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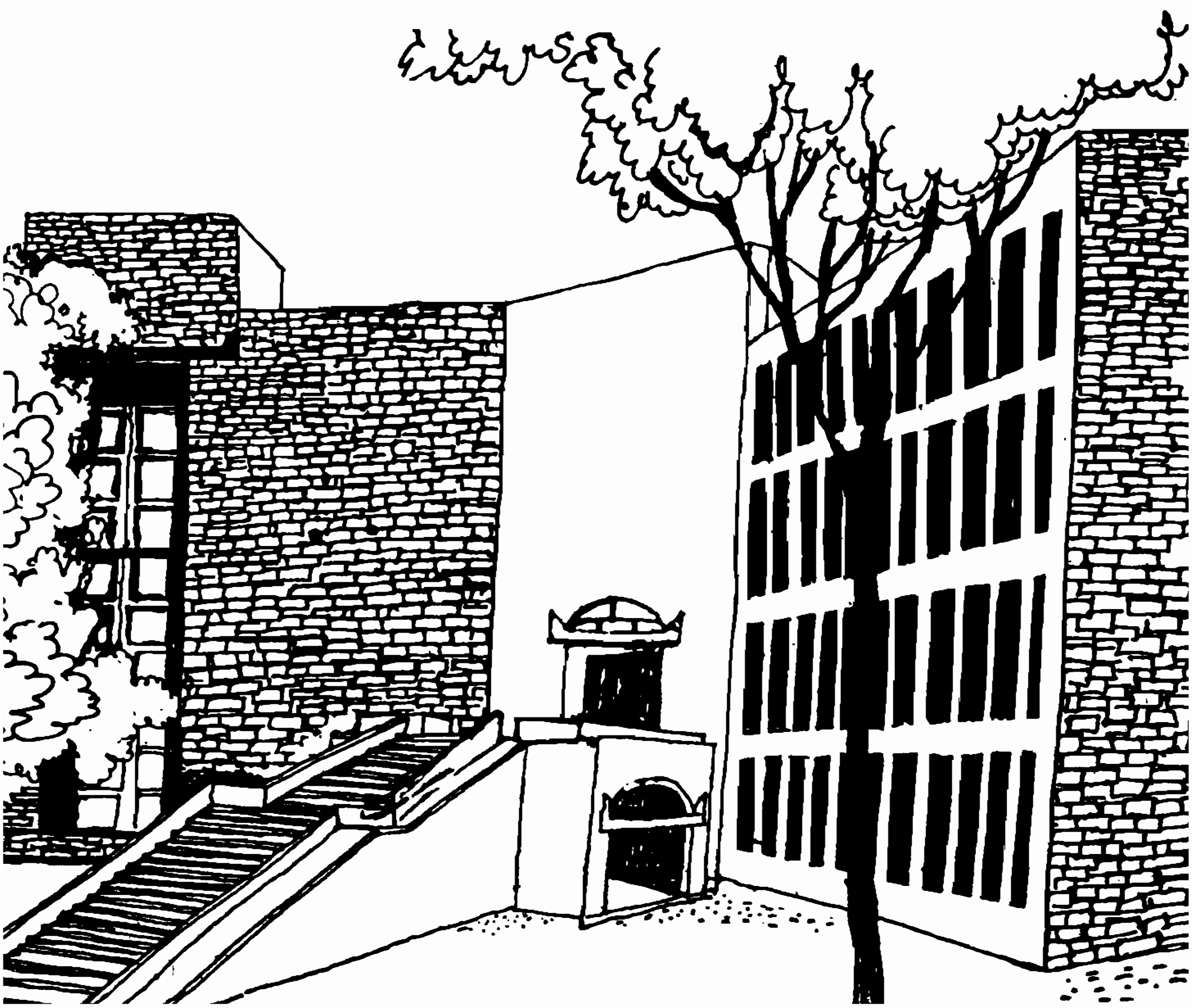

Changing Perspective on Rural Credit Between Mid-80s and Mid-90s - Experiences of Two West Bengal Villages.

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ABSTRACT

Credit is a 'pure service' transaction between two points of time rather than a spot market transaction in 'pure goods'. Because of the time gap involved between sanction and realization of credit, the players in the market confront several kinds of risks, many of which are not independent of the socio-economic environment. Against the backdrop of the institutional changes in the form of establishment and strengthening of the Panchayats in rural West Bengal over the last two decades, the present study is an attempt to capture the attendant changes in rural credit market between mid-1980s and mid-1990s from the experiences of two villages in the district of Birbhum. In doing so, it compared the profile and mode of operation of prevailing moneylenders and lending institutions with those documented in an earlier study carried out in the same two villages and made an endeavour to find out as to whether the changes in the functioning of both formal and rural credit have led to greater accessibility to credit of the rural masses, a larger base for agricultural production through productive use of assets and ensuring better prices for farmers.

The experiences of several successful multipurpose primary credit societies in India, the Indian Grameen Services, Hyderabad, the Bangladesh Grameen Bank and the Chinese Township and Village Enterprises are cited to provide some future guidance in improving the rural credit scenario in West Bengal.

Section 1: Conceptual Framework and Background of the Study:

As Dias Alejandro (1985) and Yotopoulus and Floro (1988) have rightly observed, credit because of its very nature is a "pure service" transaction between two time points rather than a spot transaction in "pure goods" like apples. Since there is some time gap between the point a credit is made and the time point when the credit is supposed to be repaid with interest, the lender has to confront several risks as listed below:

Chart 1.1: Lender's Risks Associated with Credit

1. *Risks involved in the economic activity being supported by credit.*

2. *The other activities of the borrower may reinforce or neutralise the risks already associated with the credit-supported activity.*

3. *The borrower himself may engage into opportunistic behaviour vis-a-vis the lender.*

4. *Risks due to imperfect information about the borrower and the range of his activities.*

5. *Practical difficulties in monitoring and enforcement of the credit contracts, which add to transaction costs.*

All these risks again are independent neither of the identity of the lender nor of the socio-economic environment in which the lender and the borrower are operating.

The nature of the service called credit and the associated risks have obvious implications for functioning of the credit market, as suggested in the literature and summarised in Chart 1.2 below.

Chart 1.2: Implied Special Features of the Credit Market

1. *Since credit involves interpersonal trust between the borrower and the lender, credit cannot stand alone; it must involve some collateral - tangible or intangible, or in general terms, credit must be accompanied by some credit-complementary activities involving at least some collateral.*

2. *Since tangible as well as marketable collaterals are not always available, credit often involves interlinking with markets for inputs and outputs, leading to joint rather than independent determination of the market prices of all interlinked commodities and services.*

3. *Imperfection and incompleteness of markets being rules rather than exceptions - especially in the rural settings of the developing economies, the identities of the contractual parties - namely, of the borrowers and lenders, tend to influence the terms and conditions for credit.*

4. *When individual identities do vary, besides there being the phenomenon of imperfections and incompleteness of markets in credit complementary activities, credit becomes essentially a package service calling for minute variations in multifarious attributes like magnitude, duration, forms of disbursement and recovery, collateral etc. in response to varying specificities and requirements over time and space. As a result, the entire gamut of attributes of credit - ordinarily referred to as the terms and conditions of credit - can hardly be captured by a single index - its price, the interest rate. Interest rate can at most be an imperfect measure for signalling either the cost of production of credit or the use value of credit.*

5. *Because of the above-stated features, the credit market often invites and ends up with non-market clearing prices.*

The foregoing analysis immediately brings out the fact that whereas the scope for credit is quite large, formal/institutional credit covers only a subset of the huge canvass. More precisely, formal credit deals with situations where (i) the underlying project has a reasonably good benefit-cost ratio (or, internal rate of return), (ii) the underlying collateral is marketable, and (iii) the contractual obligations are enforceable through a codified legal system. In reality, however, calculation of formal benefit cost-ratio (or, internal rate of return) becomes next to impossible when credit is required to support purely consumption or contingent activities. Many of the rural borrowers in developing countries do not possess any marketable collateral. Nor can the vast number of small and isolated borrowers - whether in villages or even in urban areas be easily subjected to as codified legal system for fulfilment of credit obligations. This means the transaction cost of enforcement of contract through the legal machinery, even if such a possibility exists in theory, would be infinitely high, as the Indian formal banking sector has come to realize through experiences in the wake of the initial enthusiasm for extending credit not only to the economically weaker sections of the community but also to those belonging to the higher income groups through the nationalised commercial banking system. In this situation, therefore, it is not at all surprising that the formal rural credit sector inclusive of commercial banks, regional rural banks and cooperative credit societies, in spite of the much-publicized branch extension and network expansion, has achieved at best only limited success. In fact, the formal credit sector in the rural areas has been constantly under the threat of "terms like `high cost', `non-viable' and `low recovery' that dominate the evaluation of their performance" (Bhavani, 1996). Even the large number of non-bank financial companies which have come up following the economic liberalisation and opening up of the economy seems to have safely skipped the vast rural sector of the economy.

Although no precise estimates are available, it appears from the existing literature from India and elsewhere that informal rural credit continues to be a predominant institution notwithstanding the fact that its incidence may be varying quite a lot between the developed and developing countries and across the developing nations. There is good amount of evidence to suggest that informal credit persists even in developed countries to a degree, even though its role may be confined to groups like recent immigrants, who are disadvantaged vis-a-vis the formal credit market. In fact, in some of the rapidly industrializing economies, informal credit groups appear to have been quite strong wherever certain segments of the capital market are restricted, for example, by government policy. Taiwan provides an illustration, where despite the market for business finance being quite strong, the system of household credit has remained poorly developed. Another notable example has been provided by Levenson and Besley (1995) who have reported that the participation in informal credit known as `*Hui*' has not suffered any marked decline in South Korea over the last 20 years. Naturally, there has been a marked growth of interests in informal credit, in general, and especially after the apparent success of *Grameen Bank*, a group lending program in Bangladesh which has depended heavily on the informal and interpersonal relations across members within a group for its success. It appears that only when monitoring and other technologies develop in the process of capital market development, leading to erosion in the information structures and enforcement technologies used by the traditional lending institutions, the small-scale informal credit associations find it hard to match the scale economies of financial intermediations enjoyed by the formal credit institutions, and it is only at that stage the informal credit organisations start giving in. (See Besley, 1995 for a latest review on informal credit).

The informal lending sector comprises of individual moneylenders as well as credit groups and associations - whether registered or not. This sector may not always be operating under a codified legal system, but as the growing literature reveals, it has fairly "well-defined rules of operation among the members of the institution, which are either embodied in a constitution or time-honored tradition. Such arrangements tend to be non-anonymous, with parties to any transaction knowing each other well". (Besley (1995).

Besley (1995) has provided three explanations of informal credit in the presence of risks. First, credit serves as an insurance substitute when the individual borrower borrows rather than receives insurance payments in order to smooth out transitory shocks. Second, credit becomes even closer to an insurance arrangement when the lender is rescheduling and even relenting some part of the repayments in the event of an unforeseen negative shock to the borrower. Third, in risky environments further complicated by incomplete information and/or enforcement problems, a combination of credit and insurance, that is, a credit contract with contingent arrangements rather than a pure credit contract is often found to be the optimal response. All these explanations provided by Besley further confirm the notion of credit as a package of services awaiting a better appreciation and understanding in the academics and in the policy making world.

Whether it is individual or group lending, informal credit institutions enjoy a comparative advantage in what Stiglitz (1990) and Arnott and Stiglitz (1990) term as "peer monitoring", and the consequent advantages in contract enforcement. Informal credit enjoys advantages in enforcement not only in terms of `the scope of sanctions' but also in terms of `the depth of sanctions'. In close-knit societies, existing social structures and mechanisms of social control limit anti-social behavior and thus extend the scope of sanction in contract enforcement. Similarly,in relatively immobile social groups, the use of incentive and punishment strategies in infinitely repeated games of the prisoner's dilemma type seems to enhance cooperation and thus increases the depth of sanctions in the enforcement of contracts.

While objective studies of informal individual lendings are few and far between, this is not true of rotational savings and credit associations - at least in the global context. Besley, Coate and Loury (1993) have provided a comprehensive survey of the second category of informal credit institutions, which are reported to be found almost worldwide under different names - for example, as *Chit* funds in India, *Hui* in Taiwan, *Tontines* in Senegal and *Kye* in Korea. The available evidence suggests that this category of institutions flourish on the profitable use of local information and enforcement in their operations. Although agricultural credit cooperatives too have similar local level advantages in terms of information and interlinked transactions in handling adverse selection and moral hazard problem, their records seem to be far from encouraging at least in the Indian context. One possibility is that information assumed to be available free of cost for peer monitoring is not actually forthcoming. The other explanations generally cited are as follows. The cooperatives may have failed to design themselves well to take care of covariance risk resulting from large-scale local level shocks (say, for example, a local drought, flood or crop disease) and the consequent mass default problem. Yet another explanation is that "the monitor and the monitored might collude to defraud the outside lender", usually the government. The last-mentioned reasoning could be a very widespread problem in the presence of large-scale politicization of the countryside and strong 'rent-seeking' behavior on the part of politicians - a phenomenon believed to be quite common in India.

Whether the precise motivation for informal (and often interlinked) rural credit flows from the economies of scale and scope, risk-pooling advantages, peer monitoring or from imperfect borrower and production characteristics (for example, from unequal access to the market for formal credit and seasonality in production), writers in the Neo-classical and New Institutional Economics tradition generally look upon this form of credit as a natural outcome in a 'second-best' world of imperfections of one kind or the other, and hence as a Pareto - efficient arrangement for the concerned parties. Writers following the Marxian tradition, however, while recognizing some of these points, tend to look upon informal credit and the usurious interest rates associated with such credit as a pre-capitalistic arrangement of the relatively stronger party to gain sufficient control over the labor process of the weaker partner in the exchange process. As a result, while the former approach while recognizing unequal distribution of economic power and resources, tends to emphasize the role of competition and the voluntary nature of transactions, the Marxists seem to argue that the weaker party is often coerced into an interlinked informal credit by the stronger and dominant partner. Consequently, the monopoly power school and the Marxists emphasize a large rent component in the usurious interest rates on informal credit. They also highlight such dynamic consequences like perpetual indebtedness, induced default, underpricing or misappropriation of collateral and even blockade to innovations. The predictions of the Neo-classical school are, in general, not so severe. According to them the consequent interest rate is high due to high opportunity cost of making loans, high administrative cost of handling and the relatively high risk premium attached to such loans. Unfortunately, very few of the existing studies seem to have attempted to calculate the effective interest rate on informal credit nor have they attempted any decomposition of the cost of credit component from the monopoly rent element in the so-called 'usurious' interest rates on informal credit.

Given the above-stated conceptual framework, the purpose of the present study is to update an earlier study on informal credit by individual moneylenders by the first author in two relatively backward villages of West Bengal for 1984-86, which was sponsored by NABARD, Bombay, by revisiting the same two villages (namely, Amdohara and Sarpalehna located near Santiniketan in the district of Birbhum) and studying the nature and extent of changes in rural credit (from both formal and informal sectors) which have taken place over the years. The broad picture of informal rural credit arising out of the earlier study reveals the following features:

* The traditional moneylenders, in response to the challenges of liberal bank credit as well as the changing socio-political climate of West Bengal, seem to have considerably diversified their portfolio of income earning assets. Pure lenders are statistically rather insignificant. Most of the lenders belong to a mixed category of borrowers - cum - lenders, whose source of funds for private lending flows not only from their superior occupations and better endowments of land and non-land assets, but also from their better access to the institutional sources of credit.

