

CHAPTER 3

AGRARIAN INTERLINKAGES AMONG OWNER CULTIVATORS

3.1 Introduction

This chapter presents an analysis of different interlinkages formed among the 184 *pure owner-cultivators* included in our sample. In the present study, pure owner-cultivators have been defined as cultivators who operate entirely on self-operated pieces of land. Lease-Ratio (L_r) i.e. the proportion of leased - in land in the total area operated by them is, therefore, zero.

Although, theoretically, interlinkages may be of various types, those most commonly observed are those involving the informal (agrarian) credit market to the labour market and the market for output. Since the access of poor borrowers to the formal credit market is limited, they depend on informal sources for financing consumption needs as well as productive activities, which heightens the possibility of involvement in interlinked transactions in the informal credit market. The basic issues to be analysed in this chapter are therefore two-fold : (a) to identify the groups of borrowers who are involved in interlinked transactions and (b) to examine the extent of exploitation if any, in linked borrowing as contrasted to non-linked borrowing.

With this in mind, an attempt has been made in the chapter to evaluate the actual access of the pure owners to formal and informal credit markets. We have examined various types and sources of informal loans and the way in which informal loans give rise to different types of interlinkages. We have presented the methodology for the calculation of the implicit / explicit interest involved in interlinked transactions and finally, the comparison of rates of interest between linked and non-linked borrowings has been made to assess the impact of such linkages on the study area that is characterised by prevalence of the peasant- subsistence mode of cultivation.

3.2 Socio-Economic Status of Pure Owners

To understand the socio-economic position of the pure owners, analysis might first be made of the distribution of their ownership holdings, which would reveal the position occupied by these households in the landowning hierarchy. The landholding distribution of the pure owners has been shown in Table 3.1. The majority i.e. above 70 percent of households in Region-I are seen to belong to ownership classes of less than 5.01 acres, and in Region-II this percentage rises to 76.54 percent. Our study area therefore characterises a small peasant-oriented agrarian economy dominated by sub-marginal (ownership class : 0.01-1.25), marginal (1.26-2.50) and small (2.51-5.00) cultivators . Even the medium (5.01 - 7.00) and large (7.51 & above) cultivators in the study area are not rich cultivators in the relative sense. The average ownership holdings among each class is relatively small. The average area owned over all ownership categories in Region-I is 3.81 acres compared to 3.02 acres for Region-II.

Table 3.1
Size Group Distribution of Ownership Holdings of Pure Owners

Region	Size Group (in acres)	Number of Households	Owned Area	Average Area
I	0.01 - 1.25	24 (23.30)	17.28 (4.40)	0.72
	1.26 - 2.50	21 (20.39)	40.74(10.37)	1.94
	2.51 - 5.00	29 (28.16)	110.78(28.21)	3.84
	5.01-7.50	16(15.53)	102.08(26.00)	6.38
	7.51 & above	13(12.62)	121.81(31.02)	9.37
	Total	103(100.00)	392.69(100.00)	3.81
II	0.01-1.25	23(28.39)	15.64(6.38)	0.68
	1.26-2.50	18(22.22)	28.44(11.60)	1.58
	2.51-5.00	21(25.93)	72.45(29.57)	3.45
	5.01-7.50	11(13.58)	62.92(25.68)	5.72
	7.51 & above	8(9.88)	65.60(26.77)	8.20
	Total	81(100.00)	245.05(100.00)	3.02

Note : Figures in parentheses are percentages to total.

Source : Field Investigation

It is also seen from the above table that sub-marginal, marginal and small cultivators together (belonging to the size-groups of less than 5^{acres}) form 72 percent of the cultivators in Region-I but own only 42 percent of land. Cultivators belonging to the same size-groups in Region-II form about 76 percent of cultivators but own 36 percent of land only.

Some idea about the social status of the cultivators may be obtained by considering their caste/community-wise distribution and levels of education as given in the table below.

Table : 3.2
Distribution of Pure Owners According to Caste / Community by Size Group of Holding

Region	Size Group (in acres)	Number of Households	Scheduled Caste	Moham -medan	Upper Caste
I	0.01-1.25	24	15(62.50)	7(29.17)	2(08.33)
	1.26-2.50	21	14(66.67)	4(19.04)	3(14.29)
	2.51-5.00	29	20(68.97)	2(06.90)	7(24.13)
	2.51-7.50	16	9(56.25)	1(06.25)	6(37.50)
	7.51 & above	13	11(84.62)	0(00.00)	2(15.38)
	Region Sub-total	103	69(66.99)	14(13.59)	20(19.42)
II	0.01-1.25	23	15(65.05)	8(34.78)	0(00.00)
	1.26-2.50	18	9(50.00)	5(27.78)	4(22.22)
	2.51-5.00	21	8(38.09)	4(19.05)	9(42.86)
	5.01-7.50	11	4(36.36)	1(09.09)	6(54.55)
	7.51 & above	8	4(50.00)	0(00.00)	4(50.00)
	Region Sub-total	81	40(49.38)	18(22.22)	23(28.40)
Total Sample		184	109(59.14)	32(17.39)	43(23.37)

Note : Figures in parentheses are percentages of row totals.

Sources : Field Investigation

Table 3.2 reveals that the dominant proportion i.e. 59.24 percent of owner cultivators belong to the Hindu Scheduled Castes (SC), 17.39 percent are Muslim and 23.37 percent are from the Hindu Upper Castes. The table therefore shows the degree of dominance of the Scheduled Castes within the cultivation

community of our study region. The percentage of SC population is higher for both regions at the largest size-group of ownership holding. The percentage of owner cultivators belonging to upper castes is also seen to increase with the size of ownership holding. However, the percentage of muslims among the owner cultivators behaves oppositely and declines with the size of ownership holding.

It needs however to be noted that the character of the SC population among the owner cultivators and over the district as a whole defines the agrarian economy of the study region as being intrinsically different from other parts of the state in the sense that the Cooch Behar SCs are much more homogenised than the SCs in other parts of West Bengal. Whereas the Scheduled Castes over most of India comprise several occupational castes placed in low scale on the caste-hierarchy, the Cooch Behar Scheduled Castes almost entirely comprise the indigenous Rajbanshi Community.

We now distribute the sample pure owner-cultivators accordingly to their level of education in Table 3.3.

Table 3.3
Distribution of Pure Owners According to Size Group of Holding and Educational Level

Region	Size Group (in acres)	Number of Households	Illiterate	Upto Primary	Above Primary & Below middle	Upto Secondary	Upto Graduate
I	0.01-1.25	24	17(70.83)	6(25.00)	1(04.17)	0(00.00)	0(00.00)
	1.26-2.50	21	12(57.14)	2(09.52)	6(28.57)	1(04.76)	0(00.00)
	2.51-5.00	29	10(34.48)	5(17.25)	11(37.93)	3(10.34)	0(00.00)
	5.01-7.50	16	3(18.75)	1(06.25)	7(43.75)	3(18.75)	2(12.50)
	7.51& above	13	1(07.69)	0(00.00)	3(23.08)	5(38.46)	4(30.77)
	Region Sub-total	103	43(41.76)	14(13.59)	27(26.21)	13(12.62)	6(05.82)
II	0.01-1.25	23	19(82.61)	4(17.39)	0(00.00)	0(00.00)	0(00.00)
	1.26-2.50	18	12(66.66)	4(22.22)	1(05.56)	1(05.56)	0(00.00)
	2.51-5.00	21	7(33.33)	7(33.33)	5(23.81)	2(09.52)	0(00.00)
	5.01-7.50	11	2(18.18)	2(18.18)	6(54.55)	0(00.00)	1(09.09)
	7.51& above	8	2(25.00)	1(12.50)	3(37.50)	1(12.50)	1(12.50)
	Region Sub-total	81	42(51.85)	18(22.22)	15(18.52)	4(04.93)	2(02.46)
Total	Sample	184	85(46.19)	32(17.39)	42(22.83)	17(09.27)	8(04.35)

Note : Figures in parentheses are percentages of row totals.

Source : Field Investigation

It is revealed from Table 3.3 that the levels of absolute illiteracy are highest among sub-marginal cultivators (0.01-1.25) but generally falls with the size of landholding. There is also some increase in higher education with the size of landholding in both regions.

