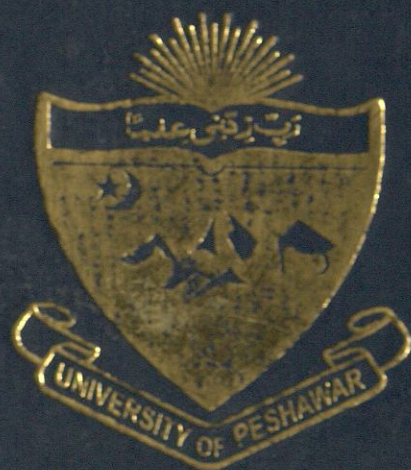


INFORMAL CREDIT MARKET IN PAKISTAN (1991-2008)
A CASE STUDY OF DISTRICT PESHAWAR



Supervised By
PROF. DR. IJAZ MAJID

Submitted By
Mr. FAZAL WAHID
Ph.D. Research Scholar

DEPARTMENT OF ECONOMICS
UNIVERSITY OF PESHAWAR
OCTOBER 2011

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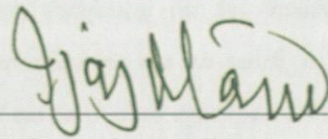
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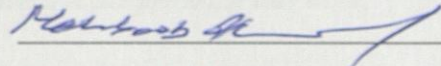
A thesis on "Informal Credit Market in Pakistan (1991-2008): A Case Study of District Peshawar" submitted by Mr. Fazal Wahid, to the University of Peshawar, in partial fulfillment of the requirement for the award of Degree of Doctor of Philosophy (Ph.D.) in Economics, is hereby approved.

SUPERVISED BY:



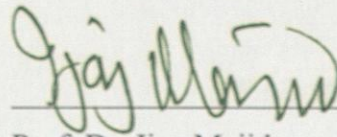
Prof. Dr. Ijaz Majid

EXTERNAL EXAMINER:



Prof. Dr. Mehboob Ahmad

CHAIRMAN:



Prof. Dr. Ijaz Majid

Def 28-7-15 Cent of Examin' UoP

ACKNOWLEDGEMENTS

All praises and thanks to Almighty "Allah" the sources of knowledge and wisdom endowed to mankind, who conferred me with power of mind and capability to take this material contribution to the already existing ocean of knowledge. All respects for the Holy Prophet "Muhammad (P.B.U.H.) who is forever a source of guidance for humanity as a whole.

I would like to extend my heartfelt gratitude and admiration to my advisor Prof. Dr. Ijaz Majid, Department of Economics, University of Peshawar, Pakistan, for his invaluable and constructive feedback during the entire period as well as allowing me to work in my own independent manner. Precisely, the learned professor assisted me more than my expectations.

I must earnestly and sincerely thank my parents, sister and wife for their constant support which remained a source of inspiration in the successful completion of this work.

Finally, I would like to extend sincere thanks to my colleagues, seniors and friends and all those who spared their precious time and provided every possible assistance on several occasions.

FAZAL WAHID

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LIST OF ABBREVIATIONS

ADBP	Agricultural Development Bank of Pakistan
GDP	Gross Domestic Product
HDI	Human Development Index
IMF	International Monetary Fund
KP	Khyber Pakhtunkhwa
MFI	Micro Finance Institution
NGOs	Non Government Organizations
CNIC	Computerized National Identity Card
NLSS	Nepal Living Standard Survey
NWFP	North West Frontier Province
PCI	Per Capita Income
Rs.	Pakistan Rupee (PKR)
SMEs	Small and Medium Enterprises
SBP	State Bank of Pakistan
UC	Union Council
USD	US Dollar
WB	World Bank
ZTBL	Zarai Taraqiati Bank Limited

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Credit is considered as significant factor for advancing agricultural and industrial production. The agricultural credit market consists of two main constituents/components i.e. formal credit market and informal credit market also known as non-institutional credit market. The formal credit market includes Commercial Banks, *Zarai Taraqati Bank Limited (ZTBL)*, *Taccavi* loan, co-operative societies and Khushali Bank. The list is not limited to only these.

The sources of non-institutional credit comprise friends and relatives, village *beoparies* (brokers or middle-men), commission agents, shopkeepers, tube-well owners and landlords. The informal credit sources, though their share in the total credit market is declining, can still be reckoned as the main providers of agricultural credit mostly in developing countries. The reason underlying this may be their presence in the proximity to farmers, procedural simplicity and long time association with these sources.

The private money lenders, who dominated the scene during the hundred years before independence of Pakistan, were village *beoparies* and artisans (commission agents) who supplied credit for production and marketing or household

needs. These money lenders would seldom inquire about the use for which money was borrowed and charged incredibly high interest rate even though the borrower's dealings were honest. As a consequence, once a peasant got into debt, he/she hardly ever got out of it and passed it on to his successors with heavy accumulations.

It is, therefore, essential to know the different operations of the informal credit sector. The informal network does not only help the poor and the needy to overcome difficult times but also constitutes predominant credit sources of Pakistani in general and for rural areas in particular.

Formal credit system expanded substantially over the years in developing countries like Pakistan. Considerable resources have been devoted to setup many institutions primarily for providing credit at low interest rate to farmers which is normally charged below the rate of interest levied by informal lending sector.

In the past, money lender was the most readily available source of credit. He/she lent money on personal surety and did not press for repayment of capital so long as interest was paid. There was no publicity attached to his/her loans, which was extremely important for protecting honours (*izat*) of the borrower. In return he/she used to charge an exorbitant rate of interest, rarely less than 18 percent and often more than 50 percent per annum. The money lender's influence started discouraging since the loans were so easily available that they were readily spent, and the most

important thing which gave comfort to the farmers was that the money lender did not care how they were spent.

Alternatively, advance payments were provided by traders interested in the purchase of the growers' produce, especially cash crops like cotton, tobacco and sugarcane. The growers entered into a contract with the dealers, stipulating supply of later. The former alternative is more general and the grower receives a percentage of the price in advance. Sometimes processors e.g. cotton ginners may provide loan. No interest may be charged but the price fixed is probably unfavorable to grower. As a consequence the price is reduced when the final installment is made.