* Among the borrowers, a significant proportion belongs to scheduled castes and tribes. As borrowers, the tenant-cultivators are the most numerous, followed by agricultural labourers and owner-cultivators in order of importance.

* Among the various classes of borrowers and lenders, there exists a hierarchical pattern in which the most affluent class of service-holders-cum-traders with 60.84 per cent share of private loan, lend to all occupational groups. The owner-cultivators lend to all groups except to service-holders-cum-traders. The tenants lend only to fellow-tenants. Agricultural labourers are always at the receiving end.

* Due to the rural moneylender's superb power of making minute adjustments in the entire gamut of terms and conditions of the package of credit services to suit individual borrowing conditions, contrary to the common and often careless characterization of bank credit as a potential substitute for private credit, these two forms of credit tend to stand in complementary rather than in

substitutability relation to each other.

* While the informal sector has a tendency to concentrate on consumption loans (varying from 83 to 86 per cent), the formal sector tends to specialize, *albeit* less, in production and investment loans (between 51 to 61 per cent), though the extent of utilization for non-productive purposes is far from negligible in case of formal sector loans.

* Partly because of the tendency towards specialization in opposing directions, and also partly because of credit-rationing by the institutional sources, neither source of credit can fully meet the credit needs of any class of the borrowers, the extent of dependence on informal credit being especially high for borrowers with inferior caste and occupational status.

* While the credit operation of the formal sector seems to have a strong concentration during the *kharif* sowing season, its informal counterpart seems to be concentrating not only during the pre-*kharif* and pre-harvesting slack months but also during the *kharif* sowing season. The latter also provides a significant amount of purely contingent-type consumption loans.

* While the borrowers are required to wait for more than a month to obtain a formal credit in 55 to 60 per cent cases, informal loans are offered instantaneously in more than 65 per cent cases.

* A major strong point of informal credit is its capability to supply loans as well as to receive repayments in a variety of forms and also to achieve appropriate rescheduling of repayment. Most of the repayments (about 90 per cent) are stipulated to be made during the harvest and immediate post-harvest period.

* Nearly 66 to 82 per cent private loans have been found to be given against such non-marketable collaterals like forward labour contract and familiarity based on caste relations, friendship and repeated transactions over a long period of time.

* Given the proximity to and intimate knowledge of the borrowers, the informal lender's cost of monitoring on loans is relatively low. As a result, the extent of default on informal loan is much less on informal loans (9.35 per cent vis-a-vis 22.01 on formal loans). Moreover, there appears to be a monotone increasing relation between the occupational status of the borrower/lender and the percentage of default amount. Two fundamental factors - first, the built-in incentive of private lenders to monitor loans which is absent in the banking sector and second, the opposing type of role of political intervention in the two credit markets, seem to be largely responsible for high defaults on formal sector credit. In this background, therfore, it is no wonder that the incidence of 'no monitoring'would be a common feature in the formal credit sector.

* The predominant explicit rate of interest on private loans, found to be zero in both the villages, does not, however, mean that informal credit is a 'free' good. Taking advantage of seasonal variations in the price of paddy, often through subtle variations in the composition of the loan and its repayment, provides the single most important source of implicit interest earning. Implicit interest earning through interlinking with sharecropping and forward sale/purchase of outputs/inputs (including labor) are usually being practiced by the owner-cultivators, and more so, by the service-holders and traders.

* Since a credit transaction involves a lot of interpersonal trust, which can atmost partially be established by a collateral, informal lenders often find it profitable to engage in various interlinked credit-complementary activities in order to overcome the imperfections associated with the credit market and minimise transaction costs. It has been found that higher interest rates (reflecting

higher cost of credit), larger loan sizes, greater borrower's difficulty in approaching formal sector credit, greater number of transactions between the same two parties in the past and better non-agricultural asset position of the lender contribute to greater interlinking, while borrowers with higher yield rates of paddy and higher default rates in the past are less likely to be involved in interlinking. It is extremely difficult, at least at this stage, for formal sector credit to replicate this function.

* The three different indices of monopoly power and/or superior access of the lender to the institutional source of credit - namely, the relative superiority in terms of caste position, lender's annual income from non-agricultural assets and lender's education index, have significant positive signs reflecting the presence of at least some monopoly rent element in the pricing of credit.

* Interlinked credit transactions should not neessarily be equated with inefficient production and resource allocation process. In a poor agrarian economy where the factor services are of non-standard type and are owned by different parties and, moreover, where uncertainty of different kinds are present, restrictions imposed on the opportunistic behaviour of borrowers and the advantages for reaping certain advantages through various interlinking devices of lenders lead to greater productive efficiency. Of course, a sizeable portion of the gains seems to be flowing back to the lenders in the form of super-normal interest charges.

* The average number of past credit transactions is 5.51 between the same set of informal borrower and lender. Thus, while the informal creditors have apparently been able to successfully utilize the past credit records of their borrowers in their day-to-day operations, the formal credit in this regard seems to have been severely constrained by undue political pressure and the fear of collective action from a powerful section of borrowers.

* If the relatively advanced village of Sarpalehana is interpreted as belonging to a high-mean low-variance (HMLV) region in terms of land productivity, and the relatively backward one of Amdohara to a low-mean high -variance (LMHV) scenario, it would appear that the better endowment position as well as the better access to formal sector credit of the HMLV situation contributes to circulation of a larger size of private loanable funds (Rs. 23,793 as compared to Rs.12,797 in the other village), a considerably larger average size of informal loan (Rs.516.16 as compared to Rs.297.60), significantly smaller incidence of kind component (27.98 per cent as compared to 46.38 per cent), a slightly larger duration of loan (6.52 months vis-a-vis 5.71 months) and a slightly lower total effective interest per month (7.29 per cent vis-a-vis 7.44). Morover, it appears that not only the extent of overall interlinking but also the modern varieties of interlinking like the borrower making forward purchase of inputs from or sale of labor to the lender are much higher in the HMLV situation.

* There are three major reasons why the rural households continue to depend in a significant way on the informal source of credit. First, a large percentage of rural population do not have any or at least easy access to the formal sector loans. Second, even when they have access, they don't get adequate consumption loans, which is an extremely important input in agricultural production process, especially in a region dominated by small and marginal farmers as well as landless laborers. Third, the stereotype nature of the formal sector advances seems to have failed to appreciate the virtues and efficiency properties of the vast array of credit-complementary activities undertaken by the informal lenders.

Section 2: Objectives of the Present Study:

The precise objectives of the current study are:

First, to determine from the experiences of these two generally backward villages of W. Bengal how the credit scenario - especially the picture of formal sector credit (i.e., commercial bank and cooperative credit) has undergone changes in response to (a) the lessons which are being drawn about the functioning of informal sector credit (including the ones drawn by the earlier study of the first author) vis-a-vis formal sector credit, (b) the credit movement that is going on in this country and elsewhere - particularly in view of the experiences of the Bangladesh Grameen Bank and the self-help groups (SHGs) and the ever-increasing emphasis on NGO-approach to credit and credit-complementary institutions, and (c) the further strengthening of *Panchayati Raj* institutions (by virtue of the constitutional amendments), which have been always very powerful in the countryside of West Bengal.

Second, to bring out the profile and mode of operation of prevailing rural moneylenders in the context of these two villages, and especially how these institutions have been surviving inspite of changes in the policy climate.

Third, to find out whether the changes in the functioning of both formal and informal sector credit have led to greater accessbility to credit of the rural masses, a larger base for agricultural production (through productive use of assets), and a more 'healthy' interface between the sellers and buyers of agricultural produce (meaning better prices for the farmers).

Fourth, to identify the nature and character of institutions or institutional initiatives which are missing in the present context.

Section 3: Design & Organisation of the Study:

The villages of Amdohara and Sarpalehana, selected earlier in consultation with NABARD, are quite representative of the generally backward contryside of our economy. Since some rapport was earlier built up with these two villages while the first author was working as Director of the Agro-economic Research Center at Santiniketan, it was proposed to go back to the same two villages with the above-stated queries rather than trying to pursue this study in fresh villages.

Both the villages located at a distance of 5-10 kms. from the subdivisional town of Bolpur belong to the Bolpur-Sriniketan block of the district of Birbhum. While Amdohara belongs to the Kankali Gram Panchayat, Sarpalehana is itself the headquarter of the Sarpalehana-Albandha Gram Panchayat. While both the villages are part of a predominantly backward region with high incidence of scheduled caste and scheduled tribe population, the infrastuctural facilities are slightly stronger for the latter village. In terms of credit, the former village is catered by Madhya Balipur Samabay Krishi Unnayan Samity (SKUS) located at Bolpur town and the Kankalitala branch of the Vijaya Bank, while the latter by Laldaha SKUS (now defunct) and the Kopai branch Mayurakshi Grameen Bank,the regional rural bank promoted by the UCO Bank, the lead bank for the district of Birbhum. Both the villages enjoy proximity to the Sarbanandapur LAMPS, an NGO called the 'Tagore Society', another NGO called the 'Janakalyan Trust Society' located at Sarpalehana and the Regional Training Center of NABARD located at Bolpur town, though there appears to be hardly any synergy across these and other developmental organisations in this area. Although both the villages fall within the Mayurakshi Major Irrigation Project Command, those villages hardly get adequate and assured irrigation beyond the *kharif* season. Only some areas of Sarpalehana can raise a second crop due to presence of one river-lift irrigation project on the river Kopai. While the Sarbanandapur LAMPS stands nearly defunct in terms of business activities, both the NGOs referred to earlier are comparatively active. Although both the NGOs have a number of activities on their agenda, the activities which seem to have gathered prominence are more in the nature of awareness-building, training and welfare works on limited scales with hardly any significant implications for sustainable growth in income and gainful employment opportunities. While some awareness for institution-building are still visible in the village of Sarpalehana - maybe due to the location of the Gram Panchayat office and the presence of a distinct class of service-holders in this village, similar awareness and efforts seem to be conspicuously missing in the other village, as in fact reflected in the recent closing down of a *'Mahila Samity'* and one *'Dharmagola'* established under its banner. Because of slight edge of Sarpalehana over Amdohara in terms of irrigation facilities, presence of a distinct and relatively affluent class of service-holders with better education and greater awareness for local institution-building, Sarpalehana can be looked upon as a slightly advanced village as compared to Amdohara. This slight edge Sarpalehana enjoys over Amdohara seems to have been reflected in the differences in the cropping pattern between these two villages, though there is hardly any difference in terms of land productivity and seasonal variation in market prices of crops (the information on these aspects as gathered from *Panchayat* sources in course of this study are given in Appendix 1).

Although the major inspiration for undertaking this study arose from a need to update the picture of rural credit in this backward region after lapse of narly a decade, the scale and depth of the study had to be kept limited in view of a smaller budget and a much greater time constraint this time as compared to the earlier occasion. This called for a change in the study design while attempting to cover formal credit a little more intensively than in the past. Two major departures in the study design which have been introduced at this stage as compared to the earlier one are as follows:

* While the earlier study had started with a complete enumeration of households in order to assess the overall economic position as well as overall credit experiences of all households, the same task has been performed this time with equal emphasis on both formal and informal sources of credit rather than with greater emphasis on informal credit (as happened in the past) and with reference to a proability proportional random sample of 30 households from each of these villages drawn after stratification of the entire village households from information available from *Panchayat* sources in terms of caste and religion, on the one hand, and broad occupational categories, on the

other (displayed in Appendix 2).

* In the earlier study detailed information on informal credit were collected at the second stage through concentration on a random sample of 89 informal loan cases drawn from all such loan cases arising out of households borrowing from the informal credit market. Given the emphasis on understanding informal credit at that stage, experiences of households borrowing exclusively from the formal source of credit were excluded. In the present study, all formal and informal credit cases arising out of the 57 sample households engaged in borrowing (3 households turned out to be non-borrowing households) from one source or the other during *kharif, rabi* and summer seasons during the last one year period (i.e., 1995-96) have been studied in details using pre-tested questionnaire method to determine not only the terms and conditions but also the nature of interlinked transactions between the two contracting parties (i.e., borrowers and lenders/lending institutions). However, as calculation of borrowers' transaction costs and implicit interest rates arising from credit-induced transactions in a world of borrowers and lenders with unequal means and access to various resources requires a lot more probing than what could be performed with the first stage sample, this exercise is performed only with respect to 40 informal loan cases and 10 formal loan cases drawn at random out of the total loan cases arising out of the first-stage sample households. The data collected through questionnaire method in the two steps as stated above have been supplemented by information gathered through interactions with the relevant local institutions including *Panchayats*, formal credit institutions and a selected number of informal lenders.

The study report has been organised as follows. While the first section has provided the conceptual framework and background of the study including a short review of the relevant literature as well as the major findings of the earlier study, which the present study intends to update wherever possible, the next two sections have described the precise objectives and design of the current study. Section 4 provides a profile of the borrowers. The next section provides a profile of the private lenders and lending institutions. Section 6 analyses the matrix of credit flows. Attempts have been made at each step to bring out the changes which have taken place in credit scenario between mid-80s and mid-90s. Section 7 analyses borrowers' transaction costs, besides trying to provide additional insights about observed supply-demand gaps with respect to total credit as well as its composition. Section 8 brings out the detailed terms and conditions of credit, besides providing estimates and further analysis of implicit and effective interest rates. Section 9 provides further insights into the observed pattern of credit default. The final section not only derives the major conclusions out of the present exercise but also brings out some of its limitations.

Section 4: Profile of Borrowing Households:

This section brings out the broad features of borrower households for the study villages and also brings out the changes therein, if any, observed between the mid-80s and the mid-90s. As mentioned earlier, the sample designs are not identical between the earlier study (84-86) and the present one (95-96). While the earlier study had done a complete enumeration of village households to study their broad features as well as their overall credit (i.e., both formal and informal sector) experiences before concentrating on a sample of 89 informal loan cases (irrespective of the borrowers', access to formal sector loans), the present one - for reasons of time and resource constraints - picked up a stratified random sample of 30 households from each of these two villages and tried to capture both formal and informal sector credit experiences of these 60 households. As a result, borrowers with access to neither of the two sources of credit as well as detailed formal sector credit experiences were left out in the intensive study of only 89 informal sector credit cases in the mid-80s. In contrast, the sample for the mid-90s includes not only 3 households who are not exposed to credit from either of the two sources, but also the detailed informal and formal sector credit experiences of the rest 57 households. Since households with exclusive formal sector experience were deliberately left out in the sample of 89 households in the earlier study given its objectives at that time, one must admit that there is a selectivity bias in the earlier sample so far as the conclusions on formal sector credit derived from the experiences of this truncated group of 89 borrowers are concerned. The broad conclusions on formal sector credit could have been different had those households having exclusive access to formal sector credit been appropriately represented in the sample at that time. This must be borne in mind while comparing the formal sector credit experiences of mid-80s with the same for the mid-90s. There is no such problem in comparing informal credit between now and then.