Evaluating the aggregated sample of owner cultivators in terms of the socioeconomic indicators, it is noticed again that the overwhelming majority of cultivators fall within medium holding or less, with nearly equal representation among sub-marginal/marginal and small/medium sub-groups. Thus large holdings are largely absent. A similar clustering over size-classes also exists among SC owner cultivators. However, muslim owner cultivators tend to concentrate among the sub-marginal/marginal ownership class while upper caste tend to concentrate among the largest size-cluster. Keeping in mind that the SC (Rajbanshi) cultivators are dominant over the entire sample, no special size-advantage is therefore indicated for them on the strength of their being the indigenous community. Instead, along with the muslims there is more numerical dominance in the lowest sized-classes. Of these castes/communities, the dominant group is also largely illiterates although differences between sub-marginal, marginal and small/medium

cultivators in literacy/ illiteracy terms is much more accentuated. Whereas the dominant section among the smaller size-group is illiterate, the medium size-group tends to have had some access to education even above the primary stage. In fact, the highest proportionate concentration among literate cultivator groups occurs at levels between primary and middle schools.

As such it may be stated that owner cultivators present largely SC and largely literate sub-sample characteristics even though in terms of size of ownership holdings they largely fall into the sub-marginal to medium group which is characteristic of a peasant economy, especially when it is remembered that the naming of acreage holdings as sub-marginal/medium/large is relative to the study area rather than to size-definitions for India as a whole.

3.3 Access to Formal and Informal Credit

In this section we shall try to evaluate the nature of rural credit market in a backward agrarian economy and examine the accessibility of poor peasants to rural credit in order to explain the genesis of interlinkages.

The rural credit market is of two types : organised and unorganised. Within the organised rural credit sector we have a number of formal lending institutions like Cooperatives, Commercial Banks, Land Development Banks, etc. which provide credit for meeting working capital requirements of cultivating households. The unorganised or informal rural credit sector includes a number of private individuals like cultivators, neighbours, friends and relatives, professional money-lenders, shopkeepers, etc. who provide relatively minor credit-support to the consuption/ production needs of the cultivators.

It has been argued by a number of economists and social scientists that formal credit market in rural areas of developing countries tend to be highly imperfect, with access to credit being easier for some groups than for others.¹ Since recent times, institutional agricultural credit has been given importance in the rural development programme of most developing countries including India. Following technological change in agriculture over recent years, credit-needs of small farmers have increased enormously. In this context therefore, the question of effective access to formal credit institutions is of crucial importance.

Increased supply of institutional agricultural credit to the rural people is considered essential because of various reasons. Firstly, it has been argued that increased production loans to agriculture are essential for achieving higher rates of growth in production and for changing the composition of production for those cultivators who presently do not produce enough to meet their own subsistence needs.² Secondly, an increase in formal credit is supposed to shift rural borrowers from informal money-lenders to formal institutions on more favourable credit-terms and thus encourage them to borrow more towards the adoption of new technology and the use of improved inputs and modern farm implements, thus increasing both production and income of the rural poor.³ Thirdly, growth of output and productivity in agriculture would increase per capita real income, which would in turn reduce risk premia and hence reduces rural rates of interest which presently are generally high.⁴ This would as a result, weaken the position of rural money-lenders.⁵ Evidence from developing countries, however, increasingly suggests that benefits from expanded institutional credit have seldom gone to the poorer cultivators. The primary advantages have accrued to large cultivators. Several explanations have been provided in the literature to explain the fact that the participation of poorer cultivators in the formal credit institutions is limited. It has been argued that the credit policies with an urban bias followed in low income countries, have led to smaller allocation of formal credit to the rural poor.⁶ The asset-based lending policies pursued by the formal credit institutions have often rationed credit in conformity with the ability to offer collateral. Since the ability of small and marginal cultivators to offer collateral is quite limited, their access to formal credit market is

proportionately reduced.⁷ A very important factor in explaining poor participation of small and marginal cultivators in the formal credit market is the higher *transaction cost*⁸ incurred in pursuance of loans by small borrowers compared to large borrowers which discourages them from approaching the formal credit institutions.⁹ Finally, patronage, arbitrariness and corrupt practices pursued by the financial institutions in selecting borrowers further limit the small cultivators' access to formal credit.¹⁰

In view of their access to the formal credit being limited, the poor borrowers depend on informal sources of credit. But the informal credit market for this section of borrowers is highly fragmented and borrowers from one source may not have or may be denied equal access to other sources. Very often the loans are highly personalised in nature and credit is advanced on the basis of personal relationships existing between borrowers and lenders. In such a situation, community and residential status of the borrower play a dominant role in the matter of credit transactions in a peasant economy with face-to-face interactions. There is reason now to study the actual access of the owner cultivators to formal and informal credit institutions using field survey data from the district of Cooch Behar in West Bengal. The credit position of pure owner-cultivators as found in the survey is depicted in Table 3.4.

Table 3.4
Distribution of Sources of Credit by Various Classes of Pure Owner-Cultivators

Region	Class of Households	Households Receiving Credit from			Total Indebted HHs	Total Number of HHs	Ratios		
		Institution only	Private only	Both Institution & Private			Ratio of Indebted HHs	Ratio of Institutional HHs	Ratio of Privately Indebted HHs
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I	Sub-marginal	3	11	4	18	24	75.00	29.17	62.50
	Marginal	4	8	3	15	21	71.43	33.33	52.38
	Small	9	12	4	25	29	86.21	44.83	55.17
	Medium	7	5	2	14	16	67.50	56.25	43.75
	Large	8	1	2	11	13	84.62	76.93	23.08
	Total	31	37	15	83	103	80.58	44.66	50.48
II	Sub-marginal	-	8	6	14	23	60.87	26.09	60.87
	Marginal	1	5	7	13	18	72.22	44.44	66.67
	Small	6	7	4	17	21	80.95	47.62	52.38
	Medium	5	3	1	9	11	81.82	54.55	36.36
	Large	3	1	2	6	8	75.00	62.50	37.50
	Total	15	24	20	59	81	72.84	43.21	54.32

HH = Household

Note : Col. 7 & Col.8 do not add up to Col.6 because of certain households having received loans from both institutional and private sources .

Source : Field Investigation

It is observed from Table 3.4 that about 81 percent of the cultivator households in Region-I and 73 percent in Region-II have entered the credit market as recipients of loans. This implies indirectly a high degree of credit-dependence on the part of cultivators in both regions. Across different size classes, the percentage of indebted cultivators varies between 75.00 - 80.58 percent for Region-I and between 60.87 - 75.00 percent for Region-II. The level of indebtedness also does not vary substantially across size-classes.

In spite of the rapid expansion of institutional credit in the district in recent years (see Section 2.7), we find informal (private) sources of credit still occupy a dominant position in the rural credit market. Only 37 percent of the loan-receiving cultivators in Region-I report sole dependence on institution as against 45 percent on private sources. Considering also the cultivators who have taken loans both from institutional and private sources, 44.66 percent of the cultivators in Region-I are found to depend on institutional sources of credit. The comparable figure for private sources is, however, 50.48 percent. Private sources in Region-I are therefore seen to dominate the institutional sources on both counts. Similar results are also obtainable from Region-II. It therefore appears that over the two sample regions as a whole the private sources of credit still dominate the institutional sources.

Col. 7 of the table describes the participation of the pure owners in the formal credit market. It is seen that the percentage of households borrowing from formal institutions increases with the size of ownership holding. There is thus a direct relationship between landbase and degree of dependence on formal credit market for the owner cultivators included in our sample. This suggests that credit tends to gravitate towards better-off farmers. A number of factors have been pointed out earlier in this section which can explain the lower access of the poor peasants in the formal credit market.

The dependence of the households on informal (private) sources of credit generally declines with the size of ownership holding (col.8, Table 3.4). It is observed that the ratio of privately indebted households tends to decline over the entire sample region with an increase in the size of holding.

3.4 Typology of Informal Loans

We have classified informal loans into two broad categories : consumption loan and production loan. Consumption loan have been defined as loans taken in cash or kind at any time of year (and not necessarily in the pre-harvest lean season) for purposes other than meeting agricultural costs. Loans required for meeting expenditure on medical treatment, on religious rites and rituals and for general consumption (such as food, clothing, house-repair, education, etc.) are included in this category. Production loans are loans taken in cash or kind for meeting working capital needs only. Loans taken either in physical form or as cash towards purchase of seed, fertilizer and for improvements on land (such as irrigation) are included in this category.