Commission agents, village traders, and landlords and well-known farmers also lend private money. The role of influence feudal and big farmers may have diminished, after the land reforms on this field of informal credit market. Usually, loans advanced by these sources are sanctioned on personal security and are for short durations, payable at the time of next harvest. In many cases a farmer borrowing from a trader has to return the favors by selling his/her produce to, or through, lender. The lender in such cases has a strong bargaining position comparison to the borrower and the lower prices paid to the farmer may be an indirect form of interest. In other cases interest is levied openly and the rates are very high.

1.2 CHARACTERISTICS OF INFORMAL CREDIT

The informal credit is characterized by several features, which make the credit readily accessible to all kinds of borrowers, but mostly economically marginalized farmers. The foremost element of informal credit sector is the flexibility as the informal sector is not governed by any kind of regulation, be it capital assets, cash, rules of credit and other auxiliary requirements such as reporting. This flexibility is reflected in the interest rate structure which can assume any form or magnitude depending on the borrowers' needs, market competitiveness and opportunity cost of lenders' funds which lenders may impose in the given circumstances. Despite these advantages, informal credit it is also become exploitative if it becomes monopolistic, or where the flow of formal credit is severely hindered for one reason or the other.

The second element of informal sector is that accessibility and convenience are not operating on fixed schedules, so no conditional collateral required, and are almost always extensively located. Borrowers whose credit needs are usually neglected by the formal sources for several reasons can, in most instances, obtain informal credit very easily and readily. It may be more expensive and might not fully meet their requirements, but at least it is a better alternative to no credit at all. The financial resources of the informal sector are quite meager as most informal lenders rely on their own funds, except for a few isolated cases where such lenders may take informal deposits and therefore actively mediate between savers and borrowers. This

puts the informal sector at a comparative disadvantage in terms of capital and duration of loan maturity.

The third feature is relatively lower transaction cost in the informal sector, as loan administration costs are not very high; there is no loan documentation, legal fee, formal supervision charges and a minimum of collection charges. Since most informal lenders operate in limited areas, personal knowledge of borrowers helps determine credit worthiness of the clients instantly and without any cost.

Other elements of the informal sector are speed of credit delivery, its competitiveness in given circumstances, and its dynamism for structural changes in accordance with socio-economic and political realities. Transaction time is almost negligible in this sector while disbursement lags are never heard of. Following a loan deal, cash or kind disbursements are almost instantaneous.

1.3 STATEMENT OF THE PROBLEM

Previously, researchers have paid little focus to the informal sector that is why very limited data is available on the topic. One of the reasons informal credit system is regarded as undesirable and exploitative is that the informal lender does not ask question about the purpose for which loan is demanded which encourages a borrowing bandwagon in the people coupled with very high associated cost. Since these unorganized sources do not have standardized interest rate,

regulations and conditions attached to the loans are subject to bargaining power of the borrower. Naturally in such a scenario the lenders bargain from a position of strength leading to the exploitation of downtrodden loan seekers. The borrowers, therefore, often have to pay hidden interest. Moreover, a credit market dominated by unorganized sources tends to operate outside the domain of overall economic policy framework. It is therefore, difficult for the government to enforce its policy choices in such matters as the size of the total credit supply and the terms and conditions used are not documented.

The village shopkeepers and other intermediaries interested in the purchase of agricultural produce have been a major source of informal credit. Sometimes the shopkeeper feeds and clothes the peasants and meets his/her requirements until the harvest. The supplies are often made available at higher than prevailing market rates, thus including a hidden interest charge. If the shopkeeper also markets the farmer's produce, he/she either obtains repayment in kind or specifies that the grower should abstain from selling through another party.

1.4 OBJECTIVES OF THE STUDY

The objectives of the study can be divided into main objectives and related objectives.

Main objectives:

- 1 To analyse the characteristics of informal lenders to attract farmers
- 2 To identify the sources from which the informal lenders generate funds
- 3 To calculate average hidden charges (interest) on the loan charged by the informal lenders

Related objectives:

- 1 To describe the mechanism used for loan recovery in informal credit market
- 2 To compare the transaction cost incurring on informal credit with formal institutions
- 3 To compare the risk of default in informal sector with institutional source of credit

1.5 RESEARCH METHODOLOGY

The research is based on primary data, which is collected through questionnaire from area of research and analyzed by using percentage methods and econometric models.

1.6 SIGNIFICANCE OF THE STUDY

The study aims to examine the cost and sources of the credit to the informal sector. This study provides a sound tooling for further research in the same field. This research is beneficial for the informal lenders, students, policy makers and non-government organization (NGOs).

1.7 LIMITATION OF THE STUDY

The following limitations are mentioned which were confronted during the process of data collection and analysis. The first limitation is that in Pakistan majority of the population is Muslim, and in Islam lending on the basis of interest is strictly forbidden. During the interview, most of the lenders did not admit involvement in lending on a fixed interest rate, but when borrowers were interviewed then these interviewees were found involved in lending on interest in both (rural and urban) areas of the district. Therefore some of the questionnaires were double checked via cross questioning by using a kind of client and patron technique where the responses of clients were seen in the light of their lenders and vice versa.

Again some lenders are directly involved in lending on a fixed interest rate i.e. money lenders, and some are indirectly i.e. landlords providing loans to farmers against making farmers working on free of cost, even this free of cost working is a form of hidden interest. Similarly, commission agents are also providing loans to

farmers on the condition that their production will be sold through them, so in this way the commission and the low bargaining power of producer is the effect of hidden interest. Thus to find out the exact interest rate is different in different scenarios which could only be explained through participant observation and also through in-depth interviews with borrowers, not lenders, in this case.

Second, there are different methods of the recovery of the loan such as personal pressure, social pressure, through court etc. It was here that the researcher had to face difficulties in eliciting the mechanisms of social and personal pressure tactics used for the recovery of loan.

Third, the study is intended to sum up the multifaceted dimensions of informal credit market in Pakistan during the time range of 1991-2008. However, by design or by default, the informal credit market is largely undocumented, fragmented, and bearing no auditable data and records; therefore the researcher took pain in generating purpose specific data by personal means. As the government does not possess any formal record coupled with the idiosyncrasies of informal market where lender, in particular, denies involvement in these practices as these are deemed prohibited in Islam. This posed great challenges in eliciting the right information for the researcher, hence reducing the external validity of the data drawn from respondents.