To study the borrowers' profile, the borrower households have been classified in terms of their access to formal sector credit, their major occupational status and caste. Then their economic position (in terms of their possession of tangible and intangible assets and annual generation of resources) as well as the nature and extent of their indebtedness to formal and informal sector credit are studied. The tangible assets in possession of the borrower households are indicated by the amounts of their owned and operated agricultural land, the percentage of earning members as a rough index of ownership of productive human capital and per capita annual income from ownership and/or operation of non-agricultural assets. Intangible assets are measured by an index of maximum education among the earning members in the household (varying from 0 to 4 for the present study and from 0 to 5 in the earlier one), degree of accessibility to formal sector credit as measured by the amount of formal sector credit as percentage of the total credit and the total number of years of service in the past by the household members in all local bodies - whether political (e.g., *Panchayats, Kishan Sabha*), economic (e.g., cooperatives) or socio-cultural (e.g., clubs). The extent of annual resource generation by the borrower households is captured by estimated annual household income and the annual cropping intensity for these households. The nature of accessibility of the borrowing households to either source of credit is indicated by the amount of loan received during the relevant period, percentage of kind component in loans, percentage of loan used in consumption and percentage of default on such loans.

In the complete ennumeration of village households in the earlier study, it was found that about 12% of households belonged to the non-borrowing category and another 70% had access to formal credit (these percentages got distorted for reasons given earlier in the sample for the earlier study and hence in Table 4.1). The corresponding figures found in course of the present study are : 5% non-borrowers and 42% with access to formal sector credit. The households belonging to the category of non-borrowers may not always be non-borrowers by design (i.e., without demand for loans), but could be so because neither of the two sources is ready to supply credit to them. For example, the 3 non-borrowing households observed in the present study includes one relatively poor labor household (presumably with positive demand for loan but having zero supply of credit), besides two relatively rich households from the owner-cultivator occupation group (with presumably zero demand for loan). Nevertheless, this category of 3 non-borrowing households in the present study has on an average the highest amount of land owned, the lowest amount of operational holding (thus meaning that these households are leasing out land), the highest percentage of earning members, the lowest amount of per capita income from non-agricultural assets, the highest level of education, the highest level of annual family income and a fairly high cropping intensity, as compared to the other categories of borrowers in the present sample (Table 4.1). It is important to note that the two affluent occupational groups of owner-cultivators and service-cum-business-holders are dominant among the borrowers with accesss to formal credit (64% as compared to 44% among those without access) in the context of the present sample.

If we leave out the category of non-borrowing households for purpose of analysis, we observe the following inter-temporal and cross-sectional features from Table-4.1:

* While both groups of borrowers (i.e., those with/without access to formal credit) have experienced increase in ownership holding and decline in operational holding of agricultural land, the incidence of increase in ownership holding is quite sharp for the borrowers with access to fomal credit. While both these groups were earlier leasing in land, the borrowers with access have started leasing out some land in the margin. The dilution in the provisions of 'Operation *Barga*' over time and especially the emergence of the concept of seasonal *Barga* in recent times, the borrowers with accesss to formal credit - many of them mainly service-holders-cum-traders - have found it easier to invest in and lease out land.

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* The percentage of earning members has increased by a meagre 0.5% for the borrowers with access, but by 1.5% for those without access.

* Those with access have achieved a much larger percentage increase in both annual per capita non-agricultural asset income (1260%) and total annual family income (519%) as compared to their conterparts without access (933% and 316%, respectively).

* Although educational indices are not intertemporarily comparable because of inadvertent use of different scales between the two time points, the borrowers with access seem to have maintained their comparative advantage vis-a-vis the other group in terms of the education index. The former group has also improved their order if accessibility to formal credit significantly from about 43% to 74% during this intervening period.

* Both the groups have experienced decline in cropping intensity during the last one decade, though the incidence of decline is much sharper for the group with access to formal credit.

* The borrower families with access to formal credit have on average the longest experience in the management of local institutions (4.24 years with a coefficient of variation (CV) slightly less than 200%), whereas the corresponding figure for those without access is considerably less (0.25 years with a CV even larger than 400%). The three non-borrowing households have on average one year's experience in local institutions (with CV equal to 173%).

Table 4.2 classifies the borrower households into four broad categories: agricultural laborers, tenant-cultivators, owner-cultivators and traders-cum-service-holders, and examines the average economic position for each of these occupational groups. It must be added that this classification on the basis of major source of income does not make mutually exclusive categories, as it can be seen below (Chart 4.1) that each of these groups seems to be deriving on average some amount of income from all the four sources.

Chart 4.1

Major Occupational Groups	Percentage of Annual Income from				
	Agricultural Labourers	Tenant cultivators	Owner cultivators	Trade and Service	Total Annual Income Rs
Agricultural Labourers	83.19	3.71	9.26	3.84	9999
Tenant-cultivators	15.14	64.24	14.31	6.31	9190
Owner-cultivators	5.08	7.11	69.78	18.03	15040
Traders-cum-service-holders	1.20	1.97	17.65	79.18	20190

Table 4.2 displays the following general tendencies:

* A comparison between the samples for mid-80s and mid-90s seems to indicate that while all the occupational groups have experienced increase in ownership holdings, this is quite sharp for the owner-cultivators and traders-cum-service-holders as compared to the other two groups - supposedly the major beneficiaries of the land reform programmes in W. Bengal. While the labor and tenant households are continuing to be leasing in land as in the mid-80s, both these groups seem to have encountered decine in their operational holdings. The owner-cultivators too have decine in operational holding, but they seem to have started to be leasing out marginally rather

than leasing in land as before. The service and business group of households, on the other hand, is leasing out land as before, but has considerably increased the average size of operational holding.

* Percentage of earning members has increased marginally for owner-cultivators and quite significantly for service and business group and also for the tenant group, but it has declined slightly for the labor households.

* Per capita annual income from non-agricultural assets has increased quite dramatically for laborers and service-cum-business category of households, moderately for the owner-cultivators and rather insignificantly for the tenants on nominal basis between the two time points.\While the improvement in case of labor households may have taken place due to IRDP, JRY type programmes, unfotunately the same thing has not happened to the tenant households. Moreover, the CV of the average figure being quite high for the labor households, the improvement is far from uniform among the laborers.

* Inspite of a smaller scale used to measure education during mid-90s, index of maximum education has shown increase over the figures for mid-80s for all borrower housholds except the owner-cultivators. While improvement cannot still be ruled out for the owner-cultivators in view of the chage in scale, it is significant to point out that this occupational group has maintained the highest value of education index.

* The only occupational group which has experienced clear improvement in terms of access to formal sector credit is the category of agricultural laborers; others have failed to improve their accesssibilty at least in percentage terms and may have even faced decline.

* In terms of participation in local institutions, the figures for service-cum-business group (6.6 years) far outstrip the same for owner-cultivators (0.76 years), the tenants (1.67 years) and the laborers (nil). Incidentally, the average figures as reported here are much more stable (in the sense of having lesser CV) for the first category of borrowers than for the owner-cultivators and tenants, indicating thereby that there may be quite a bit of stratification within the groups of owner-cultivators and tenants in terms of their accessibilty to local bodies.

* During the intervening decade's time, estimated annual family income seems to have increased by 1443% for laborers, 1027% for owner-cultivators, 665% for service and business group and only 366% for tenants.

* While the tenants and owner-cultivators have been able to maintain cropping intensities at earlier levels, there have been sharp declines in cropping intensities for the other two groups.

Table 4.3 displaying the average economic position of borrower households classified by caste seems to be revealing the following intertemporal tendencies:

* While both caste groups have faced decine in the size of operational holding, scheduled caste (SC) and scheduled tribe (ST) borrowers have significantly improved their ownership holding, while the opposite is true of the caste Hindu households. The former are leasing in land and the latter are leasing out land.

* Percentage of earning members has improved for SC and ST and minority class, and declined for the caste Hindus.

* Per head non-farm income has increased by 1725% for the former group and by 567% for the latter during this one a decade's time.

* While index of education may have improved for both the groups (though not clear from this table), the caste Hindu households continue to be in a much better position as compared to the others in this regard.

* There is no doubt that in percentage terms the SC and ST group has improved their access to formal sector credit, while the caste Hindus have lost, but the picture is far from encouraging in absolute terms.

* Inspite of a conscious move by the Left Front government in W. Bengal to uphold the cause of the socially and economically groups in every policy and forum, the average number of years of participation in local bodies continue to be much higher for the caste Hindus (2.93 as compared to 1.62 for others). However, the CV for both these averages being quite high (around 300%), one must note that the picture is quite non-uniform within individual groups. What seems to have happened is that while an average caste Hindu is continuing graup domination in local bodies, only some privileged groups within each categories seem to have gained better access to local-level political power than others. This finding also raises doubt about the caste neutrality hypothesis often cited in the context of W. Bengal.

* An important aspect of the developments in W. Bengal, which has found reflection here, is that the former group has experienced a much higher percentage increase in annual family income as comared to the latter (625% against 268%) leading to considerable narrowing down of income gaps between these two classes (though in absolute terms the latter group has an average income 1.5 times the same for the former group).

* While overall cropping intensity has gone down for both groups, this is more significant for the former group of households. This obviously raises a question about loss of profitability of agriculture vis-a-vis other pursuits and/or lack of suitable complementary inputs in agriculture.

Tables 4.4 to 4.6 bring out change in the nature of indebtedness to formal and informal credit sources of the borrower households that has taken place between the mid-80s and the mid-90s. Table 4.4 which analyses the change for borrowers with/without access to formal credit reveals the following:

* The average size of formal loan has increased from Rs. 758/- to Rs.5008/- (i.e., by 561%) for borrower households with access to this source of credit, whereas their average size of loan from informal sources has increased from Rs.691/- to Rs.1884/- (i.e., by 173%) during the same period. Borrowers having access to only informal loans, on the other hand, have increased the average size of their loan from Rs.629/- to Rs. 1848/- (i.e., by 194%) during this period.

* The percentage of kind component used to be quite high for informal loans; during the last one decade it seems to have increased further. Interestingly, the kind component in formal loans has also increased significantly during the same period.

* The percentage of loan amount used in consumption, although still very high for informal loans as a matter of design, has gone down over time not only for informal loans but also and quite significantly for formal ones.

* The extent of default, which used to be quite high for formal loans, has increased further. Interestingly, the same for informal loans, which used to be rather low, has jumped quite a lot for both types of borrowers.

Table 4.5 describing the indebtedness situation by occupational groups of borrowers reveals the following:

* While service and business category of households is at this stage receiving on average the largest amount of loan from both sources of credit (Rs.5407) followed up by tenants (Rs. 4267), owner-cultivators (Rs.2961) and laborers (Rs.2386), the laborers and tenants have experienced maximum percentage increase in the average size of loan during the last one decade - 426% and 277%, respectively, for formal loan, and 100% and 289%, respectively, for informal loans. The corresponding percentage increases are much lower for owner-cultivators and service etc. group of borrowers.

* The kind component of loan has gone up for all occupational groups of borrowers and for both types of loans, while the extent of loan used for consumption purposes has gone down across the board except for tenant-cultivators in case of informal loans.

* In case of formal loans, while the extent of default has gone down to some extent for labor and tenant households, it has gone up quite sharply for the other two relatively affluent occupational categories of borrowers. The comparative picture for informal loans indicate reduction in default rate for all the three occupational groups other than the labor households; for the latter, the default rate has jumped from 8.01% to 35.59%.

With respect to the indebtedness picture across caste groups in Table 4.6, the following tendencies deserve special mention:

* In absolute terms, the total amount of credit available at this stage is still higher for caste Hindu households (Rs. 4907 as compared to Rs. 3507 for others). In terms of percentage increase in average loan size, however, the caste Hindu borrowers (182% and 117%, respectively, for formal and informal loans) have fallen far behind the SC and ST group (with 395% and 183%, respectively, as the corresponding figures).

* Not only the extent of default is considerably higher for caste Hindu borrowers for formal loans, but also it has increased very sharply for them (from 14.19% to 47.48%) and only marginally for the other group (from 25.25% to 26.65%). In the informal credit market, the extent of default has increased rather sharply for both groups, and the percentage figure is even higher for the SC and ST group (29.81% as against 26.31% for others).

Before we close this section on borrower profile, it is important to raise certain policy issues around some of the general tendencies observed in these villages. Since the selected villages are typical of the backward regions in most parts of W. Bengal and even of the country as a whole, the issues being raised below may have general significance in the context of rural development in general and in the context of rural credit in particular.

First, although the sample of mid-80s is not strictly comparable to the same for mid-90s, it seems to have brought out a general tendency in the context of these poor villages: average size of formal loan has increased from Rs.579/- to Rs.2087/-,(260.45%) while informal loan from Rs.676/- to Rs.1771/-, (161.98%) during the last one decade, meaning thereby that credit flow from both the sectors may have even gone down in real terms. This has happened at a time when the agrarian production technologies and processes around the country have become more capital-intensive, round-about and complex thus highlighting the importance of modern and commercial inputs, and hence highlighting the need for greater credit. It is not therefore surprising that there would be meagre development of irrigational facilities, inadequate application of modern inputs like fertilizer, low average yield on crops, a tendency toward decline in cropping intensity and hardly any value addition through agro-processing. The relatively slow growth of both types of credit in favor of the owner-cultivators has further reinforced the above-stated tendencies. Even a higher growth rate of credit in favor of the other occupational classes has not changed the overall picture; rather these other occupational classes have often ended up with a clear and sharp decline in their cropping intensity without any move towards commercial and perennial crops. The failure on the part of some of the occupational classes to raise cropping intensity inspite of their favorable access to credit raises question about their use of credit and profitability of agriculture from their viewpoint. But the general failure of real credit to increase in a significant manner may not be simply attributed as a supply-side failure; it may be due to a process of complex socio-economic-political changes at least in the context of poor W. Bengal villages which, instead of building up capabilities of villagers and village institutions to demand, absorb and recycle credit in the spirit of gainful business proposition, may have degenerated agriculture into a relatively non-profitable activity and many have even triggered off a tendency toward 'rent-seeking' activities with little implications for increase in value-addition and scope for gainful employment.

Second, there are a number of indirect evidences raising hypotheses about relative neglect and relative non-profitability of agriculture. For example, the sharp growth in non-agricultural asset income even on per capita basis may have resulted from a process of channelising resources away from agriculture. The sharp growth in wage rate and prices of material inputs coupled with sharp increases in the incidences of trade union pressure and accompanying labor indiscipline seems to have made some contribution to this process. Even the direct evidence on surplus (about Rs.1020/- per *bigha*) enjoyed by a owner-cultivator even on the best quality land yielding nearly 8 quintals of the main crop - namely, *kharif* paddy per *bigha* (generating about Rs.3200/- as gross return @Rs.400/- per quintal) to cover the cost of seeds, equipments and land and also to reward himself for supervision and other family inputs after taking care of major costs like hired labor cost (32 madays @Rs.35), cost of irrigation (Rs.500 for 30 hours), fertilizer and pesticide cost (about Rs.400) and cost of working capital loan (Rs.100 evaluated at 10% interest rate on out of pocket expenses for 6 months) does not provide a very encouaging picture.