Table 3.5 shows the typological break-up of credit for 52 households in Region-I and 44 households in Region-II who report having taken credit from informal sources. The following points emerge from the study of the table. Firstly, consumption loans dominate over production loans among the owner cultivators included in our sample. About 46 percent of the privately indebted cultivator households in Region-I reported having taken consumption loans only against which the corresponding figure for production loans is about 33 percent. Considering also the cases where the cultivators have taken both production and consumption loans, the percentage of households receiving consumption loans rises to about 67 percent. Here again, this figure outweighs the corresponding figure for cultivators receiving production loans (which rises to about 54 percent). Similarly, an aggregate of about 73 percent of privately indebted households have reported their recourse to consumption loans in Region-II compared to 43 percent for production loans. For owner cultivators as a whole, consumption needs therefore dominated over production needs in determining their entry into the informal credit market. This is thus a noteworthy feature of rural credit markets in a region characterised by the peasant -subsistence mode of cultivation.

Table 3.5
Type-wise Break-up of Credit from Informal Sources

Region	Household Category	Consumption Loan	Production Loan	Both	Total
I	Sub-marginal	13	1	1	15
	Marginal	3	2	6	11
	Small	8	4	4	16
	Medium	-	7	-	7
	Large	-	3	-	3
	Total	24(46.15)	17(32.69)	11(21.16)	52 (100.00)
II.	Sub-marginal	11	1	2	14
	Marginal	6	1	5	12
	Small	8	3	-	11
	Medium	-	4	-	4
	Large	-	3	-	3
	Total	25(56.82)	12(27.27)	7(15.91)	44(100.00)

Note : Figures in parentheses denote percentages to total.

Sources : Field Investigation

In terms of relative importance, production loans seem to be more important to Region-I than to Region-II, since it is observed that around 54 percent of privately indebted households in Region-I have received credit for production purposes. The higher demand for production loans in Region-I is positively because it is relatively better irrigated.

An important observation from Table 3.5 relates to loan-seeking behaviour over different classes of cultivators. Medium and large cultivators are not seen to require consumption loans. The incidence of consumption loan is highest down the economic scale among sub-marginal cultivators. As many as 87 percent of sub -marginal cultivators in Region-I and 79 percent in Region-II report having taken consumption loans. Although production loans are taken by all classes of cultivators, the higher incidence of such loans is among medium and large cultivators who, in both regions, avail of production loans only. The result of the analysis is marked demarcations between credit-seeking motives between larger versus smaller cultivators. While the relatively smaller cultivators borrow in order to subsist, relatively larger cultivators borrow in order to produce. This would concur with the expectations raised from socio-economic stratification earlier made among the owner cultivators.

3.5 Sources of Informal Loans

Pure owners in our sample find five sources in the rural credit market for informal loans, namely, neighbours, friends and relatives, traders, professional money-lenders and village shopkeepers. Of these, the first two i.e. neighbours and friend/ relatives are actually cultivators directly participating in production process themselves and as such may be described as internal sources of credit in a peasant economy. The other three sources i.e traders, professional money-lenders and village shopkeepers are basically non-cultivators, primarily interested in the credit market because of the usury income from lending and are therefore external suppliers of credit to the peasant economic system. Within the self-perpetuating peasant economy, the credit-needs of the borrowers in normal circumstances are met from sources internal to it. Only when credit-needs assume such large magnitude that they cannot be sustained from within the system, does the entry of usurious external sources become possible.

Looking now at borrowing for production purposes, source -wise break-up of production loan for 28 cultivators in Region-I and 19 cultivators in Region-II is shown in the following table.

Table 3.6
Source-wise Break-up of Production Loan from Informal Sources

Region	Household category	No. of HHs Receiving Production Loan	No. of HHs Receiving Production Loan from			
			Traders	Neighbours	Friends & relatives	Professional Money-lenders
I	Sub-marginal	2	-	-	-	2
	Marginal	8	7	2	-	1
	Small	8	5	1	1	2
	Medium	7	1	4	3	-
	Large	3	-	1	2	-
	Region Sub-total	28	13(46.43)	8(28.57)	6(21.43)	5(17.86)
II	Sub-marginal	3	-	1	-	2
	Marginal	6	4	1	2	-
	Small	3	2	-	2	-
	Medium	4	-	2	1	1
	Large	3	-	3	-	-
	Region Sub-total	19	6(31.58)	7(36.84)	5(26.32)	3(15.79)
Total Sample		47	19(40.43)	15(31.91)	11(23.40)	8(17.02)

Note : Figures in parentheses denote percentages to total. With some households utilising more than one sources over the reference year, the percentages need not add up to 100.

Source : Field Investigation

The importance of various sources of production loan is revealed by Table 3.6. Of these sources, traders are by far the most important source of production loan since these exceed in magnitude the internal bearing capacity of the peasant economy. Out of 28 cultivators receiving production loans in Region-I traders account for 13 cases (46 percent), neighbours account for 8 cases (29 percent) while friends/relatives and professional money-lenders account for 6 cases (21 percent) and 5 cases (18 percent) respectively. The same distributional pattern of indebted cultivators by source is also discernible in Region-II. For the two sample regions as a whole, traders are therefore, the most important credit-source for production loan (sourcing 40 percent), followed by neighbours (32 percent). Friends and relatives (23 percent) and professional money-lenders (17 percent) supply the remainder. In a peasant economy, the capacity of internal sources (i.e. neighbours and friends/relatives) to advance loans for production purposes is in any case rather limited because such loans are relatively larger in magnitude. They can meet only a part of the total demand for production loans. This is the point of entry of usurious external sources (i.e. traders, professional money-lenders) with different conditionalities. The next section of the study will reveal that all the traders advance production loans as cash or physical input on the additional conditionality that borrowers would repay the loan through pre-committed sale of output. An important point emerging from the table is that the traders account for a larger proportion of production loans in Region-I, than in Region-II. Loans advanced by the traders are more readily accessible in Region-I which is relatively better irrigated implying that traders are more confident about repayment of loans from the sale of borrowers' output in this relatively more productive region and consequently estimate lower risks of default on the part of the borrowers.

Moving back to the other loan component, the source-wise break-up of consumption loans for 35 cultivators in Region-I and 32 cultivators in Region-II is shown in the following table.

Table 3.7
Source-wise Break-up of Consumption Loan from Informal Sources

Region	Household category	No. of HHs Receiving Consumption Loan	No. of HHs Neighbours	Receiving Consumption Loan from		
				Friends & relatives	Professional Money-lenders	Shop-keepers
I	Sub-marginal	14	10	2	-	5
	Marginal	9	3	7	3	1
	Small	12	6	4	2	1
	Medium	-	-	-	-	-
	Large	-	-	-	-	-
	Region Sub-total	35	19(54.28)	13(37.14)	5(14.28)	7(20.00)
	Total	67	32(47.76)	26(38.80)	13(19.40)	8(11.94)
II	Sub-marginal	13	6	2	5	1
	Marginal	11	4	5	3	-
	Small	8	3	6	-	-
	Medium	-	-	-	-	-
	Large	-	-	-	-	-
	Region Sub-total	32	13(40.62)	13(40.62)	8(25.00)	1(3.12)

Note : Figures in parentheses denote percentages to total. With some households utilising more than one sources over the reference year, the percentage need not add up to 100.

Source : Field Investigation

Table 3.7 reveals neighbours to be the most important source for consumption loans to pure owners. Out of 67 cultivators receiving consumption loans from informal sources, 32 cultivators (48 percent) source these from neighbours, 26 cultivators (39 percent) from friends and relatives, 13 cultivators (19 percent) from professional money-lenders and only 8(12 percent) from shopkeepers. The study reveals in the next section that these neighbour-creditors are often responsible for interlinking of credit and labour contracts through provision of consumption loans to poor sub-marginal cultivators.

Consumption loans are generally of short-duration and involve smaller quantum of money. As such the major portion of consumption loans is supplied by the internal sources i.e. neighbours and friends and relatives. Only when the demand for consumption loans assumes a larger magnitude which cannot be sustained within the internal fabric of the peasant economy, do poor peasants feel confident to approach external sources i.e. professional money-lenders and shopkeepers for consumption loans.

An important feature of lending in our peasant agrarian economy is the existence of interest-free loans. All loans provided by the "friends and relatives" are interest-free. Neighbours on the other hand usually charge nominal monthly rates of interest at around 5-7 percent when the loan is repaid as cash. In comparison, the rates of interest charged by the professional money-lenders are relatively higher at around 10-12 percent per month. The shopkeepers are found to charge the highest rate of interest in our study area, which varies between 15-20 percent per month. It is therefore revealed that internal credit sources in a peasant economy generally advance credit at more concessional terms compared to external sources, who tend to charge usurious rate of interest.