Fourth, the gender ratio of respondents in terms of male and female was intimidating at the beginning. However, after conducting interviews it was realized

that women were also functioning both as providers and receivers of informal credit in their own capacity. It was found that female normally participated through more subtle mechanisms such as hiring attorneys or front men for their personal dealings. Further, these representatives were mostly blood relatives of the women involved in informal credit; hence the gender balance was indirectly neutralized.

Last, there are various form of informal lenders that is commission agents, landlords, shopkeepers, friends, relatives, money lenders, tube-well owners, village beoparies (brokers) and village traders etc. so only four informal types of lenders were taken into consideration such as commission agents, landlords, shopkeepers and money lenders, because these informal lenders were available in the area of the study.

1.8 ORGANIZATION OF THE STUDY

The study is organized into seven chapters. Chapter first covers statement of the problem, objectives and organization of the study.

Review of the literature is given in the second chapter. This review covers both theoretical discussion on the subject of informal credit market and problems of the borrower's taking formal loan and the condition that compel these borrowers to engage in informal lending and the policy making in order to reduce the practice of informal lending activities related to the present study.

Research methodology is given in third chapter. This chapter reveals data collection, population, size of the sample and the techniques used for data analysis.

In chapter four, an effort has been made to elucidate the informal sector structure in accordance with fund sources, screening the borrowers and lending volume of the informal lenders. Interest rate and mark-up charged by informal lenders, purposes of borrowing, default rate, recovery of loan, conditions and the reasons for choosing the informal loan are also given in this chapter.

Descriptions of the average amount of loan demanded by the borrowers' location wise temptation in lending and receiving of loan and gifts and characteristics are given in chapter five which encompasses the share of informal loans in total volume of credit and the average days spent in taking loan from formal sector and transaction cost of formal sources of loan have also been discussed in the same chapter.

Econometric analysis (Logit Model) has been given in chapter six. In this model the important factors or characteristics like age, education, village and family size of the farmer etc which affect borrower's decision about borrowing from formal sector or informal sector.

Summary, conclusions, recommendations and policy implication on the basis of findings of the study are given in chapter seven

CHAPTER 2

REVIEW OF LITERATURE

Informal credit is becoming an area of great interest for the students of economics, academics and businessmen, in general, and for governments in under developed countries such as Pakistan, in particular. According to a recent survey conducted by the Centre for Research on Poverty and Income Distribution (2010), of the total population of Pakistan (170 Million), almost 63 percent equaling 100 million are living in transitory poverty; whereas 32 percent equaling 50 million are chronically poor who remain in poverty throughout their entire life and mostly this perpetual poverty is transferred generation to generation. Dixon and Macarov (1998) state that poverty can be viewed on the ability of individuals to survive in terms of growing sufficient food for his or her wards. Here the role of credit (formal and informal) becomes very important.

On the other hand, Khan A. Q. (2011) states that formal institutions lending is mostly politically influenced with 250 billion Pakistan Rupee worth of loans written off in a developing country such as Pakistan only in the past few years. According to the estimates from Swiss Banks deposits, the money kept there is sufficient for (a) a tax-free budget for 30 years for Pakistan (b) can give employment to 60 million Pakistanis (c) can give Rs. 20,000 per month to every citizen of Pakistan for almost 60 years and had this money been properly utilized, Pakistan wouldn't have landed in the clutches of "International Monetary Fund (IMF)" and "World Bank (WB)".

Ahmad (1969) proclaims that, in Pakistan formal credit had been extended mainly to the large farmers because small sized farmers are unable to arrange security for loan. The researcher pinpoints that landless farmers receive only 5.5 percent loans advanced by "Agricultural Development Bank of Pakistan (ADBP)", while the farmers who had land holding ranging from 1 to 3 acres received less than 1.0 percent, and those possessing land in excess of 12 acres received 86 percent of the overall loans disbursed.

Elfer and Malik (1973) argue that, in Pakistan, only 15.20 percent of the farmers have so far been satisfied from credit facilities provided by the Government of Pakistan with the share of small and medium sized farmers growing and accounts for almost 60 percent of the overall funds.

According to a report published by the Muslim Commercial Bank Limited (1981) small farmers obtain only 13.6 % of institution based credit, as a consequence the remaining 86.4 percent was obtained from non-institutional sources.

It is interesting to note that Agriculture Development Bank of Pakistan (ADBP) advances loans only to landowners and that farmers obtaining institutional loan face several constraints and are not satisfied with the performance of the lending institutions (Ahsan, 1985). The study also reveals that lending mechanism should be centralized so that loans may be granted on need basis. Furthermore, the researcher

stresses that overall share of interest free loans should be raised so as to help the marginalized farmer. The idea of compression of loan sanctioning procedure is also advocated by Khan (1986) who recommends that emphasis should be on providing timely credit for meeting all productive-cum-development needs of peasants through one centralized credit institution, which spreads across the country making the availability of credit supply. At village level, credit committee, based on farmers of allied disciplines, should be set up for assessing actual credit needs and making recommendations for approval of loans.

According to a report of Pakistan Academy for Rural Development (1986), majority of the farmers in Kalam area of Swat district received potato seed and fertilizer on credit basis. The traders did not charge direct interest, but raised the Lended price of these inputs from fifty to hundred percent for one crop season (i.e. 4 months). This implicitly means that a hidden or indirect interest at the rate of 300 percent per annum is imposed. The report further unveils the fact that farmers in the Kalam area were unaware of the institutional credit facilities, and even if available, they would not be able to obtain it because of complex and laborious procedures and of the illegal gratification demands of the officials concerned.

The importance of institutional sources of credit as cited in Malik (1989) has increased as compared to the non-institutional sources for farming sector. Despite the increased importance of institutional sources of credit, the small and tenant farmers

have least access to the institutional credit and the situation exhibits a deteriorating trend with no or little signs of improvement; as a consequence small cash strap farmers are often confronted by non-institutional money lenders.

Agabin et al (1989) contend that the share of informal credit for the fiscal year (1989) accounted for 59 percent, with formal sector 34 percent and 7 percent from hybrid sources (formal and informal) respectively out of total borrowed amount of 45 billion Pesos in Philippines. The share of the small income holders and poor households in the informal credit were the highest making informal credit market more interesting. They further categorize the economically marginalized strata of the population who are mostly inclined to informal lending as (a) The poorest households, (b) Poor or small income groups, (c) Middle class and (d) Rich class. The research further indicates that about 75% of the poor households were customers to informal credit market in 1986 and subsequently 77 percent in 1987 indicating a positive correlation between poverty and informal borrowings.