Third, while the general increase in ownership holding in all occupational groups may partly be attributed to differences in the sampling framework and the implied biases, this general tendency and especially the same tendency on the part of the two affluent occupational classes - namely, owner-cultivators and service-cum-business class, who choose to invest in agricultural land and are not significant beneficaries of land reforms, requires further probing, particularly when agriculture does not seem to be a very rewarding proposition. The following hypotheses deserve attention in this context. First, these two villages being located close to Bolpur-Santiniketan urban areas may have attracted some investment in land in the anticipation of such land gradually being converted into homestead land with a much higher market price. Second, at least a part of the increase in ownership holdings of the owner-cultivators are attributed to the alleged reversal of the provisions of 'Operation *Barga*' through return of a part of the *barga*-registered land to the original owner through mutually agreed upon manipulative devices. Third, the market for service and business activity being quite limited and segregated, most of the occupational classes may not have sufficient alternatives other than making fresh investments in agricultural land. Finally, the newly found device of 'seasonal *barga*' by passing the official provisions may have further encouraged non-agricultural occupational groups to go for ownership of more agricultural land and then to lease them out.

Fourth, a tendency toward decline in the operational holding of all occupational groups except the sevice and business class with sharp decline in the cropping intensity of the latter group, raises a question whether the changing socio-economic-political realities of rural Bengal has willy nilly contributed to greater 'absenteeism' in agricultural land holdings. Given the status and conditions of agriculture in the hands of these 'absentee' owners, one, however, doubts the emergence of a strong capitalistic agriculture at least in this part of the state. It is rather unfortunate that not only economic power but also political power seem to have moved in favor of this group, which has been pursuing neither agriculture nor business as serious and integrated business propositions with the objective of value-addition and creation of gainful employment opportunities.

Fifth, there has been a rapid increase in default rate not only on formal loans but also on informal loans though there are significant differences in the nature of default. For formal loans, the default rate has really come down for labor and tenant group of occupations, while it has gone up significantly for the two affluent occupational classes, which have managed to corner a large chunk of formal credit. In the informal part of the credit market, while default rate has gone down for tenants, owner-cultivators and service-cum-business class, it has increased quite sharply for the laboring class. While there may be a general increase in opportunistic behavior, two factors stand out prominently in the context of Bengal to explain the spurt in default rate on informal loans: first, the gradual waning out of coercive powers of private lenders to force repayment, and second, the growing political power of the laboring classes sometimes accompanied by growing indiscipline under irresponsible `unionism' in the *countryside* (although the local labour unions are more loosely organized than their counterparts in the urban areas). If this hypothesis is correct and the underlying trend continues, it would mean the superior occupational groups with better political access would continue to drain the public resources through their high default rate on formal loans, while the less affluent occupational groups which are quite numerous and have nevertheless some amount of political clout will continue to use their 'nuisance' value to become defaulters on informal loan. Given this process, ultimately it is the public exchequer and the general taxpayer who tend to be the final losers.

Section 5: Profile of Lending Households and Institutions:

The earlier study with emphasis on bringing out the identity of rural moneylenders had conducted complete enumeration of all the village households and determined the existence of a small percentage of households (6.47% and 1.84%, respectively, from Amdohara and Sarpalehana) belonging to superior castes and occupational groups, who were pure lenders. Most of the informal lenders, however, were found to be belonging to a mixed category of borrowers-cum-lenders, whose affluent economic position in terms of better endowments of land and non-land assets and superior occupations further reinforced by their easy access to the formal sources of credit, constituted their lending potential. Besides these lenders from within the villages, a small group of outside lenders living in and engaged in mainly trade and business activities in the nearby town of Bolpur but not without agricultural interests in these villages were found. This third group, interestingly without any significant share of formal credit, like the second group of lenders was found to be providing a major part of rural credit through interlinked credit operations.

While no complete enumeration of the village households is done during the present study, the borrowing activities of a suitably drawn sample of 60 households have been studied in details. Only qualitative information on lending operations could be extracted from some of the counterpart lender households, which had agreed to interact with the study team. While the profile of the private lending households seems to have remained broadly the same, the following differences appear to have surfaced over the years.

* The share of outside lenders seems to have increased significantly over time probably because many of the inside lenders have in the mean time shifted to Bolpur, the main center of their trade and business activities. Many of these lenders have their agents in the villages who work on commission and make forward purchases of agricultural produce immediately after harvest against credit and/or agricultural input purchases from the lenders. Although exact figures of credit of these lenders from institutional sources are not available, it appears there is a tendency on the part of both these informal creditors and the suppliers of formal credit to avoid each other -- given their relative affluence there appears to be no strong urge on the part of many these informal lenders to approach formal credit for lendible resources especially when accessing formal credit is beset with a cumbersome process of procedural delays and hurdles. The formal sources of credit on the other hand have looked upon these people with moderate degree of economic affluence with suspicion and failed to tap the full potential of their credit network.

* Two groups of inside lenders have surfaced prominently during the present study - one, the village `*aaratdars*' (traders) who deal in agricultural produce against loans often as an intermediatory and commission agent between the farmer and the larger trader at Bolpur, and the other, the village grocery shopkeeper who often supplies underquality grocery items at apparently moderate explicit interest rates, but has also over time acquired interest in agriculture through purchase of land. Most of these internal lenders, just as their outside counterparts - except of course a handful of them with strong political connections and hence enjoying support of local *Panchayats*, have

hardly gained strong access to formal sources of credit.

In order to understand the functioning of rural credit in general at least in the context of the study villages, attempts have been made at this stage, unlike in the earlier study, to capture a profile of the major and relevant formal credit institutions as well as their recent experiences. The salient features are being summarised below.

The Kopai branch of the Mayurakshi Grameen Bank caters to the credit needs of 48 villages belonging to the Sarpalehana Gram Panchayat and a part of the Srinitipur Gram Panchayat. As ofDecember 27,1996, it has a total loan disbursement of Rs.27.84 lakhs against a total deposit of Rs.154 lakhs (the credit-deposit (CD) ratio of the Lead Bank for the entire district being 45.15 for 1995-96). More than 50 per cent of the loans are indirect one for cattle purchase, paddy processing, establishment of small shops etc. under IRDP, ITDP type schemes and the rest are direct bank loans. Both direct and indirect loans are given in consultation with the *Panchayats*, which not only decide on the beneficiaries of indirect loans in the light of their policy priorities, but also certifies to the bank about the domicile, identification, economic status, genuineness of need, source of irrigation, state of business etc. of loan applicants. The advantage of consulting *Panchayats* prior to loan discbursement, as claimed by this branch, is that they conduct loan recovery camps and help recovery once the list of defaulters are given to them. Sarpalahana Gram Panchayat claims it allots collection quota to the members of the Executive Committee and also gives token reward (e.g., a clock) to the member having the highest percentage of recovery. During 1995-96, this commercial bank branch has experienced 75% repayment on direct loans and only 52% on indirect loans, resulting in some profits for this year.

The Laldaha Samabay Krishi Unnayan Samity (SKUS), which had been functioning pretty well for a number of years in this area, suddenly received a jolt following a RBI circular of recent past that all PACS will henceforth be operating under the District Central Cooperative Banks (DCCBs). At that time the United Commercial Bank of India (UCO Bank) with whom this society had deposits of Rs.7 lakhs deducted the loan amount of Rs.4 lakhs instantly and thus put the society in a condition of acute financial crisis. On the one hand, it started facing shortage of working capital to carry on its activities; on the other hand, the confidence of the depositors got shaken. The society alleges that neither the DCCB nor the local *Panchayat* came forward to bail it out. On the contrary, the *Panchayat* is stated to have encouraged the society's borrowers to place mass petitions for waiving of their loans, when the society tried hard to get its loans repaid and thus tide over the financial crisis. It is learnt that at this stage the elected Board of the society took a decision in favour of waiving of interest charges if the original loan amounts are repaid by the members. When this decision started receiving good response, the office of the Assistant Registrar of Cooperative Society (ARCS), unhappy over this decision, decided to supersede the Board. It left the Board members as well as the borrowers unhappy. The failure of the society to refund the deposits of members has further aggravated the crisis. As a result, the society became defunct for all practical purposes. Nevertheless, it is alleged that influential people who continue to remain defaulters of loan vis-a-vis this society are managing to get the necessary certification from the *Panchayats* as well as loans from elsewhere.

The story of Sarbanandapur LAMPS catering to 36 tribal *maujas* under 6 *gram panchayats* is no different, although it has not yet formally reached the status of a defunct society. Its recent loan records reveal a total amount of loan of Rs.70,000 under family benefit scheme to 36 beneficiaries during 1993-94 and another Rs.127,000 to 55 beneficiaries during 1994-95. All these loans carry a 50% subsidy component. The repayment position is a dismal 40%. There is hardly a single loan repayment camp organised by the *Panchayats*. The society complains of acute staff shortage; there is neither a manager nor a field supervisor. The only activity the society is pursuing is sale of cloth (to the tune of Rs.95,000 in 1992-93 and Rs.32,000 in 1993-94). According to the last audit completed, this society with a membership of 1612 has a total share capital of about Rs.2 lakhs and a reserve fund of only Rs.1395. The society suffered a loss of Rs.26,770 during 1992-93, a loss of Rs.19,402 during 1993-94 and a loss of Rs.7,487 during 1994-95. Nevertheless, the society has started constructing a fertilizer storage godown against 5% own funds, 50% subsidy and 45% loan from the National Cooperative Development Corporation (NCDC). The society members feel that development of this area and improvement in the society's activities can take place only if mini deep tubewells are dug in this area to expand agricultural activities.

The accounts of the Vijaya Bank branch at Kankalitala look considerably better. Against a deposit of about Rs.95 lakhs, the branch has an annual lending figure of about Rs.9 to 10 lakhs with an overall repayment rate of 75% (about 90% on direct loans and 50% on government schemes). Most of its direct loans, constituting about 30% of total loans are for *kharif* and summer paddy while there only a few pumpset loans. The government scheme loans include calf-rearing, paddy-processing etc. for landless families and bullock and bullock cart schemes for small and marginal farmers. The government loan scheme on sericulture is understood to have failed and the performance on fishery loans are known to be far below the expected level. This bank branch attributes its relatively better repayment performance to the active cooperation from the *Panchayat* members who are known to be accompanying the bank people to the door steps of borrowers in repayment drives undertaken immediately after the harvesting season. This commercial bank branch feels that absence of suitable supplementary agricultural activities, for example, to raise vegetables, eggs etc. are at the root of poor economic performance at the village level.

The Madhya Balipur SKUS, which came into being in 1976 recounts how it suffered from the schematic government loans which were thrust upon it during the early phase of its existence. Thanks to the writing off of those loans, they could get rid of 17 goat-rearing loans and 4 pending loans (out of 7) on paddy- processing. Their experience is that the repayment on special component loans with 50% subsidy stopped as soon as the subsidy component came to a halt. Out of 67 group shallow tubewells with 50% subsidy, they could install only 27, but all these got washed off due to flood and the scheme became a liability of the society. Given these background experiences, this society has now-a-days concentrated only on crop loans for *kharif* and *Boro*-paddy, mustard and wheat to the order of Rs.11-12 lakhs per annum with a repayment rate of 63% experienced last year. The society has also pawning and fertilizer business. Although the society covers Bolpur municipal area besides three blocks with 56 villages, there is no emphasis on promotion of non-farm activities having linkages with agriculture. The credit-deposit ratio looks favourable only because it started accepting deposits two years ago and so far received a deposit of about Rs.4 lakhs. Out of the total number of 3400 members, only 1600 are loanee members and there are about 1000 universal members belonging to weaker economic classes who became members without any share capital contribution against a membership application fee of Rs.1/- as per the laws of the state. The society is not aware of 'Cooperative Development Fund' to borrow funds from this head to change the dilapidated look of its main office building. Although the NABARD Regional Training Centre is located nearby and also an NGO called Tagore Society is working within its jurisdiction, there is no synergy across these organisations.

The following points emerged in course of discussion with the formal sector credit organisations on the continuing poor records of formal credit in the study villages:

* The cooperative credit organisations seem to have been caught between lack of cooperative awareness, capability and leadership at the local level, on the one hand, and the generally parastatal status attributed to them by a combination of dependent leadership and government bureaucracy on the other. As a result, the cooperative movement at least in this part of the country has been infested with opportunistic behaviour on the part of the locally powerful elements and has become totally irrelevant for the local resources, the local population and their problems.

* Given constraints of priority sector lending as well as restrictions on lending rate on formal sector credit, negative profits are looked upon as a natural consequence rather than as an exception.

* Whereas the formal credit sector has come to be closely tied to the functioning of the *Panchayati Raj* system in West Bengal, there is hardly any concerted efforts to develop the capabilities of the *Panchayat* members to undertake the necessary homework for promotion of credit in a poor agrarian economy. At the same time, there is hardly any standard and disciplined code of conduct evolved on the part of *Panchayat to achieve an* objective assessment of credit-worthiness of projects and individuals and mature handling of cases of default. Although there are some noteworthy examples, experience tends to vary quite a lot from place to place and from person to person.

* The practice followed by some of the commercial banks to release only a part of the sanctioned loan and to keep the rest in the form of deposits in the name of borrower, as a contingency measure unless and until the borrower displays satisfactory repayment performance on the released part of the loan, though pragmatic in certain circumstances, makes a mockery of the situation with an inadequate supply and defeats the very purpose of loan.

* A major problem encountered by the Primary Agricultural Credit Societies (PACS) is that their repayments are not suitably adjusted against the principal by the relevant District Central Cooperative Banks, (DCCBs) as and when the latter receive repayments in instalments, resulting in a distorted picture about the real state of repayments from the PACS and their credit-worthiness.

* Tagging of purchases of less popular brands with supply of more popular brands of fertilizer by higher-tier organisations like the BENFED, irrespective of local demand conditions, imposes severe losses on lower-tier multipurpose PACS/PAMS (Primary Agricultural Marketing Societies).

* Involvement of so many agencies (e.g. the *Panchayat* veterinary doctor etc. in case of a loan for purchase of a cow) with possibilities of opportunistic behaviour on the part of the involved agencies often raises the cost of a scheme much beyond the market price and thus tends to increase the probability of default from the very beginning of the loaning process.

Section 6: Credit Flow Matrix:

Unlike the earlier one, the present study has distinguished three broad categories of formal credit institutions and tried to estimate the percentages of credit flows from each of these categories to various occupational groups of borrowers in the first four columns of Table 6.1. The total formal sector credit shares of different occupational groups are also compared with the corresponding figures estimated during the earlier study (see figures in parentheses in column 4 of the same table). With respect to informal credit, detailed shares of credit flows from one occupational group to another are available for mid-80s as well as for mid-90s to enable a thorough intertemporal comparison (see last five columns of Table 6.1). This table reveals the following features:

* The two occupational groups which have significantly increased their shares of formal credit are the laborers and the households belonging to service and business categories. The losers are the owner-cultivators and more prominently the tenants - the two classes of people directly and more intimately associated with agriculture - a fact which further confirms our earlier doubt about the relative importance and profitability of agriculture.

* Among the formal sources of credit, the commercial banks hold a lion's share of nearly 76%, cooperatives a much smaller 18% share and NGOs a meagre 7% share. All these three sources display strong inclination to cater to the service and business class of borrowers. The commercial banks have the most diversified set of occupational groups as borrowers allowing for considerable chunks of loan to flow also to the laborers and owner-cultivators; while tenants receive a mere 3.81% share of formal credit at this stage, they are totally neglected by the other two sources of formal credit as per the estimated figures. The laborers have managed to capture a lion's share of cooperative credit - possibly under influence of the *Panchayats*, the various schematic loans of government usually thrust upon the cooperatives and the cooperative legal structure in W. Bengal permitting entry of a large number of otherwise inactive (in terms of participation in cooperative's non-credit business activities) as 'universal members'.