3.6 Informal Loans and Interlinkages

Tracing the compulsions behind consumption loans, it is the poor peasants whose total income from all sources including wage income, does not simultaneously satisfy the requirements of family consumption and working capital for cultivation have to depend on credit for financing some of these activities, especially during the lean period or the months following a bad harvest. In regions where formal credit flow are inadequate in relation to demand as is the case in our study area, the informal credit market tends to assume pivotal importance, especially for meeting the pressing needs of poor farmers. Because of the compelling nature of their expenditure, they have to borrow even on adverse terms and conditions. These borrowers who do not have non-labour assets which can be used as suitable collateral, may only be in a position to negotiate their loan-needs against future promise of labour service and / or standing crop. The obligation to pledge these non-marketable¹¹ collaterals to the lenders provide the latter an opportunity to offer loan to the poor borrowers in association with a combination of more than one transaction. Therefore, the credit market tends to interlink with other markets, including those for labour, input or output as is evident in our study area.

Over all sources of informal credit mentioned in the analysis above, it is the traders and occasionally the neighbours who are primarily responsible for the interlinking of markets in our study area. In certain cases the neighbours advance cash or crop loans to poor peasants over the slack season in order to get ready supply of labour services from the borrowers during the peak season. In this way, credit market becomes intelocked with labour market. The traders, on the other hand, advance cash or input on credit to the borrowers on the understanding that the borrowers will sell their produce to the traders immediately after the harvest at lower prices. In this way, the traders try to control the output market through credit-output linkage.

We find that three types of credit-interlinkages occur among different classes of pure owners included in our sample, which are enumerated below :

1. *Credit linked with input and output (CIO)* : In this type of linkage, the lenders advance inputs (seeds and fertilizers) on credit to the borrowers on condition that they will sell their produce after the harvest at creditor-determined prices. Besides, the borrowers also have to pay interest charges for the duration of loan. The lenders in such cases are all grain traders who seek to exercise control over the borrowers' output, particularly for boro paddy, the production of which is highly input-intensive by nature and necessity.
2. *Credit linked with output (CO)* : This interlinkage differs from the earlier one (CIO) in the sense that cash credit instead of input loan is supplied in this case by the lender on condition that the borrower will repay the loan through future committed sale of output. This type of linkage operates in the production of winter vegetables in our study area, which is less input-intensive than the production of boro paddy.
3. *Credit linked with labour service (CL)* : This linkage relates to labour-linked borrowing. Poor peasants sometimes negotiate loans in cash or kind against future promise of labour service, for which, however, they would be paid at market wage rates. Here the advantage of the interlinked loan-terms to the creditors are in terms of having committed supply of labour available when they might need it, rather than direct pecuniary advantage.

Credit-Labour Linkage :

Considering first the character of CL-linkage, in the study region, agricultural labour from among owner cultivators is generally provided by sub-marginal and marginal cultivators whose meagre

farm income is not sufficient to meet family consumption needs. They need in addition to sell their labour services to supplement meagre farm income. Labour activity by this group of poor peasants is more in the nature of a subsidiary occupation and is moreover restricted by the amount of time they have to devote to their own cultivation. This group of labourers very often depends on informal sources for consumption loans, especially in the pre-harvest lean season. However, the credit-labour linkage among owner cultivators in our study area is confined to sub-marginal cultivators only, a section of whom are seen to negotiate loans on cash or kind terms committing themselves to future labour supply. Since they do not earn sufficient cash income to repay the loan, repayment in terms of labour supply is convenient to them. Certain creditors are also seen to extend credit-support to these borrowing labourers in lieu of credit-linked labour services. It therefore appears that both non-financial as well as financial considerations play important roles in explaining the occurrence of credit-labour linkage in our study area. Table 3.8 provides information on the incidence of credit-labour linkage.

Table 3.8
Interlinking of Credit and Labour Contracts

Region	Household Category	Number of HHs Borrowing form Informal Sources	Number Receiving Loan against Future Commitment of Labour Supply	Number of Households Who Worked for Their Lenders		Number Rendering Unpaid or Under-paid Non-farm Services to the Employers against the Loan
				At MWR	Below MWR	
I	Sub-marginal	15	8	8	-	-
	Marginal	11	-	-	-	-
	Small	16	-	-	-	-
	Medium	7	-	-	-	-
	Large	3	-	-	-	-
	Total	52	8	8	-	-
II	Sub-marginal	14	6	6	-	-
	Marginal	12	-	-	-	-
	Small	11	-	-	-	-
	Medium	4	-	-	-	-
	Large	3	-	-	-	-
	Total	44	6	6	-	-

Note : *MWR = Market wage rate*

Source : Field Investigation

In course of the survey, a section of privately indebted sub-marginal cultivators reported that they had obtained consumption loans from their neighbours (who also happen to be larger cultivators) on condition that they would repay loans by working for the lenders at a future date. The lenders often enter into an implicit contract with the borrowing labourers such that the borrowers will guarantee to do a particular piece of work (for instance, planting or harvesting of paddy) at a future date. The labourers undertake to continue to work for the same employer till the agreed work is completed. We later describe this type among labourers as *semi-attached* labourers who remain attached to a particular employers for a few number of days (for details, see Ch. 5). Since the average amount of loan is usually very low (between Rs. 55 and Rs. 130), the period of attachment with a particular employer is not very long (which necessarily does not exceed 13 days at a time). The smaller size of loans therefore imparts a seasonal character to the credit-labour linkage in our study area. This type of labour attachment against the provision of consumption loans is very common to the region. The consumption loans involved are, however, highly personalised in nature and are given only to those labourers with whom the lender has a long-standing social relationship.

Table 3.8 shows that ten percent more of sub-marginal borrower cultivators in Region-I received credit against future commitments of labour supply as compared to Region-II. With the percentage of sub-marginal borrower cultivators in the two regions lying between one-fourth to one-third of the total number of sub-marginal cultivators, this accentuates the fact that the CL-linkage is the primary arrangement for credit among this group. All such linked labourers in Region-I and Region-II also report having worked for their creditors at prevailing market wage rates at the time of repayment of loan.

The advantages of the CL-linkage to the relatively poor farmers is that it allows for collateral substitution in the informal credit market, and also provides assured employment for a defined length of time, however short it may be. From the lenders' point of view this arrangement is theoretically convenient due to the following reasons:¹²

- (i) assurance of supply of labour services from borrowers, in times of need on priority basis;
- (ii) saving of time and recruitment cost by not having to contract a number of casual labourers during the peak of major agricultural operations.
- (iii) reduction of wage costs by hiring the labour service of these borrowers at lower than market wage rate.

No evidence of the third of this is seen in our survey results, since all linked labourers were paid at market wage rates prevailing at the time of work.

It has been argued in several studies of interlocking that the essential feature of feudal relationships is related to the appropriation of surplus in the form of unpaid labour services by the employer-creditor through *extra-economic coercion* or social and legal compulsions. But we have not observed any case of extra-economic coercion being exercised by the creditor to extract unpaid labour services from the borrowers. All linked labourers report having received prevailing wages and that no effective pressure was applied on them to restrict their entry into the free labour market. Moreover, it was also revealed that they did not perform any non-farm services for the lenders. The relationship of borrower and lender arises purly from economic considerations. Therefore, we do not find any reason to describe this type of temporary labour-tying arrangement as a feudal or semi-feudal manifestation of production relations. This point is further elaborated in Chapter 5.

Credit-Output and Credit-Input-Output Linkage :

It is a characteristic of agricultural production as compared to industry, that it is spatially dispersed, with individual producers enjoying only limited access to central markets. This becomes particularly true in rural economies where communication and transport systems are imperfectly developed. Marketing, under most economic systems, is carried out by specialised marketing intermediaries through whom farm products flow from their original producers to final consumers via various intermediaries, special market facilities and contractual arrangements which mediate the transactions between producers, marketing intermediaries and final consumers.¹³

At the village level, the number of such intermediaries is necessarily small. Consequently market imperfections arise, because of personalised transactions and various bilateral arrangements between producers and marketing intermediaries substituting for competitive markets.¹⁴

In a poor agrarian economy certain institutions are developed as a substitute for missing markets in an environment of pervasive risks, market incompleteness, and information asymmetry. In the absence of a complete set of smoothly functioning markets for factors and commodities and above all for credit and risk, households find it advantageous to enter into simultaneous transactions with each other in more than one markets.¹⁵ The credit-output interlinkage, for example, is one such instance of simultaneous transactions taking place between the producers and traders.

In our study area, the marketing of agricultural produce is observed to be controlled by private traders. There are different kinds of intermediate market functionaries known locally as *fariah*, village merchant, *beparies*, *aratdars*, wholesalers, brokers, etc. who are the middlemen. These functionaries play a very significant role in the process of marketing agricultural produce from the farmers to the ultimate consumers. An aratdar (namely trader) often enters into a contract with a farmer under which the trader provides a credit for cultivation against a commitment by the farmer to sell his harvest only to the lender at a price lower than that prevailing in the market. Such activity of the traders leads to interlocking of credit and output contracts.