In the same way, the statistics provided by Government of Pakistan indicated that about ninety percent of loans were advanced in the country. Similarly seventy percent was disbursed by the Agricultural Development Bank of Pakistan (ADBP) and ninety percent by the Commercial Banks to those farmers who had land ownership less or equaling 12.5 acres (Malik et al 1989). This creates a major discrepancy with the government claiming that small farmers were the recipient of the

major part of the credit which goes in sharp contrast with the land ownership parameter mentioned above for loan sanctioning. Inwardly, the constraints faced by loan seekers from formal institutions have several ramifications with small land cultivators relying on their kiths and kens, and landless peasants on feudal landlords. Outwardly, it means that the interest rate of informal lender depends on the land ownership of the farmers, households and landless cultivators. This means that informal lenders were in a position to charge a higher interest rate compared with formal sources charging 12.18 percent and informal sector imposing 20 percent interest rate on yearly basis.

According to the Agriculture Census (1990) conducted by the Government of Pakistan, dependency of small farm households (5 acres or less) on non-institutional sources was found to be even greater as almost 95 percent of outstanding loans obtained by these households were from non-institutional sources. Not only does this suggest the predominance of the informal credit system but also possibly a rise in its share over the years, particularly in the case of small farmers.

Bell (1990) examined the impact of initiatives such as rural cooperative system in the rural credit market in 1950 in India where the role of the money lenders reduced with the introduction of the system of rural cooperatives. Similarly, with the expansion in the institutional credit market such as commercial bank branches, rural cooperative societies and government intervention the power of the monopolistic market created by the money lenders was curbed.

Hoff and Stiglitz (1990) contend that in the majority of the developing countries including India and Thailand, the formal credit market provided credit on the basis of collateral but landless farmers and informal firms had only one alternative; to borrow from informal credit market due to lack or absence of collaterals. This gives rise to an interesting case where informal sector enjoys a monopoly condition as the demand is overwhelming but the dilemma is that the supply of informal credits are in abundance, undocumented and fragmented. The reason underlying this effect might be that a major stratum of the population is always in a state of dire financial circumstances. This phenomenon holds true across the border in Pakistan as almost 15 crore people out of 17 crore are living below the poverty line (Saleem, 2011).

The cost of obtaining credit is one factor, among several others to be considered by farmers when they attempt to obtain loans (Shiyani and Bhatt, 1990). The study reveals that loans when categorized on the basis of groups such as crops loan, minor irrigation, livestock, and other agricultural loans, reveal transaction costs in the form of laborious efforts and transportation when borrowing from formal institutions such as banks. On the other hand, these transaction costs were almost absent when the credit is obtained from non-institutional sources like money lenders and relatives. However, the rate of interest charged in the latter scenario was considerably higher than the former case.

According to Uprety (1990) women traditionally play a significant role in livelihood farming in Nepal, and contribute more to household income as compared to men. However, women lack access to banks and other formal institutions and are, therefore, disadvantaged relative to their male counterparts. In the light of such a situation, Production Credit for Rural Women (PCRW) was launched in 1982 that covers 44 of Nepal's 75 districts. In spite of a few limitations such as the emphasis on livestock production, and lack of marketing facilities, the program, in general, has been successful.

Khan (1991) found that agricultural sector in Pakistan consisted predominantly of small farmers (74 percent of the holding were below 5 acres). However, it was a misconception to view small farmers as inefficient and unresponsive to economic opportunities or unwilling to adopt innovations. The study also examines the constraints that small farmers faced in obtaining credit facilities; strict social values, lack of publicity, inadequate infrastructure and so on. The reasons for non-use of credit were; lack of information, non-availability, complex procedure, sufficient own funds, high transport cost and illegal gratification. Whereas in India, to raise the living standards of poor rural households, there is still a need for institutional credit services and other facilities within village communities (Sharma and Ram, 1991). Khan (1991) further sheds light on the credit scenario prevailing at Saharanpur district during 1987 indicating that only 18 percent of the milkmen/women were clients of institutions and the rest were relying on informal sources of credit.

An interesting perspective is forwarded by Bantista (1991) who reckons that since formal and informal interest rates are interrelated; therefore, the central bank monetary policy can reduce the informal interest rate by lowering the interest rates of formal credit institutions. The strategy was carried out in Philippines from 1950 to 1980 which had an impact on the size and transaction of loan disbursed in the informal credit market. As a result, during the decades of 1950-1980s, demand for formal lending increased in Philippines.

Qureshi and Shah (1992) proclaim that in Pakistan during the year 1988, about 8000 Rs. on average was borrowed by households from informal credit market. A positive relationship was witnessed between the agricultural value and credit. However, the formal loan contribution in the agricultural production growth found that the loan operations in the farm investment are unevenly distributed. Formal credit was found to have limited contribution in the growth of the agricultural sector because formal credit was predominantly extended to few large and medium sized farmers. Small and landless farmers had a very little share of the overall pie because of restricted access to formal sources of credit due to absence of collateral and information. Major shares of the formal credit were mainly in the hands of big landlords.

Nagarajan (1992) reveals that in 1980, the informal credit market in Philippines was regarded as a primary loan source, which impacted the efficiency and effective flow of funds in the financial services sector. The main objectives of his

study relate to scrutinize the determinants of demand and supply of loan. As per his findings, the author stresses on the utility maximization approach for borrowers and secondly, he focuses on the expected profit maximization for lenders. The findings of the study reveal that there were many types of lenders in informal credit markets but the traders and farmers were the predominant source of loan that provided loans on a short run basis requiring repayment in the form of barter such as rice for loan. In order to avoid loan default, the well versed lenders were offering differentiated standard loan contracts which included separate terms and conditions clientele specific implicit and explicit clauses. With the advent of sophisticated machinery in the rice farming sector, these farmers had to rely on informal sector so as to remain competitive in the marketplace. Farmer lenders provided large amount of loan in comparison to trader lenders to households who had no land or whose farm size had shrunk over the years and those who had lower marketable surplus. It was observed that borrowers sought lesser amount from informal credit sources and greater amounts were sought from formal lending institutions for which they had to sustain a clean credit history and relationship with the personnel involved. When the farmer was involved in some business other than the domain (farming) such as starting his own business venture then he or she was more inclined towards formal sources of lending. By design or default, the informal sector was willing to accept lands acquired by farmers after government land reforms as collaterals whereas the formal sector did not recognize such land in the form of collaterals. The shortage of the sufficient savings in the formal credit market for mobilization, some households provided their savings for lending for the period of short term in informal credit market with interest

rate. In general, on the basis of mutual relationship among friends, farmers, landlords and relatives, informal lending and borrowing was not something new in Philippines that were playing the parity role of formal institutions albeit with high interest rates.