* In the market for informal credit, the laborers and tenants continue to be net borrowers and the other two occupational classes net lenders as before. However, since mid-80s there has been a

dramatic increase in the loan share of service and business group as borrowers (from 4.54% to 45.15%), a moderate increase in the shares of owner-cultivator borrowers (from 20.52% to 27.43%), a mild decline in the shares of the labor class of borrowers (from 24.82% to 22.17%), and again a dramatic decline in the share of the group of borrowers (from 50.12% to 5.26%). These dramatic increases and declines can hardly be explained away as sampling bias.

* Because of stratification within the classes of laborers and tenants -- largely because of the political process in operation, some of the labor and tenant households are found to be engaged in lending as seen in the earlier sample, though their percentage shares are quite negligible. As compared to mid-80s there has been a significant decline in the shares of owner-cultivator lenders (from 36.67% to 8.76%) and a significant rise in the shares of business and sevice class lenders (from 60.84% to 86.90%).

* There has been significant reduction in the share of loans the tenants used to receive from the owner-cultivators and service-cum-business classes, which means a near-alienation of the tenant class from the credit market as a whole. There is hardly any significant proportion of intra-group loans among the owner-cultivators, and this figure has gone down further. The dominant informal lender - that is, the service and business class has increased its share of loans to the owner-cultivators and quite dramatically also improved its share of intra-group lending. So, in overall terms, the same hierarchical pattern in informal credit disbursement as observed about a decade ago - namely, that the service and business class are at the top of the pyramid lending to each and every occupation, whereas the owner-cultivators are located one step below in the credit hierarchy - still holds good except for the fact that there has been considerable tightening of the grips on credit by the service and business class and some slackening of grips by the owner-cultivators on the informal credit market over this 10-year period.

Section 7: Borrowers' Transaction Costs & Demand-Supply Gaps:

The main purpose of this section is to analyse borrowers' transaction costs on both forms of credit based on the present study. The earlier study does not provide any information in this regard except that the average waiting period between approachment for loan and sanction of loan was consistently higher in both villages for formal (2.01 and 0.78 months, respectively, for Amdohara and Sarpalehana) than for informal loans (0.06 and 0.19, respectively). Besides looking at the monetary component of transaction costs as sum of application fees, actual travel expenses and commission charges (and simply referred to as transaction costs), an attempt has been made to bring out other real costs like time taken by lending bodies for approval of loan and also for disbursement of loan, number of creditors approached by the borrower for the same loan, and number of visits made by the borrower to the lender's place after approaching for the loan, and also an important factor like number of past credit transactions between the two sides, which is likely to influence true transaction costs at the current stage. These direct and indirect measures of borrower transaction costs have been estimated for both types of credit, across two broad categories of formal credit institutions (namely, commercial banks and cooperatives), across different caste groups of borrowers, and also across different occupational classes of borrowers and lenders in Tables 7.1 to 7.4.

Although esimation of demand-supply gaps in credit for these two villages is not an objective of the present study, still an attempt has been made in the above-stated tables to provide some idea about demand-supply gaps in both formal and informal credit based on the experience of a sample of 40 private loan cases and 10 formal loan cases drawn at random from the total number of formal and informal loan cases arising out of the 60 households selected for the present study. In this context one should not, however, lose sight of the fact that the estimated demand-supply gaps pertain to only selected loan cases of households which have already achieved access to formal/informal credit. Obviously, these figures do not display the overall demand and supply situation with respect to credit even for the same households, not to speak of the situation confronting those households who have for various reasons failed to (or decided not to) establish access to either source of credit. Nevertheless this limited exercise has been attempted with the present sample with respect to both cash and kind components of credit in order to demonstrate how formal and informal creditors play with the cash and kind composition of credit in response to the borrower's identity. Before we analyse tables 7.1 to 7.4, it must be pointed out that the average values displayed in these tables do not always correspond to maximum number of observations indicated in the top of each table, because there are occasions of no response as well as irrelevant response (for example, when the loan is demanded either in 100% cash or in 100% kind).

On borrower's transaction costs, the findings are as follows:

* As Table 7.1 shows, the monetised part of transaction costs are close to zero for informal credit and only Rs. 1 per case of formal credit. Average number of creditors approached is unity for formal loan and only marginally above unity for informal loan. The past credit records are much longer for informal credit. All the real indices of transaction costs considered here are considerably and consistently lower for informal credit.

* When one looks at the differences between commercial bank and cooperative credit in terms of borrower transaction cost variables in Table 7.2, one notices much longer credit experience of the borrower, lesser monetary transaction cost, and lesser waiting period for loan approval with cooperatives than with commercial banks, but the number of trips to the lending institution and the waiting period between approval and disbursement of loan are higher for cooperatives.

* The transaction cost parameters for formal sector credit seem to be behaving quite differently between caste Hindu and the residual categories of borrowers in Table 7.3. The latter group has higher financial transaction costs and less frequent number of past credit experiences. They also confront much longer waiting period for approval and disbusement of formal sector loan.

* The experiences of caste Hindu and the residual categories of borrowers do not differ much in the informal credit market with respect to number of creditors approached for loan, number of trips to the lender and the monetised component of transaction costs. However, the SC and ST class of borrowers are more frequently approaching the same lender and also facing a much longer waiting for approval and disbursement of loan as compared to the caste Hindu class (Table 7.4). This means not only formal credit but also informal credit has a tendency to discriminate against SC and ST group of borrowers as compared to their caste Hindu counterparts.

Regarding gaps between supply of and demand for total amount of loan as well as its cash and kind components, the major finding are given below:

* Informal credit is always more liberal than its formal counterpart (Table 7.1).

* Infact, the informal sector seems to have managed to push in on average a much larger quantum of kind loan than what is demanded by the borrowers.

* Within informal credit, cooperatives are found to be better fulfulling the requirements of borrowers in terms of total credit as well as its composition than their commercial bank counterparts (Table 7.2).

* The formal credit institutions are also found to be more keen to fulfil the total and cash credit requirements of caste Hindu borrowers than the same for the residual category of borrowers (Table 7.3). Exactly similar tendency is also seen in the informal credit market, besides the fact that the informal lenders have a tendency to push in a much larger component of kind credit than what is demanded by the SC and ST group of households.

Section 8: Terms & Conditions of Credit:

The present approach looks upon credit as a package of services with multifarious dimensions like composition, duration, purpose, collateral, repayment conditions, credit-complementary services etc., rather than a simple quantity with an explicit and uniform price, irrespective of borrower and lender identities. This is especially true in the context of informal credit where the lenders because of their intimate knowledge and past credit experiences are capable of making minute adjustments in the credit package in order to suit individual borrower conditions and thus reaping additional gains from this trading activity called supply of credit services. It is against this broader notion of credit the present section attempts to bring out all important dimensions of the terms and conditions, including implicit interest rates arising from credit-complemetary activities and also to relate these attributes of credit to certain major attributes of borrower and lender households. Needless to add, at each and every step attempts are made to come up with a comparative perspective of credit between mid-80s and mid-90s.

In Table 8.1 timings of loan payment are classified into four major seasons: pre-*kharif* slack months of February-March to May-June, *kharif* sowing season of June-July and July-August, post sowing slack period of August-September and September-October, and *kharif* harvest and immediate post-harvest period of October-November to February-March. In the earlier study a tendency was observed on the part of formal credit to concentrate its lending operations during the *kharif* sowing season, whereas a tendency on the part of informal credit to provide a relatively more even distribution of credit. It is seen at this stage that the formal credit institutions seem to have stepped up their lending operations also during *rabi* and summer seasons to achieve a more balanced distribution of credit across seasons. Apparently in response to these developments in formal credit, informal creditors seem to have reshuffled the seasonal composition of their credit in favor of the post-sowing slack period and the post-harvest period and away from *pre-kharif* slack and *kharif* sowing seasons. While all these changes are not fully understandable, several tendencies appear to be distinct: first, a sharp withdrawal from the *kharif* sowing period on the part of informal credit and, attachment of greater importance to credit needs during *rabi* and summer seasons on the part of both sources of credit. Although this information is not tabulated, the informal lenders are found to be continuing to insist on repayment of their short-duration loans after the harvest in most of the cases, whereas such tendecies are far from clear in case of formal loans probably because of a mix of loans of different duration and schematic governmental loans in their portfolio. Finally, the observed complementarity between formal and informal credit during mid-80s seem to have been under considerable strain at this stage because of the above-stated change in loan timings by the two segments of credit, besides due to the fact that informal credit have declined proportionately more than formal credit during the intervening period.

Tables 8.2 to 8.9 describe the terms and conditions classified by duration type (whether duration is fixed or open-ended), collateral type (whether tangible or not), purpose of loan (whether for consumption or production), village type (across the relatively advanced village of Sarpalehana and the relatively backward one of Amdohara), borrower and lender occupation, borrower caste and presence/absence of explicit credit-interlinked transactions. The terms and coditions of credit analysed in these tables include such basic attributes like the size of the loan, its kind component, duration, and explicit interest rate, besides the implicit interest rates in credit-complementary transactions, which alter the effective interest rate on credit. Regarding implicit interest rate, the earlier study had identified five sources from which it could arise - namely, from credit-induced input purchases from the same lender, from credit-induced sale of crop to the lender, from credit-induced sale of labor to the lender, from credit-induced increase in land productivity of interlinked sharecropper-borrower, and from differences in the price of the main staple, paddy, between the time points a loan is given and it is repaid. The first four types of implicit interest rates can arise when credit induces the borrower to undertake another transaction with the same lender within the stipulated period of loan at a price different from the prevailing market price. The last type of implicit interest can arise in potential sense even in the absence of another credit-induced transaction at non-market price, for example when the lender makes a kind loan in paddy (or a cash loan by decummulating his stock of paddy), say during the post-sowing slack period, when the price of paddy is at the peak, and asks the borrower to return the loan in cash immediately after the *kharif* harvest, when the price of paddy reaches the lowest yearly rate. This means the lender by decummulating his stock of paddy by a smaller quantity can claim a larger quantity within a span of merely 2-3 months. This last source of implicit interest in fairly large quantities is possible when government policy cannot prevent seasonal variations in the price of paddy and there are few institutional mechanisms to enable enough paddy stock holding by the poorer households to sustain the slack months.

Between mid-80s and mid-90s, two significant trends seem to have surfaced in the rural areas of West Bengal, which have found reflection in the credit-related data of these two villages for the mid-90s. First, not a single case could be found where the borrower is supplying labor at a price below the market wage rate, which is generally decided these days in most of the villages through a negotiation between the potential employers and employees in the presence of local political masters at the beginning of *kharif* operations in each year. It appears no employer has the courage to pay a wage rate below this negotiated 'market wage rate'; all that he can do at most is to demand the labor of his borrower as first claim, particularly when the borrower is not in a position to repay the loan other than by selling his labor. This definitely confers some gain to the employer-lender, as he can thus minimize his search cost, but this aspect used to be there even earlier and the resulting gain is quite difficult to quantify. Second, the earlier practice of giving loans to tenant-borrowers also seems to have gone down appreciabely especially after implemention of the provisions of 'Operation *Barga*', so much so that not even a single case could be found in the recent sample. As a result, two sources of implicit interest earnings are absent in the present context. In order to achieve easy comparability with the earlier results, these two figures for the earlier study (at an average of 4.93% and 3.94%, respectively, per annum for all the 89 informal loan cases studied at that stage) have been supressed in the present tables and also in calculation of the total effective interest rate at this stage.

While all formal sector loans and most informal sector loans are of fixed duration type, several cases of informal loans (precisely 9 out of 77) are found in the present sample where the duration of loan is not well-specified as part of the terms and conditions of credit. All such loan cases, henceforth to be referred to as open-ended loans, have arisen from caste Hindu borrowers having owner-cutivation or service and business as their main occupations. While the size of loan is considerably higher and also explicit interest rate slightly higher for such open-ended loans as compared to the same for the fixed-duration ones, the average implicit interest rates and the total effective interest rate are not necessarily higher for the open-ended ones (Table 8.2).

Between mid-80s and mid-90s there seems to have been significant reduction in the importance of tangible and marketable collateral in both segments of the credit market (although the precise figures for formal credit market are not available for the earlier study nor displayed in Table 8.3). At the present stage, out of the 3 formal loan cases with tangible collateral, as many as 2 arise from caste Hindu borrower households and all these three households belong to owner-cultivator occupation group. In the market for informal credit, which had already shown a bias in the past in favour of intangible collateral, there is at this stage only a single instance of use of tangible collateral by one owner-cultivator borrower from SC, ST group of households. Regarding the terms and conditions of formal credit, use of intangible collateral has not prevented realisation of a larger size loan of longer duration with a larger percentage of cash component at fairly comparable explicit interest rate. In the last several columns of this table dealing with informal credit, implicit interest figures could not be obtained as there is not a single case of use of tangible collateral among the 40 informal loan cases studied in details for estimating these figures. Even in the first stage sample of mid-90s only one case of tangible collateral could be found with respect to informal loans. So, the effect of collateral type on terms and conditions of informal credit cannot be meaningfully ascertained at this stage. However, one point which comes out clearly from intertemporal comparison is that use of intangible collateral has not prevented informal borrowers from getting at this stage much larger loan than before at a much smaller explicit as well effective interest rates. While explicit rate and implicit interest on informal loan due to paddy price variation seem to have come down with the passage of time, this is not true of implicit interest rates arising from credit-induced input purchase and output sale transactions (Table 8.3).

Purpose-wise break-up of the terms and conditions of formal credit is available only for the present sample. Based on the qualitative information available, it appears there is some change in formal sector's attitude towards consumption credit (though apparently the observed cases pertain to loans for marriage purposes) as reflected in 7 cases of fairly large size loans under this category (Table 8.4). Incidentally, 3 out of these 7 cases arise from caste

Hindu borrower households and all these 7 borrowers have owner-cultivation (1) or service and business (6) as the main occupation. In the informal segment of the market, the percentage share of production loan has increased from 16% to 26% in terms of numbers and from about 16% to 30% in terms of funds involved. Out of the 20 cases of informal production loans encountered at this stage, 15 are from caste Hindu borrowers and 14 from households with owner-cultivation or service and business as their main occupation. While there has been a slightly larger increase in the average size of informal production loan as compared to a consumption loan, it is interesting to note that the informal lender does not make as much distinction as his formal counterpart regarding the sizes of consumption and production loans. As expected, the kind component is much smaller with informal production loans, and it has gone down further over the years. Not only is the average duration of informal production loan larger (compared to the same for informal consumption loan), but also it has gone up further over time. Not only explicit interest but also effective interest have gone down significantly over time, the latter partly because of absence of implicit interest from tied labor and sharecropping contracts in recent times. Interestingly, in the absence of the above-stated two sources of implicit interest earning usually accompanying informal consumption loans in recent times, the total effective interest on production loan turns out to be higher than the same for a consumption loan. It is difficult the last-stated point without recourse to the monopoly power argument (that is, merely on the basis of the cost of credit hypothesis).

From Table 8.5 displaying the terms and conditions of informal credit across the two study villages (the same for formal credit do not and is also not expected to vary much and hence not included in this table), only the following trends could be discerned in clear terms. First, the average size of loan, although larger in absolute terms for the relatively advanced village of Sarpalehana as before, seems to have increased faster in the relatively backward village (Amdohara). Second, Sarpalehana continues to enjoy a larger cash component than Amdohara in loans. Third, average implicit interest rate arising from credit-induced output sale by the borrower to the lender, which is slightly higher for Sarpalehana at present, seems to have increased over time for both the villages. Finally, total effective interest interest on credit has come down significantly for both the villages.