The following table gives us information on CO /CIO-interlinkages.

Table 3.9
Interlinking of Credit and Output Contracts

Region	Household Category	Number of HHs Borrowing from Informal Sources	Number of HHs Receiving Loan against Future Commitment of Output	Number of HHs Selling Their Produce to Their Lenders	
				At Market Price	Below Market Price
I	Sub-marginal	15	-	-	-
	Marginal	11	7(2)	-	7
	Small	7	5(1)	-	5
	Medium	7	1	-	1
	Large	3	-	-	-
	Total	52	13(3)	-	13
II	Sub-marginal	14	-	-	-
	Marginal	12	4	-	4
	Small	11	2	-	2
	Medium	4	-	-	-
	Large	3	-	-	-
	Total	44	6	-	6

Note : Figure in parentheses denote the number of borrowers receiving input-loans (i.e. seed and fertilizer).

Source : Field Investigation

Table 3.9 shows that 25 percent of cultivator households in Region-I and 13 percent of households in Region-II from among those borrowing from informal sources have borrowed from traders against future commitment of output. One-fourth of such output-linked borrowers in Region-I report having received input-loans i.e. seeds and fertilizers. On the other hand, all the output-linked borrowers in Region-II have received cash loans from the traders. Out of 19 cultivators in Region-I and Region-II sourcing output-linked loans from traders, 16 are subject to CO-linkage and only 3 cultivators (in Region-I) are involved in CIO-linkage.

Credit-output linkage (CO) in our study area is a seasonal phenomenon particularly observable in the production of winter vegetables (e.g. cabbages, cauliflower, etc.). The traders advance cash loans to vegetable growers against committed future sales of vegetable. The incidence of such linkage is slightly higher in Region-I which is relatively better irrigated. In contrast, credit-input-output (CIO) interlinkage is found in the production of boro paddy (HYV spring paddy) where water and fertilizer requirement is very high. The CIO-linkage is prevalent in Region-I only where the cultivation of boro paddy has recently taken a foothold with the help of the existing irrigation facility, which is why the incidence is relatively high. The production of boro paddy is virtually non-existent in Region-II where irrigation facilities are very poor. Grain traders in Region-I however sometimes advance seed and fertilizers to willing farmers on the condition that the farmers would sell their output of boro paddy to the traders. Where boro cultivation involve the production of paddy in a non-traditional season, the consequent ability of the trader to corner the output in a scarce situation gives him considerable market advantage.

Numerically therefore, the CO-linkage is more powerful than the CIO-linkage. It appears that output-linked credit transactions in our study area are primarily a phenomenon observable in the production of winter vegetables, although in certain cases it has also entered in the cultivation of paddy. In a small peasant-oriented subsistence economy where production of paddy takes place mainly for domestic consumption and not for sale in the market, the poor peasants are unlikely to be very responsive to any interlocking arrangement in the production of paddy which increase their involuntary involvement in the market as sellers. However, the response of the peasants is likely to be opposite in the production of vegetable which is produced mainly for the market. Interlinking arrangement in vegetable production is therefore easily acceptable to a poor peasant than in the production of paddy.

Table 3.9 also reveals that CO/CIO-linkage is largely confined among marginal and small cultivators. Neither sub-marginal nor large cultivators are involved in this linkage. All interlinked cultivators also report that they have sold their output to the lender-traders at lower than market prices. Moreover, the lenders also charge higher prices against inputs advanced on credit to the borrowing cultivators. Output-linked loan transactions, therefore, involve both explicit (stipulated) and implicit (hidden, as for example, in the forms of over-valuation of inputs given as loans and / or under-valuation of products offered by the borrowers to the lenders) extraction of interest. A methodology for measuring such rates is evolved later.

The production of boro paddy (HYV) and vegetables has been a recent addition to the cropping-matrix of the district. The introduction of these new crops with higher monetary yield per acre may thus appear as an income-augmenting technological improvement in the area. A small peasant surviving on the verge of subsistence, can not generally be expected to have the economic ability to bear either the additional risk or the cost of introducing new technology in agriculture. In a poor agrarian economy where the actual accessibility of small peasants to the organised credit market is very limited, they have to fall back upon the traders for working capital to finance the new technological opportunities. The professional trading class whose primary aim is to extend control over the marketing of output, can not normally be expected to play a leading role in the technological transformation of backward agriculture which may improve the economic condition of the poor peasants and consequently may weaken their grip over the peasant. They advance production loan to the small peasants who are liable to sell their produce to the traders at lower than market prices immediately after the harvest. Commercial exploitation of the indebted peasants thus takes place through the network of exchange relations. The traders extract very high effective interest (implicit & explicit) from the poor indebted peasants thus enhancing the extraction of agricultural surplus through 'unequal exchange'. Commercial capital thus plays a crucial role in inhibiting the process of technological diffusion among the small peasants because of intensified commercial exploitation by traders who extend their control over marketing of products.¹⁶

3.6.1 Types and Extent of Interlinkages

There are a total of 33 interlinked households (i.e. 17.9 percent) among 184 pure owner-cultivators found in our sample. A little less than half are labour-linked and the remaining are output-linked. The following table gives a type-wise break-up of interlinkages among various classes of pure owner-cultivators.

Table 3.10
Types of credit interlinkages among various classes of pure owner-cultivators

Household Category	Types of Linkage	Number of Linked Borrowers			Principal Source of Lending	Description of Loan	Mode of Repayment
		Region I	Region II	Total			
Sub-marginal	CL	8	6	14(42.42)	Neighbours	Cash, Grain	Payment in terms of Labour Service
Marginal	CO	5	4	9(27.28)	Traders	Cash	Payment in output (Vegetable)
	CIO	2	-	2(6.07)	Traders	Fertilizer, Seed	Payment in grain (Paddy)
Small	CO	4	2	6(18.17)	Traders	Cash	Payment in output (Vegetable)
	CIO	1	-	1(3.03)	Traders	Fertilizer, Seed	Payment in output (Paddy)
Medium	CO	1	-	1(3.03)	Traders	Cash	Payment in output (Vegetables)
Total	-	21	12	33(100.00)	-	-	-

Note : Figures in parentheses denote the percentage of individual type linkage to total linked borrowers.

Source : Field Investigation

The difference in numbers between Region-I and Region-II are basically accounted for by differences in their level of agricultural development, especially since the data in the table pertain mainly to production loans. Table 3.10 also shows that CO-interlinkage is the dominant form of interlinkage, followed by CL and CIO-interlinkages. It is found that CO-linkage accounts for just under half the total cases, CL-linkage accounts for around 42.42 percent and CL-linkage 9.1 per cent of the cases. The relative importance of different types of interlinkages are shown in the diagram.

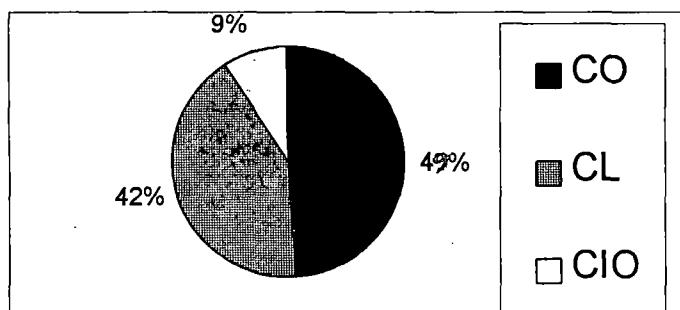


Fig. 3.1 : Typology of Interlinkages Among Owner Cultivators

It is seen also that trader-sourced loans are the primary means of credit-support for production purposes that are availed by marginal to medium owner cultivators, whereas sub-marginal cultivators basically depend on neighbours for labour-linked credit. A certain (small) proportion of cultivators in the marginal and small categories avail of input-support offered by the traders for engaging in cultivation of boro paddy. The phenomenon is interesting because input costs of boro cultivation by medium and large cultivators are self-financed. The relatively weaker economic class of marginal and small cultivators is able to emulate them with the support of the traders in the region (i.e. Region-I) where the other important requirement for boro cultivation, namely the irrigation facility, is adequate. Bearing in mind

that boro cultivation is a relatively recent (because the irrigation facility is relatively recent), the grain-trader is a new comer in the informal rural credit market. On the other hand, traders financing CO-linked credit are the vegetable traders who have more traditional presence in the informal credit market. Since the grain traders usually also double as traders in inputs such as seeds and fertilizers, the CIO-linked credit-support they offer to the marginal and small cultivators is basically an extension of that input market besides affording an advantaged entry into the market for agricultural produce.