Mohieldin and Wright (1992) conducted their research in four Egyptian villages with a sample size of 200 households. Their findings indicate that informal sector accounts for 13 percent of the total borrowing and lending that had occurred between 1992 and 1994. Their findings reveal that informal sector was more dominant when compared with the prevalent formal lending institutions. The overriding barrier to the informal sector was mostly related to the scarcity of funds, often times due to the inability to generate a huge pool of funds for their business purposes.

Persed and Parthasarthy (1993) stated that farms credit plays an important role in boosting and stabilizing growth, especially when it is accompanied by improved production technology. The adoption of new innovations for agricultural development is only possible when adequate amount of capital is invested. They further revealed that commercial banks and cooperatives are catering to the needs of large farms while small farmers' credit requirements are still being met by private sources.

Besley (1994) in his research argues that the lack of information, perfect competition, and enforcement of costly contract are the characteristics of informal credit market. The problem of credit rationing, moral hazard and the selection was adversely leading to lack of awareness that raises the rate of interest in the informal

credit market. If awareness is there, on the other hand, it brings equality between demand and supply of fund for credit. It also plays an important role to effect the lenders' loan quality.

Lower rates of interest were fixed by lenders which created access to credit rationing phenomenon in which borrowers are not able to borrow to the extent they require and at times they may not be able to borrow anything (Dilip, 2001). Besley (1994) contends that in rural credit market the lack of information was very important due to which credit markets were confronted adverse selection which mostly resulted in an adversarial relationship between the lenders and borrowers (Coyle, 2010). Similarly, a high rate of interest led to encouragement of borrowers to run those projects which were mostly risky. Besley (1994) classified the informal credit market according to their major features for the explanation of the informal and formal credit market existence in Africa including the existence of the risk covariant and collateral for security. In rural areas, most of the households were poor and could not possess collateral to offer as security. Formal lenders found it difficult to know the repayment probability of loans, because of the absence of collateral and their advancement of loan were limited in rural areas. Borrowers become defaulters because of the change in incomes affected the credit market operation in rural areas. In rural areas borrowers' income depend on agricultural production which is prone to divine and man-made disasters such as climate change, floods, weather and so on. This risk can be averted by lenders through diversifying their loan portfolios.

Bouman and Hospes (1994) contend that small borrowers meet their requirements of funds through informal credit market. The environment of the informal credit market was suited to those areas where the income level of the people was low. Informal lenders advanced loans to those whom they personally knew and borrowers also knew lenders and on the basis of this personal information, confidence was created between borrowers and lenders. Informal lenders provided valuable services to their clientele not forthcoming from the formal lending sector. From the economic point of view, however, the services provided by informal lenders were exploitative as they charged high rate of interest. So in the whole economy, the reallocation of the resources was not efficient and hence, the contribution of formal sources of credit only was more visible in the growth of the economy.

Schrader (1994) contends that the role of informal credit market is reduced due to the expansion and continuous growth of formal sector, but mostly in developing countries the business of the formal and informal lenders still continues to take place in parallel. Cost of the services provided by formal institutions is relatively high and replacing process of informal credit mechanisms require a strategic stance which could be enabled through infrastructure improvement. The importance of the informal lenders will not disappear altogether with the improvement and development of the institutional sources of credit.

Manig (1996) studied the Importance of the Informal Financial Market for Rural Development Financing in Developing Countries, where he cites the example

of Pakistan as a special case and argues that lack of capital and the absence of attractive investment opportunities are considered to be important reasons behind inadequate economic development. But sufficient credit is no longer available to the actual target groups because funds are scarce, as a consequence informal rural credit market is very heterogeneous and is always a component of the prevailing socio-economic and political network, involving relatively low additional transaction costs and high interest cost for credit supply.

Floro and Ray (1997) proclaim that formal sources of loan were the major sources of funds for informal lenders. Providing loan facilities to those borrowers who could not access to formal sector is dependent on the ability of formal sector to service the loan requirements of informal lenders. So in this way a link has been created between formal and informal sources of funds. They contend that the role of informal credit market in the economic development of a country is important and this indication needs to be re-examined because formal credit system faces several constraints to fulfill the requirements of small farmers. i.e., the lack of information about these small farmers which have no or less security or repayment guarantee which will be acceptable in the formal sources of credit. Another constraint to formal lenders is the responsiveness of government policy in which funds are fixed at low rate of interest for rural areas which is inadequate and again these funds are utilized by big farmers because of the availability of the collateral to the formal sources of credit. This means that the need is not to extend the formal sector but to extend and develop informal sources of credit, in this way the need of funds to small farmers for

productive purposes will be possible. High interest rate charged by informal lenders could be reduced by linking the funds of informal lenders to formal sectors and informal lenders can raise their funds for lending through formal sectors which is not surprising. It is, however, assumed that the informal credit market is competitive and there is no restriction to enter in the market as lender. Their analysis reveals that under the structure of informal credit market, there were chances that informal lenders by lowering competition engaged in strategic cooperation. Strategic cooperation was possible if formal and informal lenders were linked with each other.

Kochar (1997) contends the constraints of credit rationing by separating the access of lenders' decision from the credit demand in informal credit market in India. The fact recognized by Kochar is that to increase investment in agriculture sector, the provision of institutional credit at low rate of interest to farmers in rural area is inevitable. Farmers' access to formal sources of loan would be increased and the credit rationing constraints in formal sector of loan become tougher. According to Bell (1990) and cited afterwards in Kochar (1997) both argue that the constraints of the credit rationing that formal lenders a high rate of cost charged from households specially from risky households because of the high cost on the screening of the borrowers and on maintaining such a high cost lead to reduce the role of formal credit in the development and investment in rural sector of the economy as well as demand for formal credit also reduced.

Ghosh et al (1999) stated that the existence of the lack of perfect information about credit market were the features of the informal credit. Lack of information about credit market generated the moral hazard and adverse selection. Result of their survey reveals that the various models of informal credit market have some common view that appears in the form of credit rationing. While recommending for policy, the researchers suggest coming up with measures to improve the environment of the formal sources of credit by improving the bargaining power of the borrower's as well as reduce the inequality in assets and the high rate of interest which is the main objective of macro economic policy.