Only the following trends could be identified beyond doubt from Table 8.5 describing the terms and coditions of informal credit across borrower occupational classes. First, while there is an all-round increase in the average size of nominal loan for all classes, the percentage increases seem higher for owner-cutivator and service-cum-business class of borrowers. Second, there have been consistent declines in average duration and explicit interest for all occupational classes of borrowers. Third, whereas there have been consistent increase in average implicit interest on output sale and consistent decline in average implicit interest due to paddy price variation, the same on input purchase has declined except for the owner-cultivator group. Fourth, the total effective interest, though consistently lower over time for all occupational groups, continues to be the highest for tenant-borrowers.

Table 8.7 showing the terms and conditions of informal credit across lender occupational classes includes only few loan cases from laborer-lenders and tenant-lenders, which can be ignored for all practical purposes in subsequent analysis. A comparison of performance between the terms and conditions for owner-cultivator and service-cum-business class lenders reveals that (i) the latter class has effected a steeper rate of increase in the average size of loan, (ii) average duration and explicit interest rate have gone down consistently for both groups of lenders, (iii) both implicit interest rate flowing from paddy price variation and total effective interest have gone down consistently and significantly for both groups of lenders, though the owner-cultivator lenders seem at this stage capable of extracting larger effective interest rate as compared to the other group.

When the terms and coditions of informal credit are classified by borrower's caste for the mid-90s sample in Table 8.8 (a similar table is not available for the mid-80s sample to allow for intertemporal comparison), it is seen that the SC and ST group of borrowers receives on average a slightly smaller size of loan with a larger kind component, but for comparable durations and at comparable explicit interest rates. The scope for implicit earning through induced input purchase and output sale transactions seem slightly larger with this group of borrowers, and as a result the effective interest rate is invariably higher for this category of borrowers.

As Table 8.9 brings out in clear terms that the incidence of interlinked credit from the informal market has gone down significantly between mid-80s and mid-90s - at least in the context of these villages (from 50 out of 89 to only 7 out of 77). Out of the 7 cases of interlinked credit reported in the latest sample from 60 households, as many as 6 are tenant-cultivators, though all of them are caste Hindus. In 6 out of these 7 cases the loan is taken from consumption purposes. While the owner-cultivator group is lender in 4 cases, the service and business class has lent in the other 3 cases. Interlinking does not attract a higher size of loan as in the past, but as in the past it attracts a higher kind component, a shorter duration loan and a considerably smaller explicit interest rate. Naturally, effective interest, though lower than in the past, is considerably larger for interlinked cases. Though the present study does not examine the efficiency implications of interlinked credit, nor decompose the cost of credit and the monopolistic rent elements in the computed effective interest rates - unlike in the earlier study, it certainly brings out the nature and extent of vaccuum created by sharp declines in credit-complementary activities by the rural moneylenders at a time when formal credit has been facing all kinds of problems. The relevant question in the context of these villages is whether the vaccuum referred to above is a real one or whether this vaccuum has been adequately covered through a higher overall growth rate in agriculture and/or evolution of an appropriate and alternative set of rural institutions at the grassroot level.

Section 9: Default on Loans:

Against the background of increase in the default rate on both types of credit in general as pointed out earlier, this section attempts to analyse the default cases as well the default amounts by several attributes of credit and also by some broad identity variables of the borrower households. It also examines possible variations in the overall terms and conditions of credit depending upon the *ex-post facto* default status of loans in order to determine whether default could at all be attributed to relatively more stringent terms and conditions of credit.

From Table 9.1 it is clear that there has been a steady increase in the shares of wage laborers and service and business category of borrowers in the total default amount, whereas there is a steady decline in the shares of the other two groups. Out of the 16 default cases on formal loans identified at this stage (the total number of formal loan cases in the sample being 26), 6 come from service and business group, 5 from owner-cultivator group, 4 from the wage labor group and only one from the tenant group. 11 out of these 16 loans are taken for production purposes and as many as 12 of them are from caste Hindu borrowers.

Regarding default on informal loans, the two occupational groups of borrowers mainly responsible for it are the wage laborers (who have increased their shares in both number and amount of default over the years) and the service and business category of borrowers (who have also increased their share in the defaulted amount, though not in the total number of default cases). Out of the total number of 24 default cases observed at this stage, 23 involve consumption loans, 20 are from caste Hindu borrowers, 8 of them are open-ended loans, in which at least one instalment payment is defaulted although the final payment can be staggered. As many as 21 of these default cases do not involve any interlinked transaction (Table 9.1).

It is quite debatable whether the slightly higher size of the formal loan with a higher kind component, a shorter duration and a marginally higher explicit interest can be held responsible for occurence of default (Table 9.2). The basic attributes of defaulted informal loans seem to stand in similar relationship vis-a-vis non-default cases. Although the issue cannot be resolved without a rigorous statistical treatment, the lower values of the different components of implicit interest rates as well as of the total effective rate do not seem to suggest a more stringent terms and conditions for the default cases.

Section 10: Limitations and Conclusion:

Before we conclude this study, it is important to bring out its major limitations, so that the conclusions can be interpreted accordingly and future research efforts can be directed towards overcoming at least some of these limitations. These limitations are listed below:

* As mentioned earlier, the main thrust of this study is to come up with a comparative perspective of credit between mid-80's and mid-90's based on the experiences of two villages from a backward region of West Bengal. But the sampling design followed in mid-80s with the objective of understanding informal moneylending rather than the total credit scenario introduced an element of selectivity bias in the earlier sample. Even though this bias has been overcome in the later sample, the two samples are not exactly comparable in strict statistical sense and hence all the conclusions drawn here ought to be looked upon as tentative, unless and until these are reconfirmed through a more rigorous exercise. Ideally, suitable development agencies involved in credit and credit-related affairs should put some planned and concerted efforts to come up with a panel data on credit at least for certain representative pockets of the country in order to keep track of credit and credit-related matters over time.

* The second set of constraints arose from limited budget and time available to the study team, which seem to have affected the rigour of the study in three ways:

  - First, the study could not collect detailed input-output data on agricultural operations of the borrower households to replicate the exercise done in the earlier study - namely, to examine whether or not interlinked credit transactions lead to overall efficiency in production.

  - Second, many of the lender households being residents of villages/towns outside of the boundaries of the selected villages and also given the reluctance of most lender households to freely share information related to credit, the earlier study and more so the present study had to be content with mere borrower-side information relating to credit (i.e., without confirmation of data from the lender side) and from only a handful of informal lenders, who had agreed to interact with the study team.In the absence of time and resource constraints, this limitation could have been overcome through repeated trials and efforts.

  - Third, some of the formal credit organisations, local body representatives, NGOs operating in and around these villages could not be covered at all or not covered sufficiently.

* A third source of limitation, which the study team came to realise after the facts, seems to have crept in through blindly following the four group occupational classification as followed in the earlier study. A clear distinction between the service-holders and the trade and business class would have allowed to separate out the distinct role a newly emerging service class (many of them being local school teachers) with strong political clout and a very good access to formal sector credit have been playing in the context of West Bengal agriculture.

Subject to the above-stated caveats, analysis of credit and credit-related data from these two villages, insights derived from interactions with a cross-section of the villagers and local organisations, and exposure to the various kinds of experimentations on credit and related matters in the rural context captured through a review of the growing literature on the subject, seem to suggest the following conclusions. In view of the tentative nature of these conclusions for reasons explained earlier, we propose to enlist these in the nature of hypotheses, which need further probing and researches for confirmation and resolution of the underelying issues.

First, while agricultural labor households and SC/ST households have clearly improved their accessibility to formal sector credit during the last one decade (the share of formal sector credit in their total loan amount having increased from 16.13% to 25.93% for the former group and from 28.44% to 31.57% for the latter), the average size of formal loan per village household (irrespective of access) increased from Rs.579/- to Rs.2087/- (i.e., by 260.45%) during the same period. This means formal sector loan per household has most probably declined in real terms at a time when the default rate on formal loan has gone up from 14.57% to 34.74% and quite drammatically for the bulk consumers of such loans - namely, the owner-cultivator and service and business class of borrowers (even though there is slight reduction in default rates of labor and tenant group of borrowers). This has happened in spite of involvement of the powerful *Panchayats* in West Bengal from the very beginning of the loan sanction process and also in the loan recovery process. From these findings against the backdrop of high credit-deposit ratio, only partial decontrol of lending rates, restrictions of priority setor lending, high borrower transaction costs and little operational flexibility of individual bank management to economise on the wage bill and even on provisions and contingencies (the last-mentioned feature is mostly a fallout of past bad loans in the wake of the 'loan writing off' decision), many of which have found reflection in the present study, it appears the formal credit sector - at least in this part of the country - seems to be steadily approaching a dead end, unless it can earn a fresh lease of active life through institutional innovations.

Second, the situation is found to be even worse with the cooperative credit structure, a constituent of the formal credit system. The highly restrictive cooperative legal structure with a plethora of irresponsible rules and bureaucratic processes, coupled with critical absence of independent, dynamic and vigilant local leadership, as reflected even in the disproportionately brief accounts of some of the cooperatives in the study area, seem to have robbed the cooperatives of their true democratic character and other cooperative values. Unlike the well-known cooperative banks like Warana(Maharashtra), Mulkanoor(Andhra Pradesh), Amalsad(Gujarat), Sridharpur(West Bengal) etc., these cooperatives - not unlike the most of them through the length and breadth of the country - are parastatal and loss-making organisations with hardly any relevance to development of local people as well as the local resources. While the local people are quite keen and enthusiastic about some of the examples cited above, there appears to be a strong reluctance on the part of West Bengal - a state known for its strong grassroot level political organisations - to learn from the examples of some other states (like Andhra Pradesh and Bihar, which have already come up with a progressive and parallel Act allowing for independence and autonomy to interested cooperative organisations), not to speak of arranging the necessary exposure of the promising grassroot level workers to the well-known examples.

Third and probably the most disturbing trend is that these villages have also started facing decline in the supply of informal credit in real terms, as the average size of informal loan per village household increased from Rs.676/- to only 1771/- (i.e., an increase of only 161.98% in nominal terms during a decade's time), while during the same period the extent of default on such loans jumped from 9.60% to 28.99% with a drammatic increase in the default rate of the largest group of informal borrowers - that is, the wage earning class (from 8.01% to 35.59%) without any decline or any significant decline in the default rate of other occupational groups. There have also been notable changes in the nature and extent of interliked credit transactions over the last decade - the number coming down from 50 out of 89 (i.e.,roughly 56%) to a mere 7 out of 77 (i.e., roughly 9%), and land leasing out (under sharecropping arrangement) and labor purchase transactions mostly being delinked from credit transactions of private moneylenders under compulsions from legal (e.g., in the form of 'Operation Barga') and local political pressures (e.g., in the form of minimum wages agreed upon at the beginning of each season by buyers and sellers of agricultural labor in the presence of local political leaders). It is also heartening to note that implicit interest on loans arising from seasonal variation in paddy prices and even the total effective interest on credit have gone down considerably over the years. However, this is not true of implicit interest on input purchases and output sales which are interlinked with credit, meaning thereby that alternative institutional arrangements, even if there, have not been able to compete away the possible monopoly rent elements in these two implicit interest rates. True, the current study has not further confirmed the efficiency implications of interlinked credit transactions found with the mid-80s data, nor has it replicated the earlier exercise of segregating the monopoly rent element from the cost of credit component in total effective interest on informal loans. But if interlinked credit continues to mean greater productive efficiency as found in the earlier study, decline in such types of credit for whatever reasons coupled with increase in implicit interest on credit-complementary services in the form of input sales or output purchases by the informal lenders, may mean a vaccuum in the local institutional setup. Unfortunately, this was created through decline in the role of informal credit and seems not to have been filled in through evolution of suitable and competitive alternatives. This doubt becomes stronger the moment one confronts decline in overall cropping intensity with hardly any movement towards perennial and commercial crops (unlike what is typical of developed agricultural regions), hardly any improvement in the quantity and quality of irrigation, and very meagre growth in productivity (for the main staple crop, *kharif* paddy productivity has increased from an average of 2.6 to 3.5 quintals per *bigha* over the last one decade) - not to speak of conspicuous absence of any value addition activities on crops in the villages. The observed steep rise in default rate on credit, especially by the wage earning households - under conditions of decline in the traditional coercive powers of the village moneylenders, on the one hand, and under growing political power of the agricultural laborers, on the other -although a welcome feature at first sight - may signal a further downward sliding of the rural economy.

Fourth, no doubt there are serious supply-side problems - especially organisational problems relating to efficient delivery of credit besides its proper utilisation and repayment. But the overall scenario prevailing in this area seems to point towards a more fundamental demand-side problem with respect to credit. There is no dearth of demand for credit in a notional sense, but there is acute shortage of effective demand - demand backed by purchasing power and willingness to pay the price for credit. While purchasing power to pay for credit depends on designing and effective implementation of innovative and bankable projects based on the available and commandable resources, the willingness to pay depends on the prevailing ideology and the incentive-disincentive structure to cope with opportunistic behavior and other moral hazard problems. It appears that there are serious problems on both the fronts, which are steadily and consistently dampening the demand for credit.

Fifth, the role of inappropriate ideologies and incentive structures. This point can be clarified with reference to three observed features in the countryside in relation to successful implementation of bankable projects: a non-operational notion of 'exploitation', absence of incentive-disincentive structure to ensure accountability, and predominance of rent-seeking activities going hand in hand with a culture of economic dependence. Let us elaborate. In Marxian economics, exploitation can arise when a factor, say labor is paid below the value it produces. In orthodox economics, exploitation can arise only if a factor can be paid below its opportunity cost. In neo-classical economics, there is no place for exploitation as competition and free mobility of factors tend to ensure equality between marginal productivity and opportunity cost. 'Opportunity cost' being an operational term unlike 'value', it is easier to estimate and improve upon it through quality improvement in factors and creation of an expanding and competitive market for high-quality factors. Unfortunately, the observed tendency is to politically assign and impose an arbitrary price of factors like labor under a false notion of exploitation without a corresponding increase in its quality, productivity and demand, often resulting in long-term non-viability of the business proposition itself, in which the factor were to be employed. Artificially and politically inflated price of factor-services is one of the fundamental factors to render a number of bankable projects non-viable. Absence of a suitable system of rewards and punishment to establish accountability tends to further erode viability of projects demanding team production and use of both visible and invisible (and often non-measurable) inputs at multiple levels for success. For example, an artificially priced labor or for that matter any input of doubtable quality (because of absence of accountabilty in accordance wuth a codified system of discipline) may render that factor even costlier leading to less than optimal investment in projects intended to make intensive use of that factor. This appears to be true to some extent in the context agriculture and allied activities in these villages. The absence of an accountable system is again responsible for the decline of not only formal credit but also informal credit, as the experience of these villages seem to suggest. When economic organisations like banks fail to generate value for the society under pressure of opportunistic behavior of the stakeholders and affiliated organisations, the result is an inevitable dependence on external sources of funds for running the system. It is most unfortunate that the banks do not find enough productive avenues to plough back their deposits in local economic enterprises, resulting in low credit-deposit ratios and drainage of local savings to finance development elsewhere (which sometimes visionary cooperative leaders like Tatya Saheb Kore of Warananagar stopped through establishment of a cooperative bank to finance local projects with own funds), while the state and central governments of the country may remain busy in chasing and attracting foreign capital as well as international funding agencies in local area development. The culture of economic dependency seems to have taken so deep roots that the *Panchayats* -the most decentralised self-governing bodies at the grass-root level, have become totally dependent on outside sources of funds as well as the guidences and directives such funds would normally imply. It appears that by rejecting the capitalistic approach, on the one hand, and by not harnessing any efforts to evolve a suitable and alternative ideology which is operational, on the other, the existing indifferent attitude is willy nilly contributing to a process of steady drift towards economic anarchy without posing any challenge whatsoever to the perceived and much talked about enemy of the people - the growing power of monopoly capitalism.