The following table shows the extent of interlinked transactions among different classes of cultivators over the entire sample.

**Table 3.11
Interlinked Transactions in the Informal Credit Market of the Study Region**

Household Catagory	Total Number of Households	Number of Households Borrowing from Informal Sources	Number of Households Borrowing with Inter-linked Tranactions	Percentage - Ratios		
				BH	IBH	IBH:BH Ratio
Sub-marginal	47	29	14	61.70	29.79	48.28
Marginal	39	23	11	58.97	28.21	47.83
Small	50	27	7	54.00	14.00	25.92
Medium	27	11	1	40.74	3.70	9.05
Large	21	6	0	28.57	0.00	0.00
Total	184	96	33	52.14	17.93	34.38

Note : BH = Borrowing Household

IBH = Interlinked Borrowing Household

Source : Field Investigation

It is seen from Table 3.11 that 61.70 percent of the sub-marginal cultivators have borrowed from informal sources, of whom nearly half have participated in linked credit transactions. This is also nearly true for marginal cultivators. In terms of credit-dependence the position of small cultivators is relatively similar but a significant decline takes place in their dependence on interlinked transactions. There after sharp progressive decline in both, credit-dependence and in dependence on interlinked transactions is seen for the larger land-categories, namely medium and large cultivators. The large cultivators are free of any compulsion to enter interlinked transactions.

The IBH-ratio in the table shows that just under a third of the sub-marginal cultivators in our sample have borrowed through interlinked credit transactions. While the ratio is similar for marginal cultivators, it shows substantial progressive decline over larger land-categories and ultimately is nil for large cultivators.

It would also be necessary to consider the relative importance of consumption versus production loan needs in explaining the pattern of credit-linked transactions found among the pure owners. The following table describes distribution of interlinked households according to the purpose of loan.

Table 3.12
Distribution of Interlinked Households According to Purpose of Loan

Category of Household	Number of Interlinked Households	Number of Household Interlinked through	
		Production Loan	Consumption Loan
Sub-marginal	14	-	14
Marginal	11	11	-
Small	7	7	-
Medium	1	1	-
Total	33(100.00)	19(57.58)	14(42.42)

Source : Field Investigation

From Table 3.12 we find that all interlinked sub-marginal owner cultivators are linked through consumption loans, but all others in cultivator-categories above them only source production loans. Over the combined sample, 57.58 percent of the total interlinkages are sourced from production loans while 42.42 percent are sourced from consumption loans. Production loans thus seem to be responsible for explaining interlinkage for the majority of the linked owner-cultivators, especially for the larger categories among them.

The foregoing analysis has pointed out that interlinkage in our study area is confined to households with lower economic status i.e. sub-marginal, marginal and small cultivators. Collateral-poor borrowers would prefer to settle loan obligations in terms of output, only when this not possible (i.e. among the sub-marginal category), they offer their labour services as repayment of loans. Therefore, the order of interlinkages found among different cultivator-categories appears to be essentially a manifestation of survival strategy of the collateral-poor rural households in a backward agrarian economy.

3.7 Terms of Borrowing from Informal Sources

In order to obtain some idea about the terms and conditions that apply to borrowing from informal sources let us first consider the modes of repayment of such loans. In our study area 7 modes of repayment apply to informal loans, which comprise : (a) money to money; (b) money to crop; (c) input to crop; (d) money to labour; (e) crop to crop (i.e. grain) and (f) crop (i.e. grain) to labour. Table 3.13 and Table 3.14 describe the the modes of repayment of production and consumption loans respectively.

Table 3.13
Modes of Repayment of Production Loan

Region	Modes/Sources	Traders	Neighbours	Friends & relatives	Professional Money-lenders	Total Instances
I	Money to Money	-	8	6	5	19
	Money to Crop	10	-	-	-	10
	Input to Crop	3	-	-	-	3
	Money to Labour	-	-	-	-	-
	Total	13	8	6	5	32
II	Money to Money	-	7	5	3	15
	Money to Crop	6	-	-	-	6
	Input to Crop	-	-	-	-	-
	Money to Labour	-	-	-	-	-
	Total	6	7	5	3	21

Source : Field Investigation

Table 3.14
Modes of Repayment of Consumption Loan

Region	Modes/Sources	Neighbours	Friends & relatives	Professional Money-lenders	Shopkeepers	Total Instances
I	Money to Money	8	11	5	7	31
	Crop to Crop	3	2	-	-	5
	Crop to Labour	2	-	-	-	2
	Money to Labour	6	-	-	-	6
	Total	19	13	5	7	44
II	Money to Money	4	9	8	1	22
	Crop to Crop	3	4	-	-	7
	Crop to Labour	2	-	-	-	2
	Money to Labour	4	-	-	-	4
Total		13	13	8	1	35

Source : Field Investigation

The modes of repayment presented in Table 3.13 and Table 3.14 indicate a high degree of monetisation of rural economy. In 86 percent of both production and consumption loans, the lending and /or repayment of loans involve the use of money. In only 14 percent out of 132 instances of production and consumption loans did the transaction take place without the use of cash. The incidence of various modes of repayment as revealed by field investigation are discussed below :

Money to Money : This emerged as the dominant mode of repayment in our study area. Out of 53 instances of production loans over the two regions, loans were both received and repaid in cash in around 64 percent of the cases. Similar percentage was found among 79 cases of consumption loans where the loan was taken and repaid in money.

Money to Crop : This emerged as an important type of mode of repayment from the view-point of interlinkage and covered output-linked credit advances by traders as production loans in cash. 16 instances of these were found, which have been interpreted as CO-linkage under Table 3.9.

Input to Crop : Trader-lenders also sometimes advanced seeds and fertilizer inputs on credit to the farmers against repayment from the resulting output. The 3 such instances of loans have been interpreted as CIO-linkages in Table 3.9.

Money to Labour : Out of 79 instances of consumption loans over the two regions combined, about 13 percent were loans repaid by the sale of labour services by sum-marginal farmers to their lenders. These provided the incidence of credit-labour linkages in Table 3.8. In all the 10 cases the CL-linked borrowers were paid at the prevailing market wage rate without interest being charged on the amount of loan advanced.

Crop to Labour : 4 instances were found where loans of grain were taken from neighbours and repaid by the sale of labour services. These have been interpreted as interlinkage between labour and credit contracts in Table 3.8. All such loans may be considered as interest-free loans because no implicit or explicit rate of interest is charged.

Crop to Crop : 12 instances were found of consumption loans where repayment of grain-loans were made from the subsequent paddy crops. In just 50 percent of such cases, loans are taken from neighbours and are repaid with an extra amount of paddy as the grain-rate of interest. The loans advanced by the friends and relatives however did not involve any grain-rate of interest. Such cases of borrowing had been done in the slack season and repayment was made immediately after the harvest. The duration of the loans was generally 3 months or less, and the basic grain-rate of interest (when it applied) varied between 25-40 percent of the crop advanced irrespective of the period of loan.

So far as the mode of repayment of production loans are concerned, we find that trader-credited loans cluster against the 'money to crop' and 'input to crop' repayment mode. No other repayment mode (e.g. cash) is accepted by the traders. This reveals the traders' strong motive in controlling the output market through advancing linked production loans, for which reason he participates in the informal credit market. The picture is however different for other sources who insist that the repayment should be in terms of money. The intrinsic difference in creditor-behaviour with regard to the choice of the preferred mode of repayment is accounted for by the size of loans advanced since production loans advanced by the traders are usually large (varying between Rs. 1000 and Rs. 2500 over an agricultural season), repayment in terms of future committed sale of output serves the interest of the traders by lowering the higher risk associated with the loan, besides guaranteeing recovery of loans. In comparison, loans advanced by other sources are smaller in magnitude, and since the creditors do not trade in agricultural produce, the acceptable form of repayment is money. This singles out trader-creditors as the source of usurious linkage, because of the coincidence of several motives within their willingness to advance larger loans. Firstly, the mercantile interest is served because the linkage allows cornering of stocks at lower prices. Secondly, in so far as the trader is also a dealer in agricultural inputs, the linkage expands his market and has monopolistic power to levy higher prices on inputs sold. Thirdly, his ability to outcompete rival traders is increased.