Jain (1999) revealed in the model that the cost on lending in the informal credit markets was cheaper than the formal credit market. This advantage of the informal lenders was against formal sectors. Formal institutions of credit aimed to maximize profit and provided partial loan for business to screened borrowers and the remaining portion of loan for their project relay on the informal credit market. In order to reduce the interest rate of the institutional sources of credit by the intervention of the government may lead to reduce the profit of formal lenders and lead the society as whole may suffer loss and lead formal lenders redistribution the excess funds provided as loan to specific borrowers. In some cases, the formal lenders may drive out of the market completely. Conversely, the intervention of government in the activities of the informal lenders may lead to raise the lending cost on credit, will lead to improve the welfare of society and importance of formal credit market in bringing the effectiveness in screening of the borrowers.

Irfan, M. et al (1999) contend that average amount of loan per borrower was more than Rs. 10,000, small farmers constituted 38 percent of the total borrowings but their share in total credit was only 21 percent. Mark-up tends to change from product to product and also by type of borrower and lender. The average mark up is 25 percent; in the case of fertilizer, it is estimated to be 29 percent while for the pesticides it comes around 35 percent. About 347000 Rs. were generated by informal lenders; however, 729000 Rs. were generated by input dealers who charged a high rate of interest that is, from 60 percent to 120 percent. Their business spread over 19 villages in case of commission agents, and in case of landlords and money lenders, it ranged to two villages depending on landlords and tenants relationship. Informal lenders spend, on average, one day on the assessment of loan request, and usually they lend, on average, Rs. 10,000 per borrower; in case of big farmers, about Rs. 25,000 are advanced and in case of small borrowers, about Rs. 6,000. So 38 percent small borrowers were taking only 21 percent of the total volume of credit and 90 percent credit for production purpose. But landlords and shopkeepers were not concerned. The default rates was very low even less than 6 percent, the reason was that these money lenders used social pressure as a means of power in taking their amount and the other reason was that the borrowers were very serious in repaying their loans because of future need and to maintain a good relationship with lenders.

Amir (1999) studied the factors related to farmers' access to borrowing from informal credit market. The study was based on a household level survey into two

purposely selected villages (Tarnab and Sufaid Dheri) of district Peshawar, Pakistan. His findings revealed that farmers had a limited access to the formal credit market as only 20 percent of respondents got formal credit and 80 percent of farmers had borrowed from informal sources. He has recommended that loaning procedure of the formal credit institutions should be simplified for the benefits of farmers.

Atieno (2001) pointed that most of the enterprises take loan from informal sources of credit than formal credit market. Personal saving in both the (formal and informal) credit market were the main sources of funds for credit especially at the time of starting a business venture. The ability of the formal lenders were limited to meet the credit demand of the borrowers and especially small scale enterprises located in rural areas had a very limited access to the institutional sources of loan. The accessibility to the informal credit even depended on the different segments, personal savings and borrowing from friends and relatives. In both the formal and informal credit market, credit rationing evidences were observed. However, no credit rationing was found in the family sources of credit as compared to the other informal lenders within the informal credit market. Because of the inaccessibility of the relatives of moneylender were least credit rationing. Credit market fragmentation was not only in the (formal and informal) credit market but also in the various categories of borrowers according to their characteristics. Credit market segmentation reflected in the amount of loan differences as well as differences in the credit sources. Access to the formal sources of credit was more than 50 percent of the sample found by

Small and Medium Enterprises (SMEs) activities in non agriculture sector for short term loan and with the passage of time this ratio was increasing.

Chaudhuri (2001) has come up with a policy for credit subsidy through which some of the required objectives could be achieved by formal credit institutions through a lower interest rate. The policy of credit subsidy was designed in two distinct and bundled packages. One alternative of the policy was to retain the same rate of interest and increased credit volume of the formal sector. Second alternative of the policy was to keep the supply of formal credit volume same and decrease the interest rate of formal credit market. If a policy is undertaken based on the first option, the rate of interest charged by informal lenders would reduce and the borrowers' welfare improvement and their productiveness can become unambiguous. This injection of the extra volume of formal credit supply in rural areas will lead to reduction in the informal credit demands of money lenders; and informal lenders reduced the interest charges. With the reduction of the rate of interest on informal credit, the constraints faced by bank officials become more and that may reduce unethical practices such as commission rate or bribing in the formal sector. Chaudhuri (2001) strongly advocates that the concerned authorities of the developing countries should follow the policy of credit subsidies and that too especially in rural areas. If the second way of the policy is implemented then in such a scenario its impact could be felt on the gains of bank employers and money lenders linked with the formal lenders not the borrowers.

According to Ghosh and Ray (2001), lenders do not possess any record about borrower's credit and the rise in numbers of defaulters. The researchers are of the opinion that normally there is a fixed proportion of defaulters in a population which is natural, so there has to be an equilibrium between lenders and borrowers by simple behavior rules and to keep the state of equilibrium, lenders always advance small amount of loans to those borrowers who apply for the first time, so in this way a relationship continues between borrowers and lenders. In this way lenders may relax the limit on the condition of repayment; this phenomenon is called micro rationing. So there is also the possibility for the development of macro rationing. They observed that the micro rationing will always be in equilibrium and the unique equilibrium will be in existence if both the micro and macro rationing are allowed and, finally, if the natural or the fixed proportional defaulters are below the minimum point then macro rationing increases. Informal lenders were reluctant in lending to new borrowers in view of the high default rate; usually they lend in small amount to risky borrowers for testing in first time. The repayment of loan on due time creates a relationship between borrowers and lenders and then lenders extended loan at relatively low rate of interest. At testing stage, if borrowers failed in the repayment of loan then lenders terminate its relationship and borrowers would test another credit prospect. Informal lenders restricted the volume of credit and become costly to the risky borrowers. The researchers contend that if the percentage of risky borrowers were above a certain limit in the entire population then a simple equilibrium position was not possible.