Finally, the *Panchayats* - often assumed to be not only powerful but also vibrant organisations in West Bengal - seem to have taken a very narrow view of things in their assumed role in the context of rural development. Instead of initiating and promoting local leadership and business entrepreneurship through a process of evolution from below and then sensitisation and facilitation of innovative and bankable projects, these grassroot organisations seem to have remained too busy in fighting too many election battles at too many levels only to ensure unopposed continuation in power of the same political party and the same set of people. Apparently, it is quite heartening to see the democratic process at work even say at local school committee level through fairly regular conducting of elections, but one wonders about the long-term developmental implications of the seriousness attached and the extent of time, energy and resources spent to ensure rule of one party and one ideology at practically all levels of the society. In the context of credit, for example, the *Panchayat* members seem to be quite content with the fact that they are being regularly consulted in the selection of loan beneficiaries, in judging the credit-worthiness of an individual or a project and also in occasionally organising loan repayment camps. However, these tasks are commonly being performed not only subject to their time constraints, but also subject to their limited and pre-conceived notion of a given set of bankable projects. Unless the capabilities of the Panchayat as well as those of other decision makers are improved through exposure to innovative practices and constant interaction with potential rural development entrepreneurs within a competitive framework, little tinkering here and there with the existing project ideas may not improve repayment performance in any significant manner. It appears the politically powerful elements who have already managed berths in the *Panchayats* are not at all keen to rope in entrepreneurs without similar political leanings in the credit network, nor are they keen to learn from successful experiences here and there. The following examples which can change the mindset of the relevant people deserve special mention in the context of credit:

* There are several illuminating examples of multipurpose PACS (primary agricultural credit societies), which in collaboration with suitable commodity cooperatives and even in collaboration with private companies, have been pursuing profitable and diversified sets of business activities, even though historically their local resource base is no better than that of the study areas. Interestingly, most of these success stories in these areas have taken place in spite of no changes in the legal framework of cooperatives merely through the hard work of outstanding leadership. In all these cases, there has been fullest possible utilisation of local funds besides prompt and timely repayment of credit from outside. Being fully confirmed that credit cannot stand on its own, these areas have invariably tagged credit with suitable credit-complementary activities. This seems to be at the heart of their success. (for details , see Datta et al, 1997)

* Following on the lead from a pilot project of NABARD, a number of states, sometimes with some initial help from NGOs, have started linking banks with self-help groups (SHGs). Many of these SHGs, formed with people with common perception of needs and with common interest in collective action, pool the members' savings and relend the same resources within the group on rotational or need basis. Although there are SHGs promoted under different banners and claiming different orders of success, their broad objectives are the same -namely, to meet the credit needs of the poor by combining the flexibility, sensitiveness and responsiveness of informal credit with the technical strength and administrative capabilities of formal credit sector, to build trust and confidence between the members and the banks, and to encourage banking activity within that segment of population, who are extremely difficult to reach through the regular credit route. The SHG movement in India has derived a lot of inspiration from the success story of the Bangladesh Grameen Bank (for a critical review of Grameen Bank, see Khandkaer, Khalily and Khan, 1995). While SHGs are not totally unknon in West Bengal, there seems to be some kind of allergy

towards group loans and group activities -probably in anticipation of a possible rivalry between the *Panchayats* and any other organised group activity under a different banner. Surprisingly, inspite of presence of a large number well-known organisations like the NABARD Regional Training College, a central university (namely, Visva Bharati, with a full fledged Institute of Agriculture and several rural development centres) and one Tagore Society for Rural Development - to mention only a few among them, there is no synergy developed across these organisations, on the one hand, and the local credit and credit-related institutions, on the other.

As a careful reader may notice,the earlier study as well as the present one have highlighted the relative strengths and weaknesses of the two traditional forms of credit. Interestingly, most of the weaknesses of formal credit seem to have been removed while most of the strengths of informal credit seem to have been accommodated in a new generation rural livelihood promotion organisation called BASIX which has recently come into being with its headquarters at Hyderabad to promote sustainable livelihoods for the large masses including the rural poor and women and to supply financial services and technical assistance in an integrated manner, besides generating a competitive rate of return to the investors of this company. This company also plans to access in the near future, mainstream capital markets. Its main activity is to provide credit togetherwith technical assistance to rural producers directly and also through hitherto unexplored channels in collaboration with produce buyers like agro-processing companies, commodity cooperatives, commission agents etc., input suppliers like fertilizer dealers, yarn merchants etc., and voluntary agencies, which have organised self-help groups for the rural poor. Currently, its operations are limited to Raichur district of Karnataka and Kurnool, Khammam and Mahaboobnagar districts of Andhra Pradesh. From the first round of customer satisfaction audit performed, it appears BASIX has so far done well in terms of timeliness of loan disbursement (8 days on average), in supplying adequate amount of loans (in 70% of cases), in keeping lending agencies' transaction costs within reasonable limits (below 3% of the loan amount in 78% of cases), and in ensuring consumer satisfaction in most of of the cases (by scoring more than 3 on a 4 point scale in 90% of the cases)(BASIX,1997). As this unique experimentation is still in the process of unfolding itself and has immense implications for th future of rural credit, it demands a careful study and a lot of attention from the relevant quarters.

In the context of giving suitable exposure to the *Panchayats* and rural development organisations for building up their capabilities, the experiences of the Chinese Township and Village Enterprises (TVEs), carefully designed to provide the necessary linkage between the villageeconomy of China and the nearby towns and cities, on the one hand, and the critical exposure to fast changing demands and requirement of the outside world on the other, deserve special mention. It is significant to note that in the Chinese TVEs emphasis is on incentives and competition through marketization and the use of managerial responsibility contracts rather than on ownership reforms (Nugent et al, 1996). The state of West Bengal with its left political leanings may find these Chinese experiences quite useful and palatable, especially in the context of reforming and capability building of its grassroot level organisations including the *Panchayats*. Probably there is no harm in designing suitable incentive contracts even for the *Panchayat* members, who are in a position to promote fresh and bankable projects and also manage their successful implementation togetherwith timely credit repayment.

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Table : 4.1 Average Economic Position of Borrower Households according to their Accessibility to Sources of Credit

	Borrowers with access to none of the sources		Borrowers with no access to formal sources		Borrowers with access to formal sources		All borrowers	
	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97
	n=0	n=3	n=21	n=32	n=68	n=25	n=89	n=60
A. Tangible assets								
A1. Owned agricultural land (in acres)	n.a.	2 17	1.45	1.12	0.87	1.55	1.01	1.35
A2. Operated agricultural land (,,)	n a.	1.06	1.54	1 24	2.07	1 45	1.94	1.32
A3. Percentage of earning members	n a.	50 00	41 97	43.20	40.31	40.91	40.70	42.59
A4. Annual Income per head from non-agr. assets (Rs)	n.a.	786 11	82 38	847.51	145.26	1972.01	130 43	1312.98
B. Intangible assets								
B1. Index of maximum education	n.a.	1.67	1.67	0.88	1.76	1.12	1.74	1.02
B2. Degree of accessibility to formal sector credit	n.a.	0 00	0.00	0.00	42.64	73.96	32 58	32.44
B3. No..of years of service to the local bodies	n.a.	1 00	n a	0 25	n.a.	4.24	n.a.	1.95
C. Other Indices representing flow of resources								
C1. Estimated annual family income (Rs.)	n a.	19400	2786.83	11594.84	2628.68	16274.40	2666 00	13934.92
C2. Overall cropping intensity	n.a.	106 67	122.00	107 54	122.00	93.56	122.00	101.04

Table : 4.2 Average Economic Position of Borrower Households according to their Occupational Status

	Agricultural Labourers		Tenant Cultivators		Owner Cultivators		Service & Business	
	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97
	n=21	n=25	n=42	n=3	n=20	n=17	n=6	n=15
A. Tangible assets								
A1. Owned agricultural land (in acres)	0.22	0.27	0.23	0 39	0.45	2.54	1.08	1.99
A2. Operated agricultural land (,,)	0.55	0 42	2.15	1.72	3.37	2.45	0.64	1.44
A3. Percentage of earning members	50 45	47.05	41.11	55.00	34.37	39 61	24.85	36.04
A4. Annual Income per head from non-agr assets (Rs.)	31 90	150.40	104.52	116.67	134.90	577.24	641.67	4323.72
B. Intangible assets								
B1. Index of maximum education	0.22	0.44	0.23	0 67	3.45	1.53	1 08	1.47
B2. Degree of accessibility to formal sector credit	16.13	25 93	35.19	21 93	38.84	38.71	50 99	38.68
B3 No.of years of service to the local bodies	n a.	0.00	n.a	1.67	n.a.	0 76	n.a.	6.60
C. Other Indices representing flow of resources								
C1. Estimated annual family income (Rs.)	647.78	9999 60	1969.73	9190.00	6225.34	15040.29	2639.16	20190 00
C2. Overall cropping intensity	125.00	76.10	117.00	117.67	127.00	126.14	125.00	99 06

Table : 4.3 Average Economic Position of Borrower Households according to their Caste Positions

	SC ST & OBC		Upper Caste Hindus	
	1984-86	1996-97	1984-86	1996-97
	n=63	n=45	n=26	n=15
A. Tangible assets				
A1. Owned agricultural land (in acres)	0.33	1.07	2.67	2 18
A2. Operated agricultural land (,,)	1.84	1.21	2.21	1.66
A3. Percentage of earning members	43.02	45.27	35.09	34.53
A4. Annual Income per head from non-agr. assets (Rs)	59 37	1077.08	302.61	2020 67
B. Intangible assets				
B1. Index of maximum education	1.02	0.89	3.50	1.40
B2. Degree of accessibility to formal sector credit	28.44	31.57	42.60	35.11
B3. No.of years of service to the local bodies	n.a.	1.62	n.a	2.93
C. Other Indices representing flow of resources				
C1. Estimated annual family income (Rs.)	1729.51	12534.33	4935.20	18136.67
C2. Overall cropping intensity	121.00	96.16	123.92	115.67

Table : 4.4 Nature of Indebtedness to Formal and Informal Sector Credit and Use of such Loans by Borrowing Households according to their Access to Formal Sector Credit

	Borrowers with access to none of the sources		Borrowers with no access to formal sources		Borrowers with access to formal sources	
	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97
	n=0	n=3	n=21	n=32	n=68	n=25
A. Formal loans						
A1. Amount (Rs)	n.a.	n.a	n.a	n.a	758.34	5008 00
A2. % of kind component	n.a	n.a.	n.a.	n.a.	8.71	31.25
A3. % of loan used in consumption	n a	n.a.	n.a.	n a	37.22	4.17
A4. % of defaulted amount	n a	n.a.	n.a.	n.a.	28.81	31.10
B. Informal loans						
B1. Amount (Rs)	n.a.	n.a	629.24	1847.97	690.62	1884.00
B2. % of kind component	n.a	n.a.	16.13	25.28	34.79	49 53
B3. % of loan used in consumption	n.a.	n.a.	79 61	44.97	87.04	71.39
B4. % of defaulted amount	n.a.	n.a.	10.44	21.97	9.01	23.08

Table : 4.5 Nature of Indebtedness to Formal and Informal Sector Credit and Use of such Loans by Borrowing Households according to their Occupational Status

	Agricultural Labourers		*Tenant Cultivators*		*Owner Cultivators*		*Service & Business*	
	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97
	n=21	n=25	n=42	n=3	n=20	n=17	n=6	n=15
A. Formal loans								
A1. Amount (Rs)	250.00	1316.00	442.31	1666 67	892.00	1835.29	1650 00	3740.00
A2. % of kind component	1.92	35.71	9.37	100.00	7.91	29.58	0.00	47.78
A3. % of loan used in consumption	40.74	14.29	31.28	0.00	14.38	0.00	12 20	0.00
A4. % of defaulted amount	17.33	12.86	26.81	24.00	23.45	47.27	0.00	35.54
B. Informal loans								
B1. Amount (Rs)	535.57	1070.00	668.26	2600	751.10	1125.59	973.33	1666.67
B2. % of kind component	21.02	28.87	39.33	61.54	23.88	29 02	22.22	31.94
B3. % of loan used in consumption	92.86	73.53	87.23	100.00	75.81	41.04	76.77	41.67
B4. % of defaulted amount	8 01	35.59	7.35	7 69	2.56	7 14	21.88	19.16

Table : 4.6 Nature of Indebtedness to Formal and Informal Sector Credit and Use of such Loans
Loans by Borrowing Households according to their Caste Positions

	SC ST & OBC		*Upper Caste Hindus*	
	1984-86	1996-97	1984-86	1996-97
	n=63	n=45	n=26	n=15
A. Formal loans				
A1. Amount (Rs)	344.00	1702.22	1147.69	3240.00
A2. % of kind component	7.17	25.74	5.38	47.78
A3. % of loan used in consumption	33.04	5.56	17.21	0 00
A4. % of defaulted amount	25.25	26 65	14.19	47.48
B. Informal loans				
B1. Amount (Rs)	638.48	1805.22	767.38	1666.67
B2. % of kind component	33.28	36.08	23.36	31.94
B3. % of loan used in consumption	87.12	59.76	80.85	41.67
B4. % of defaulted amount	7.49	29.81	13.84	26 31

Table : 6.1 Shares of Formal and Informal Loan by Borrower Occupation & Lender Occupation/Type

Borrower Group	Formal Loan: Com.Bank	Coop.	N.G.O.	Total	Informal Loan: Wage Labour	Tenant	Owner Cultivator	Business & Service	Total
Wage lab	17 84	9.15	0 00	26.99 [10.18]	0 00 [0.00]	0 00 [0.00]	4 34 [6.02]	17.83 [18.80]	22.17 [24.82]
Tenant	3.81	0.00	0.00	3.81 [36.00]	0.00 [0.00]	0.00 [2.22]	2.67 [27.04]	2 59 [20.86]	5.26 [50.12]
Owner.cult	21.49	2 29	0.00	23.78 [34.60]	4 18 [0.00]	0.17 [0.27]	0.91 [3.61]	22.17 [16.64]	27.43 [20.52]
Business & service	32.34	6.10	6.94	45.43 [19.20]	0.00 [0.00]	0.00 [0.00]	0.84 [0.00]	44 31 [4 54]	45.15 [4.54]
Total	75.53	17.53	6.94	100.00 [100.00]	4.18 [0 00]	0.17 [2.49]	8.76 [36 67]	86.90 [60.84]	100.00 [100.00]

[Figures in the parentheses denote the share pertaining to the earlier study]