Looking now at the repayment modes of consumption loans we observe that the neighbours open various options for the recovery of loans from different category of borrowers. Since the neighbours are not seen to pursue any usurious motive behind lending, the borrowers are generally given a variety of choices of loan-repayment modes. However, repayment of loans in terms of labour services of the borrowers is seen to be the most important form of repayment -mode of neighbour-credited loans which benefits both the lenders and borrowers. The lenders can ensure availability of labour services in the peak agricultural seasons. The borrowers on the other hand can get interest-free loans by committing future labour services. The loans advanced by the friends and relatives are seen to cluster against 'money to money' and 'crop to crop' repayment forms with a denser concentration in the former. All such loans are goodwill loans which do not carry any rate of interest. Professional money-lenders and shopkeepers generally insist the repayment in cash and charge usurious rates of interest. An analysis of mode of repayment therefore reveals the motives of lending of different credit-sources in a peasant economy.

The terms and conditions of borrowing are also reflected by the collateral security used in the informal credit market. We present the information on various types of collateral securities used by the borrowing pure-owners in the study area in Table 3.15 below.

Table 3.15
Collateral Requirements in the Informal Credit Market, Cooch Behar (1990-91)

Class of Households	Number of Borrowing Households	Number of Households Borrowing with Some form of Collateral as			Total
		Labour	Product	Others	
Sub-marginal	29	14	-	5	19(65.52)
Marginal	23	-	11	1	12(52.17)
Small	27	-	7	1	8(29.63)
Medium	11	-	1	1	2(18.18)
Large	6	-	-	0	0 (0.00)
Total	96	14	19	8	41(42.71)

Note : Figures in parentheses denote percentages of indebted households borrowing with some form of security.

Source : Field Investigation

Borrowers in our study area in most of the cases used non-marketable collaterals like future labour service/standing crop to raise loan in the informal credit market. In a very few cases however some "other" forms of collateral (such as wrist-watch, silver ornaments, brass utensils, land, etc.) have been used by the borrowers. It is found from Table 3.15 that 65.52 percent of loan-receiving sub-marginal cultivators obtained credit with some form of security. The corresponding figures for marginal, small and medium cultivators are 52.17, 29.63 and 18.18 percent respectively. The large cultivators borrow in the informal credit market without the use of security. Clearly, the percentage of households borrowing in the informal credit market with some form of security goes down with the increase in the status of the farm households. Out of 96 households borrowing in the informal credit market, 41 (i.e. 42.71 percent) have borrowed with some form of security. In most of the cases, labour and output are used as collaterals by the borrowing cultivators. 14 borrowing households used labour and 19 such households used output as collateral. As seen from the table, only the sub-marginal cultivators used labour and marginal, small and medium cultivators used output as collateral. Besides labour and output, the poor farm households also used some "other" forms of collateral. Land is used least by the farm households. Only one medium cultivator borrowing with "other" form of collateral used land to raise loan.

The evidence from our study area therefore shows that the poor-farmers generally use future labour services and output to raise loans in the informal credit market and in this way try to keep their tiny pieces of land for cultivation. Moreover, the percentage of households borrowing without security increases with an increase in the size of landholding of farm households, indicating their higher creditworthiness for the lenders.

Besides the terms and collateral-conditions of borrowing, another important aspect or character of informal credit transactions relates to interest terms. Since this aspect involves an additional computational exercise, it is dealt with separately in the next Section.

3.8 Variation in Interest Rates over Linked and Non-Linked Credit Transactions

Method of Computation

The terms and conditions of borrowing are also reflected by the interest charged on loans. But the calculation of rate of interest in the informal credit market involves some difficulties. Sometimes, creditors overvalue the commodities advanced as loan (e.g. seed and fertilizer) and/or undervalue the repayment-commodities (e.g. labour service or output). Even in cases of smaller loans, for example, where a 'paddy-interest' is charged, this involves the problem of valuation of commodity advanced and refund liabilities. While the refund liabilities in terms of the quantity of grain remains constant, its value at the time of loan repayment differs from the time of loan offer due to a change in price. To handle problems of this nature, separate computational methodologies are derived for calculating interest on CL, CO/CIO linkages and non-interlinked credit transactions, taking into account the different modes present among each.

A. Labour-Liked Loan Transactions

In case of labour-linked borrowings in our study area, no explicit or stipulated rate of interest is charged by the lender to the borrower. The only rate of interest that may arise is in the form of a wage-cut implying an implicit rate of interest. The methodology for the calculation of the implicit rate of interest is presented below

(i) *Cash to Labour Service :*

When implicit interest exists, the actual wage rate paid (W_A) will be less than the prevailing market wage rate (W_M) at the time of rendering labour service. When $W_A = W_M$ (i.e. when labourers are paid according to prevailing market wage rate), no implicit rate of interest would arise. Implicit interest rates therefore occur according as $W_M \geq W_A$. Here the payment of implicit interest will have taken the form of a wage-cut. When L is number of days of labour provided by the borrower to repay the loan, the total wage bill at actual wage rate (TW_A) will be

$$TW_A = L \cdot W_A$$

and the total wage bill at market wage rate (TW_M) will be

$$TW_M = L \cdot W_M$$

The total amount of implicit interest in such a case would therefore be

$$TW_M - TW_A = L \cdot W_M - L \cdot W_A = L(W_M - W_A) \dots (1)$$

In our study area the standard agreement for repayment of labour-linked loans involves a partial deduction by the employer from the wages payable by agreement each day until the loan is realised. With the loan principal as B an agreed rate of deduction of X Rs. would see the principal being repaid over B/X days determining the number of days for which the labourer commits to work for his creditor. Thus the total amount of implicit interest on the loan is given as

$$TW_M - TW_A = B/X (W_M - W_A), \text{ by transformation of equation (1).}$$

With the duration of the loans given as T, annualised implicit rate of interest (R_1) can then easily be computed as

$$R_1 = \frac{(W_M - W_A) \times 365 \times 100}{XT}$$

Since no explicit rate of interest (R_2) is found to exist on labour-linked borrowings in the study region, the effective rate of interest (R) which would have been the sum of implicit and explicit rate of interest is same as implicit rate.

(ii) *Kind to Labour Service :*

When credit is received in a kind-loan (i.e. rice/paddy) and is repaid through labour, it may be valued in terms of its cash equivalent by valuing the commodity borrowed (Bq) in terms of the commodity price prevailing on the time the loan was taken (P). Therefore, the market realisation of kind loan is P.Bq. Once the kind loan is converted into a cash equivalent, the money rate of interest on these loans can be calculated by applying the method developed above.

B. Output-Linked Loan Transactions

(i) *Cash to Output :*

As seen earlier, output-linked loans are an important feature of trader-creditors and involve a borrowing in terms of money against repayment by sale of output. Here a role equivalent to that of ($W_M - W_A$) in the previous procedure is laid by ($P_M - P_C$) where P_M = market price of output at the time of harvest and P_C = contracted purchase price at which the creditor purchases the output from the borrowers. By nature of the contract as seen in the study region, $P_C < P_M$ and thus an element of interest arises purely from the differences in prices, which can, for the total amount of output realised as repayment (Q), be denoted as $(P_M - P_C)Q$. The implicit rate of interest (R_1) would therefore be

$$R_1 = \frac{(P_M - P_C)Q \times 365 \times 100}{B.T}$$

In addition to this, such loans also carry a stipulated explicit rate of interest (R_2) which has to be added to the annualised implicit rate of interest (R_1) to arrive at total i.e. effective rate of interest (R) on the loan advanced. Thus

$$R = \frac{(P_M - P_C)Q \times 365 \times 100}{B.T} + R_2$$

(ii) *Input to Output :*

Traders are also seen to advance fertilizer and seed inputs against repayment to be made by the sale of output particularly against cultivation of boro paddy. A separate procedure has to be followed to calculate the rate of interest since the loan principal is also in kind and moreover inputs supplied

are valued at higher than market price. Here the method is similar to that above but the extra prices realised on input supplied have to be added to the interest element. These extra prices may be calculated as follows :

With p_m as the price of inputs and p_c as the contracted price-valuation of inputs, $p_c > p_m$ according to the terms of the contract. With total quantity of inputs defined as q the extra price realised against inputs supplied will be $q(p_c - p_m)$. This has to be added to $Q(P_m - P_c)$ to get the total implicit interest charges which is equal to $Q(P_m - P_c) + q(p_c - p_m)$. Annualised implicit rate of interest (R_1) would therefore be

$$R_1 = \frac{[Q(P_m - P_c) + q(p_c - p_m)] 365 \times 100}{(B + q.p_c).T}$$

In such case therefore, the effective rate of interest (R) on input loan is

$$R = \frac{[Q(P_m - P_c) + q(p_c - p_m)] 365 \times 100}{(B + q.p_c).T} + R_2 \text{ where } R_2 \text{ is the stipulated rate of interest on such loans.}$$

C. Non-interlinked Loan Transaction

Besides non-linked money-to-money loan transactions arranged through professional money-lenders, village shopkeepers, etc., where the standard methods of calculating explicit rates of interest apply, a separate method has to be evolved to handle non-linked transactions where both principal and repayment are in kind. This is not discussed.