Ramachandran and Swaminathan (2001) found that the ratio of debtor of the landless household since 1985 has decreased but still it was about 68 percent in 1999 in India. The landless labour with no other sources of consumer got 94.2 percent of loan from informal credit market and only 5.8 percent from formal sector; in this way all village households were taking 85.9 percent from informal and 14.1 percent from formal sectors. About 77.4 percent of loan was demanded for personal consumption purposes by landless households and only 22.6 percent for production purposes; however, it is not a must that the purpose of borrowing should comply with its spending. Micro-credit program controlled by organizations (NGOs) which give small amount of loan to the poor both from rural and urban areas and also require no security via "Rural Banking for the Poor". They further pointed out that in India banking policy is divided into three major phases. The first phase of the policy was green revolution in the countryside with the nationalization of big commercial banks. In the second phase, the alleviation of poverty based on credit and thirdly through liberalization phase of the policy.

Besley et al (2001) reveal that out of 3064 households, 2481 were informal borrowers and 385 were formal in Nepal. In urban areas, about 24 percent of loans were advanced by informal lenders for production purposes and 75 percent for personal consumption. On the other hand, a same ratio was manifested in the rural areas as 81.8 percent of loans were sanctioned for production and 18.2 percent for consumption purposes. The researchers suggest that the net cost on the informal loan such as transportation cost was lower than formal sources of loan with the unique

characteristics like convenience, flexibility, availability and time duration in the informal sector.

Aliber (2002) defined informal credit market having no explicit rules and regulations and owner managed, unhelpful and required no or less collaterals. Recently, most of the formal financial sectors are trying to adopt the four main characteristics of the informal credit market, that is, to minimize cost on the transaction, creating relationship between borrowers and lenders, access of small income holders to formal sector and finally, transaction regularity and its promotion. The use of informal credit decreases with the passage of time and spread of education.

Conteh and Braima (2003) pointed out that the needs of the poor households in the rural areas were not fulfilled by the credit of formal institutions the world over. Almost in all the rural areas, the informal credit market provides services including, marketing inputs, transportation facilities and resource persons etc. in different areas. Formal sources of credit were incapable to provide such auxiliary services based on non-collateral. The need is to develop policies that utilize informal credit market for economic growth. Due to the lack of capital access, low capital utilization and low production, informal credit markets were regarded as unorganized market. They further pointed out that the effects of the economic policy, like monetary and fiscal policy, on the informal credit market were no or very little because of its unorganized system. But the contributions of informal credit market to the economic growth were

significant. The need was not only to recognize the role of informal credit sector but also to link it with the formal credit sector and economic growth.

Okurut and Thuto (2003) contend that on average in Botswana, about 1299.5 Pesos (P) amount of loans were granted by the informal lenders in which co-operative societies granted the highest amount of loan as on average 1580 Pesos (P) and the pawn-shop were granted the lowest amount of loan as on average 900 P. The informal lenders granted loan for 1 to 2 months at the 20.4% interest rate monthly and 244.8 annually. Their result reveals that the interest rates levied by the informal lenders in Botswana are comparatively higher than banks' which is 13 to 16 percent per year. The repayment capacity on the informal loan was 98.9 percent which shows that the risk of default rate was very low. At the time of borrowers demand for loan, informal lenders were very careful and for the eligibility of loan, Computerized National Identity Card (CNIC), passport and/or pay slip were required. Their analysis also revealed that 56.8 percent informal borrowers were small income holders and only 2.7 percent had high income.

Giang (2004) contends that those borrowers who have land ownership with average income of 28136 (thousand Dong) have taken more loans from formal sources but those borrowers whose net income was in the range of 16980 to 26606 Dong were the customers of informal lenders. Informal lenders required no collateral which was 0.1 percent but this requirement ratio was very high in formal sources of credit which was more than 80 percent. Similarly, his results show that formal sector

provided more than 80 percent of loan for production purposes and less than 20 percent for consumption but the reverse holds true in informal sector in which 50 to 70 percent of loans were provided for consumption purposes and the remaining for production. Formal sector charged 1.37 percent of interest rate per month with the maturity of loan more than 18 months as compared with the rate of interest of informal lenders that is 2.93 % per month which was two times more than formal sector with the maturity duration of the loan on average as 9 months. The research further reveals that there were monopolistic positions of the informal lenders and for the sake of profit charged as high rate of interest as possible. The advancing of loan by money lenders largely depended on the risk factors, as lenders provided low quantity of loan at a high rate of interest to more risky borrowers and high amount of loan at low rate of interest to less risky borrowers.

Barslund and Tarp (2004) pointed out that during the period 1997-2002, about 69 percent of households obtained one time loan and 46 percent of households obtained two or more than two times. During the period 1999-2002, the importance of the informal credit deteriorated from 21 percent to 17 percent. In Vietnam, the two formal institutions providing credit to rural credit market consist of "Bank of Agriculture and Rural Development (BARD)" and "Vietnam Bank for Poor (VBP)" and the informal institutions consist of friends, relatives and money lenders. Informal sector provided loan of 3904 Dong at a very high interest rate i.e. 1.8 percent per month as compared with the formal sources of credit. During the year of 2002, formal sector provided 81 percent for production and only 19 percent for consumption but

this situation is quite different in informal sector as lenders provided 55 percent for production and 20 percent for consumption purposes and relatives provided 36 percent for production and 29 percent for consumption purposes at zero rate of interest. The households who had older and well educated persons had no or less demand for credit but those who had bad credit history were the clients of informal lenders.

Pitt and Moskowitz (2005) pointed out that in Bangladesh during the period of 1998-99, the informal system was at par with the formal sector, as evident from their survey reports that households received loan of about 2125 Taka from formal sector and 1440 Taka from informal sector along with 3040 Taka received as informal gifts. Further they pointed out that the role of informal credit market is very important in Bangladesh as well as other parts of the world, such as in Madagascar where households received 96 percent of informal loan, in rural Philippines 89 percent and in China 26 percent of rural households received informal loan. Their result shows that people were very much inclined to receiving loans and gifts. Households received 15 percent of gifts from informal lenders but sent only two percent, the gap between the sending and receiving of loan was smaller as in the case of gifts. During the period of seven years i.e. from 1991-92 to 1998-99, the households received loans from both formal and informal credit markets. The gifts from informal sector rose up to 250 percent. Interestingly, there was observed a growth in women borrowers, but still men received larger amount of loan than women. In the informal credit market, women mostly relied on the informal gifts and household' women received about

three times of gifts than informal loans. Out of total informal credit, only 5 percent of loan and 43 percent of gifts were accounted for women.