Table : 7.1 **Average Values of Transaction related Variables in respect of Formal & Informal Loans**

Variables	*Formal* n=10	*Informal* n=40
Duration (days)	621.87	127.56
Supply of credit (Rs.)	5890.00	1691.62
Supply as % of total credit demand	85.28	99.00
Supply of cash credit as % of total credit demanded in cash	76.78	95.62
Supply of kind credit as % of total credit demanded in kind	100.00	163.64
Time taken for approval of loans (days)	169.50	12.97
Time taken between approval & disbursement of loan (days)	10.50	4.05
No. of creditors approached for loan	1.00	1.05
No. of visits made to the lender after approaching for the loan	3.30	1.90
Transaction costs per case of credit	0.95	0.01
No. of past loans from the same lender	3.20	12.87

Table : 7.2 **Average Values of Transaction related Variables in respect of Formal Lendings Institution .**

Variables	*Comm.Bank* n=7	*Coop. Bank* n=3
Duration (days)	588.00	678.33
Supply of credit (Rs.)	5914.29	5833.33
Supply as % of total credit demand	78.97	100.00
Supply of cash credit as % of total credit demanded in cash	71.11	90.00
Supply of kind credit as % of total credit demanded in kind	100.00	100.00
Time taken for approval of loans (days)	181.43	141.67
Time taken between approval & disbursement of loan (days)	10.14	11.33
No. of creditors approached for loan	1.00	1.00
No. of visits made to the lender after approaching for the loan	2.86	4.33
Transaction costs per case of credit	1.22	0.32
No. of past loans from the same lender	0.29	10.00

Table : 7.3 Average Values of Transaction related Variables in respect of Formal Loan Cases according to Caste & Religon of Borrowers

Variables	*SC ST & OBC* n=7	*Upper caste Hindu* n=3
Duration (days)	860.10	240.00
Supply of credit (Rs.)	6842.86	3666.67
Supply as % of total credit demand	78.97	100.00
Supply of cash credit as % of total credit demanded in cash	71.11	90.00
Supply of kind credit as % of total credit demanded in kind	100.00	100.00
Time taken for approval of loans (days)	229.29	30.00
Time taken between approval & disbursement of loan (days)	13.43	3.67
No. of creditors approached for loan	1.00	1.00
No. of visits made to the lender after approaching for the loan	3.29	3.33
Transaction costs per case of credit	1.19	0.37
No. of past loans from the same lender	1.71	6.67

Table : 7.4 Average Values of Transaction related Variables in respect of Informal Loan Cases according to Cast & Religon of Borrowers

Variables	*SC ST & OBC* n=30	*Upper Caste Hindu* n=10
Duration (days)	131.03	117.50
Supply of credit (Rs.)	1745.50	1530.00
Supply as % of total credit demand	98.67	100.00
Supply of cash credit as % of total credit demanded in cash	94.81	100.00
Supply of kind credit as % of total credit demanded in kind	233.33	80.00
Time taken for approval of loans (days)	16.93	1.10
Time taken between approval & disbursement of loan (days)	4.87	1.60
No. of creditors approached for loan	1.03	1.10
No. of visits made to the lender after approaching for the loan	1.93	1.80
Transaction costs per case of credit	0.01	0.00
No. of past loans from the same lender	14.20	8.90

Table 8.1: Percentage Distribution of Credit from Formal & Informal Sources according to the Period of Loan Given

	Formal loan		*Informal loan*	
	1984-86	1996-97	1984-86	1996-97
Loan Timings				
Pre-kharif slack	n.a	30.77	39.10	24.68
Kharif sowing	n.a	26.92	26.93	12.98
Post-kharif sowing slack	n.a	15.12	12.38	20.78
Kharif harvest & immediate post-harvest	n.a	26.92	21.59	41.56
Total	0.00	100.00	100.00	100.00

Table 8.2 : Terms & Conditions of Informal Credit by Duration Type

	Open ended	*Fixed duration*
	1996-97	1996-97
	n=9	n=68
A. Basic Attributes		
Average Quantity (in Rs.)	4594.44	910.07
% Kind Component	40 41	41.27
Duration (in months)	-	2.74
Interest (per annum)	5.56	2.48
B.Implicit Interest Rates (per annum)		
Thro' Input Purchases	0.00	3.80
Thro' Output Sale	28.80	20.13
Due to Paddy Price Changes	0.00	14.00
Total Effective Interest	34 36	36.61

Table 8.3 : Terms & Conditions of Formal & Informal Credit by Collateral Type

	F O R M A L				*I N F O R M A L*			
	Intangible	*Collateral*	*Tangible*	*Collateral*	*Intangible*	*Collateral*	*Tangible*	*Collateral*
	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97
	-	n=23	-	n=3	n=69	n=76	n=20	n=1
A. Basic Attributes								
Average Quantity (in Rs.)	n.a	5247.83	n.a	2500.00	404.25	1351.77	432.35	500.00
% Kind Component	n.a	29.71	n.a	38.89	35.56	40.40	37.93	100.00
Duration (in months)	n.a	11.96	n.a	6.67	6.25	2.55	5.74	1.00
Interest (per annum)	n.a	12.78	n.a	11.33	23.59	2.83	57.68	4.00
B.Implicit Interest Rates (per annum)								
Thro' Input Purchases	n.a	n a	n.a	n.a	3.27	3.32	2.57	n.a
Thro' Output Sale	n.a	n.a	n.a	n.a	6.67	21.21	0.00	n.a
Due to Paddy Price Changes	n.a	n.a	n.a	n a	82.60	12.25	63.39	n.a
Total Effective Interest	n.a	n.a	n.a	n.a	116.13	39 61	123.57	n.a

Table 8.4 : Terms & Condition of Formal & Informal Loan classified by Purpose of Loan

	FORMAL				*INFORMAL*			
	Consumption		***Production***		***Consumption***		***Production***	
	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97
	-	n=7	-	n=19	n=75	n=57	n=14	n=20
A. Basic Attributes								
Average Quantity (in Rs.)	n.a	7228.57	n.a	4242.11	411.05	1275.18	408.00	1527.50
% Kind Component	n.a	28.57	n.a	31.58	41.74	53.81	10.81	5 00
Duration (in months)	n.a	14.00	n.a	10.58	6.00	2.17	6 92	3.75
Interest (per annum)	n.a	10 29	n.a	12 89	35 01	2 53	10.00	3.75
B.Implicit Interest Rates (per annum)								
Thro' Input Purchases	n.a	n.a	n.a	n.a	3 70	0.29	0.00	7.42
Thro' Output Sale	n.a	n.a	n.a	n.a	5.16	7.66	5.21	39.55
Due to Paddy Price Changes	n.a	n.a	n.a	n a	83.25	13.33	51.79	10 79
Total Effective Interest	n.a	n a	n.a	n.a	127.10	23.81	67.00	61.51

Table 8.5 : Terms & Conditions of Informal Credit accross Villages

	Amdohara		***Sarpalehana***	
	1984-86	1996-97	1984-86	1996-97
	n=43	n=41	n=46	n=36
A. Basic Attributes				
Average Quantity (in Rs)	297.60	1261.46	516.16	1430.97
% Kind Component	46.38	42.41	27.98	39.77
Duration (in months)	5.71	2.27	6.52	2.39
Interest (per annum)	57.70	1.66	5.71	4.19
B.Implicit Interest Rates (per annum)				
Thro' Input Purchases	2.73	6 34	3.48	0.31
Thro' Output Sale	6 10	19.48	4.30	22.94
Due to Paddy Price Changes	69.47	13.62	86.51	10 88
Total Effective Interest	136 02	41.10	100.00	38 32

Table 8.6 : Terms & Conditions of Informal Credit classified by Borrower's Occupation

	Wage Labour		*Tenant*		*Owner Cultivator*		*Service,trade & business*	
	n=21	1996-97	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97
	1984-86	n=36	n=42	n=5	n=20	n=18	n=6	n=18
A. Basic Attributes								
Average Quantity (in Rs.)	431.88	756.95	436 00	1260 00	374.95	1063 06	276.76	2808.33
% Kind Component	21.77	37.88	46.77	35.00	30.30	35.10	33.33	55.56
Duration (in months)	5.76	2.24	5.98	4.00	6.56	3.61	7.33	1.93
Interest (per annum)	30.00	2.78	41.89	4.00	19.60	3.83	12.00	1.67
B.Implicit Interest Rates (per annum)								
Thro' Input Purchases	10.80	3.72	4.98	2.22	2.47	3.33	6.59	2.59
Thro' Output Sale	0.00	9.58	13.89	65.11	13.13	46.20	0.00	4.14
Due to Paddy Price Changes	84.86	15.39	55.81	13.02	136.37	10.76	53.99	4.42
Total Effective Interest	125.66	31.47	116.48	84.35	171.57	64.12	72.58	13.82

Table 8.7 : Terms & Conditions of Informal Credit by Lender's Occupation

	Wage Labour		*Tenant*		*Owner Cultivator*		*Service, Trade & Business*	
	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97	1984-86	1996-97
	-	n=1	n=6	n=1	n=33	n=14	n=50	n=61
A. Basic Attributes								
Average Quantity (in Rs.)	n.a	5000.00	151.67	200.00	406.06	748.93	444.62	1435.24
% Kind Component	n.a	0.00	33 33	0.00	45.21	48.21	30.71	40.91
Duration (in months)	n.a	1.00	6.50	5.00	5.67	3.07	6.42	2.39
Interest (per annum)	n.a	0 00	41.66	0.00	55.93	7.50	20.20	1.87
B.Implicit Interest Rates (per annum)								
Thro' Input Purchases	n.a	0.00	n.a	0.00	0.04	12.01	24.80	1.57
Thro' Output Sale	n.a	0.00	n a	0.00	0.00	17.14	27.02	23.50
Due to Paddy Price Changes	n.a	0.00	67.89	13.95	72.81	24.76	83.15	9.77
Total Effective Interest	n.a	0.00	109 55	13.95	128.78	61.41	155.17	36.71

Table 8.8 : Terms & Conditions of Informal Credit by Borrower's Caste & Religion

	SC ST & OBC	*Upper Caste Hindu*
	1996-97	1996-97
	n=62	n=15
A. Basic Attributes		
Average Quantity (in Rs.)	1318.31	1433.33
% Kind Component	43.07	33.33
Duration (in months)	2.55	2.47
Interest (per annum)	2.90	2.60
B.Implicit Interest Rates (per annum)		
Thro' Input Purchases	4.20	3.03
Thro' Output Sale	26.10	19.58
Due to Paddy Price Changes	10.05	12.99
Total Effective Interest	43.25	38.20

Table 8.9 : Terms & Conditions of Informal Credit classified by Interlinking Status of Loans

	No Interlinking		*Interlinking*	
	1984-86	1996-97	1984-86	1996-97
	n=39	n=70	n=50	n=7
A. Basic Attributes				
Average Quantity (in Rs.)	330.46	1399.07	473.05	757.14
% Kind Component	29.49	40.29	42.63	50.00
Duration (in months)	6.55	2.51	5.82	2.71
Interest (per annum)	44.50	2.96	21.36	1.71
B.Implicit Interest Rates (per annum)				
Thro' Input Purchases	0.00	0.00	5.55	4.43
Thro' Output Sale	0.00	0.00	9.20	28.28
Due to Paddy Price Changes	49.37	0.00	100.84	16.34
Total Effective Interest	93.87	2.96	136.95	50.76

Table : 9.1 Frequency Distribution of Default Cases on Formal and Informal Credit classified by Borrowers' Occupation

Occupation	*Formal*				*Informal*			
	Freq.		*Def. Amt.(Rs)*		*Freq.*		*Def. Amt. (Rs)*	
	1984-86	1996-97	1984-86	1996-97	1984-86	1986-87	1984-86	1996-97
Wage labour	n.a	4[25.00]	910[9.04]	4225[21.00]	3[13.04]	14[58.33]	250 [6.37]	9520 [59.97]
Tenant	n.a	1[6.25]	4977[49.42]	1200[5.97]	9[39.12]	1[4.17]	1503 [38.29]	200 [1.26]
Owner Cultivator	n.a	5[31.25]	4184[41.55]	4756[23.64]	5[21.74]	3[12.50]	1471 [37.48]	1366 [8.60]
Business,Trade & Service	n.a	6[37.50]	0[0.00]	9935[49.39]	6[26.08]	6[25.00]	700 [17.83]	4790 [30.17]
Total	n.a	16[100]	10071[100]	20116[100]	23[100]	24[100]	3925[100]	15876[100]

Note : Figures in parentheses indicate percentages of column total

Table : 9.2 Characteristics of Formal and Informal Credit classified by Default Status

	Formal		*Informal*	
	No Default	***Default***	***No default***	***Default***
	n=10	n=16	n=53	n=24
A. Basic Attributes				
Av.Quantity (in Rs.)	4960.40	5100.00	900.66	2312.50
% Kind Component	25.83	35.42	30.32	65.15
Duration (in months)	17.10	7.81	3.03	1.42
Interest (per annum)	11.00	12.81	2.77	3.00
B.Implicit Interest Rates (per annum)				
Thro' Input Purchases	n.a	n.a	4.42	0.01
Thro' Output Sale	n.a	n.a	27.52	2.28
Due to Paddy Price Changes	n.a	n.a	15.02	3.96
Total Effective Interest	n.a	n.a	49.73	9.25

Appendix 1: Cropping Pattern, Average Productivity and Observed Market Prices of Crops in the Study Villages

Sl.No.	Crop Name	% CGA	Productivity (Qt./Bigha)	Market Immediate Post-harvest	(Rs./Qt.) Price Peak
Village: Amdohara					
1.	Paddy (Kharif)	68	3.50	390	420
2.	Sugarcane	2	NA	NA	NA
3.	Wheat	15	2.50	500	700
4.	Potato	2	24.00	133	300
5.	Mustard	8	1.00	800	1200
6.	Pulses	2	NA	NA	NA
7.	Paddy (Boro)	0	-	-	-
8.	Sesame	2	NA	NA	NA
9.	Vegetables	1	NA	NA	NA
Village: Sarpalehana					
1.	Paddy (Kharif)	67	3.50	390	420
2.	Sugarcane	3	NA	NA	NA
3.	Wheat	3	2.50	500	70
4.	Potato	1	24.00	133	300
5.	Mustard	6	1.00	800	1200
6.	Pulses	1	NA	NA	NA
7.	Paddy (Boro)	15	6.00	400	420
8.	Sesame	3	1.00	800	1200
9.	Vegetables	1	NA	NA	NA

Appendix 2: Sample Design for the Present Study

Caste & Religion	Occupational Groups				
	Owner - cultivation	Tenant-cultivation	Agri. labour	Service & Business	Total
Village : Amdohara					
1. Caste Hindu	35 (8)	0 (0)	8 (2)	7 (1)	50 (11)
2. SC/ST/OBC/Religious Minorities	16 (4)	5 (1)	52 (12)	8 (2)	81 (19)
					Total: 131 (30)
Village : Sarpalehana					
1. Caste Hindu	14 (2)	0 (0)	1 (0)	10 (2)	25 (4)
2. SC/ST/OBC/Religious Minorities	47 (8)	25 (4)	59 (10)	14 (4)	145 (26)
					Total: 170 (30)

Note : The figures indicate the actual number of households in each cell, whereas those within parentheses indicate the number of households selected through a process of stratified random sampling.

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