In this category of non-interlinked credit, loan advance and repayment is made in terms of paddy. In our study it is observed in some cases that borrowers repay the exact equivalent amount of paddy to that which is borrowed, hence paying no interest, and in others that the repayment involves an additional amount of paddy over and above the principal. The monetary-equivalent for the latter grain-rate of interest is calculated as follows :

The difference between the principal quantity borrowed (Q_p) and the contracted quantity to be repaid (Q_c) i.e. $(Q_c - Q_p)$ equals the total grain-interest over the duration of loan. Crop loans of this kind are usually taken in the pre-harvest lean season when crop-price is generally high, and the loans are to be repaid immediately following the harvest when crop-prices decline. Because of this seasonal fluctuation in prices we get, $P_1 > P_2$, with the relevant paddy prices being P_1 at the time of borrowing and P_2 at the time of repayment. Therefore, the seasonal fluctuation in prices work to the disadvantage of the lender and to the advantage of the borrowers. However, the lenders generally fix the repayment quantity (Q_c) in such a way that it more than compensates the loss suffered from seasonal price fluctuation. Under this contracted arrangement, the whole mechanism, therefore, goes in favour of the lender. The total monetary equivalent of the interest realised by the lender is equal to $(P_2 Q_c - P_1 Q_p)$. Considering the duration of the loan, this interest in money terms can be annualised to the effective rate of interest (R) which can be written as

$$R = \frac{(P_2 Q_C - P_1 Q_p) \times 365 \times 100}{P_1 Q_p T}$$

Variation in the Study Region

On the basis of above formulations we have computed the mean effective rates of interest paid on linked and non-linked credit transactions according to size of holding as presented in Table 3.16.

Table 3.16
Mean Effective Rates of Interest Paid by Pure Owners on Linked and Non-Linked Borrowings in Cooch Behar (1990-91)

Household Category	No. of Linked Borrowers	No. of Non-linked Borrowers	Mean Rates of Interest Paid by Non-Linked Borrowers	Mean Rates of Interest Paid by Linked Borrowers (percent per annum)		
				Stipulated Rates of Interest	Implicit Rates of Interest	Total Effective Rates of Interest
Sub-marginal	14	15	126.00	0	0	0
Marginal	11	12	88.57	44.00	94.27	138.27
Small	7	20	51.92	44.00	87.09	131.09
Medium	1	10	37.75	44.00	73.69	117.69
Large	0	6	0.00	-	-	-

The above table reveals that interlinkages do not require the sub-marginal cultivator-borrowers to pay any interest. Since it has been seen that such poorer borrowers opt for CL-linkages against loans of small size, this establishes that CL-type linkages do not entail any exploitative element at all. However, this class of cultivators does pay a very high mean rate of interest (126 percent) on non-linked credit transactions. For the other classes of cultivators, the rates of interest paid on linked transactions are much higher compared to those paid on non-linked transactions. For instance, the linked borrowers belonging to the marginal cultivator-category pay a mean rate of interest of 138.27 percent compared to the mean rate of 88.57 percent paid by non-linked borrowers in the same category. This character of linked *versus* non-linked credit transactions is seen to be common to all cultivator classes, excluding the labour-linked sub-marginal cultivators and the larger cultivators at the upper end (who however do not resort to any linked transactions at all). The overall conclusion emerging from the study is that the labour-linked borrowers do not face any exploitation whereas output-linked borrowers face usurious exploitation in the form of higher effective interest paid compared to the rate paid on non-linked credit transactions.

The CL-linkage resorted to by sub-marginal cultivators is sourced from neighbour-creditors who are an internal source of credit to the peasant economy. They are seen to have no usurious motive behind their lending operations, and usually lend money to secure future labour services from the borrowing labourer. The amounts of loans involved are not also very high since these are for consumption purposes. Local residency of the borrower appears to be an important consideration behind such loan-based linkage-operations, because this ensures fulfilment of the labour contract. As such, the labour-linked borrowers do not face any exploitation. However, output-linkages are carried on by the trader-creditors who are an external source of informal credit and as such are usurious in nature.

It is important to note that the mean rate of interest paid by the non-linked borrowers gradually declines with the economic status of the borrowers. The larger cultivators are relatively more creditworthy and hence can obtain credit at cheaper rates, also because loan principal and therefore total interest realisations are large in their case. Moreover, these cultivators are easily acceptable as borrowers to their neighbours and to their friends and relatives. Between these two sources, the neighbours are generally seen to charge lower rates of interest to larger cultivators whereas friends and relatives always advance interest-free goodwill loans to these borrowers. Total incidence of cheaper or interest-free loans is therefore higher for the larger cultivators. All these factors account for the decline in average rate of interest paid by non-linked borrowers as their economic status improves. We have found 6 large cultivators who have borrowed non-linked production loans from neighbours/friends and relatives without any rate of interest. We may further note that the mean effective rate of interest paid by the linked borrowers in the other categories also declines with the economic status of the borrowers. As the economic status of the output-linked borrowers (which excludes the sub-marginal category) increases, their bargaining position *vis-a-vis* the trader-interlockers improves and hence the effective rate of interest paid on linked borrowings declines.

3.9 The Character of Interlinkages Among Owner Cultivators

Three forms of interlinkages are found among the pure owners in the study region. These are namely CL, CO and CIO linkages. Of these, the CL-linkage is found to be prevalent among sub-marginal cultivators only, who are the weakest section in socio-economic terms *vis-a-vis* other categories of landowning cultivators. CO and CIO linkages, on the other hand, are observable among the marginal, small and medium cultivators whose crop-incomes are insufficient to finance all their production plans without external support from trader-creditors. The purposes of borrowing for these classes are different from those among sub-marginal cultivators. Whereas the relatively better - off cultivators borrow for production purposes, the latter borrow to meet consumption needs, and moreover, because of their relative poverty, are amenable to labour-linked credit to finance such needs. The proportion of households borrowing through interlinked transactions gradually falls with increase in the size of ownership holdings. The incidence of interlinkage therefore appears to be one of many manifestations of poverty in a peasant agrarian economy.

The CL-linkage as observed in our study area is sourced from the internal source of neighbour-creditors and do not entail any rate of interest. As such, no element of exploitation can be attributed to such linkages. Local residency of the borrowers appears to be an important consideration while advancing loans to them on labour-linked contracts. However, the CO/CIO linkage found among the marginal, small and medium cultivators, and carried on by the external source of trader-creditors, involve a usurious rate of interest which enhances surplus extraction from the village economy. This may therefore be held responsible for relative impoverishment of the poor peasants. It therefore follows that the internal sources of credit in a peasant economy while making an institutional arrangement with the local borrowers through instruments like CL-linkage, do not display any inherent tendency towards exploitation. In contrast, external entrants into the rural credit market generally engage borrowers on interlinked credit terms such as CO/CIO linkages that are deleterious to the peasants.

Notes & References

1. cf. Lipton (1976); Ladman and Adams (1978); Griffin (1979); Braverman and Guasch (1986); Eswaran and Kotwal (1986)
2. Sarap (1991), p.54
3. *Ibid.*
4. *Ibid.*
5. *Ibid.*
6. *Ibid.*
7. *Ibid.*
8. The small and marginal farmers have to incur extra costs (besides the nominal rate of interest) in the process of obtaining a loan from formal institutions. For example, many small and new borrowers are required to visit the formal institutions several times to negotiate loan, withdraw part of loan, make payments in installments, etc. These visits may often involve waiting for long hours and travelling long distances. The opportunity cost of borrowers' time used, travelling expenses and costs incurred for getting a guarantor are some of the important factors considered while estimating transaction costs. The effective rate of interest (total cost of borrowing) paid by the small borrowers includes the nominal rate of interest and transaction cost. See also George *et al.*(1985)
9. *op.cit.*, Sarap, p.56
10. *Ibid.*
11. Collaterals like promises to render labour services or to sell future output, are usually unmarketable (because of non-availability of readily established markets in and around the villages) and therefore unacceptable as collateral in the organised market.
12. *op. cit.*, Sarap, p.99
13. Zusman (1989), p. 297
14. *Ibid.*
15. Bell & Srinivasan (1989), p. 221
16. Bhaduri (1983), pp. 52-55