According to State Planning Board of India (2005) a majority of the people in Kerala took loans and deposited their savings with informal money lenders despite a network of bank branches and penetration rate of the banks. The households who deposited their savings were middle income group and were very serious about the interest rate offered by the money lenders and that is why people deposited their savings for the purpose of future events like daughter's marriage or for educational purposes. Household possessed personal information about money lender for years and does not hesitated in keeping their deposits with them so the risk factors were not involved in them.

Haugen (2005) proposes that in Nepal the reason of taking informal loan was the illiteracy of the households, high transaction costs of the bank and no collateral requirement. This conclusion was drawn from a study where out of the total 144 respondents, 60 were informal borrowers and the remaining were formal and/or informal borrowers. According to Nepal Living Standard Survey (NLSS), in rural areas of Nepal only 16 percent of loans were taken from formal sector and the remaining from informal credit market. In Nepal, relatives, landlords, shopkeepers and money lenders were the main providers of informal loan in which 25 percent of loans were provided by relatives and 61 percent by money lenders. In the informal credit market the personal guarantor were commonly used and about 54 percent of

informal lenders advanced loans without any collateral. Informal lenders charged a very high interest rate which was around 40 percent and varying from 29 to 95 percent on the average loan size of 7695 in Eastern Terai, Nepal. The default rate was very low in the informal credit market and there was no process of screening and selecting the borrowers and they were chosen on the basis of their honesty and moral hazards as against any security. Majority of lenders provided loans to those whom they personally knew. The researcher concluded that in Nepal, there were free entries in the market for informal lenders by changing interest rate according to their own free will, which described a monopolistic competitive market. In the country of Nepal, the screening costs are low and adverse selection and moral hazards are mostly ruled out through personal relationships.

Madestam (2005) proposes that informal lenders if they face some restriction to choose money lending as profession, which inwardly means that they must have additional sources of income that is from their own land or business. With additional sources of income, banks were also enabling factor as they provide more funds to informal lenders on the basis of their land ownership or trade. In case money lenders had no additional income then the funds flow of bank were also limited for informal lenders and extended to landlords and traders. Segmentation of credit market is a common feature in most of the developing countries in such a way that despite the existence of a formal institution. Households were restricted to borrow from informal lenders. The associations of cost on formal borrowing were fixed ($k > 0$) while the accesses to informal credit were costless. Money lenders and traders demanded more

funds from formal sector if the values of (where "k" is formal borrowing cost) were low and the market outcome were same. In case the value of "k" increases then formal credit demand reduces or becomes less attractive. When the values of "k" were above the utility obtained by the traders from bank borrowing then money lenders were alone in the credit market to raise funds from formal sources of credit. Thus market segmentation occurs when money lenders are relatively rich while traders are poor.

Guirkinger (2006) contends that in informal credit market, the repayment of debt depends upon the capital of borrowers. If the borrowers have a fixed monthly income, they are required to repay their debts in installments and if the borrowers are farmers then the repayment of loan is required in the next harvest of crops which might take around 6 to 12 months. Informal lenders, in order to stay abreast of information about the repayment capacity of borrowers, use two types of best practices or techniques during lending processes. The first practice pertains to observing the borrowers productivity before and after the disbursement of loan, for this purposes the lenders either make a transit walk in borrowers' field or collect information from borrower's neighborhood. On the ground of borrowers expected output projections, lenders then decide about the size of loan and its repayment schedule. Secondly, lenders provide part of their loan to borrowers in kind like fertilizers, chemical and hired labour to diversify the flow of credit from consumption to production uses. Informal lenders are not only socially but also physical proximity to borrowers because lenders and borrowers normally come from the same village or

community. It is convenient for informal lenders to make access to additional information about borrowers; although they might possess information even before their loan demand. The researcher proposes that by taking loan from formal sector is a viable proposition if the borrowers repay in time, but if the borrowers default then the formal loan will be more expensive than informal loans due to accumulation of interests and may multiply due to compounding of interest rate, penalties and so on. Informal lenders are normally engaged in common businesses with the borrower's relatives or its communities through which they enforce repayment of loan and that too with an exploitative interest rate. This technique can be termed as social or peer pressure which is instrumental to the success of informal sector.

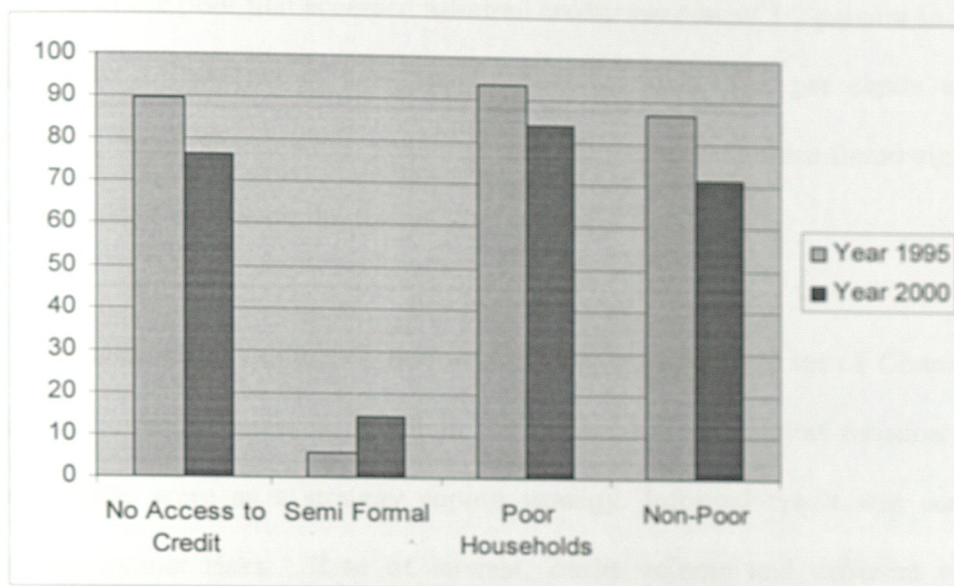
Kaino (2006) pointed out different determinants of demand for credit and credit rationing at household levels. He conducted the study by taking 301 households as sample from 7 villages of upper Burma in 2005. For the study, about 76 percent of households were those who took loans from formal and semi-formal sources of loan, 6.6 percent from informal sector and 32.2 percent of them were no borrowers. Formal and semi-formal sectors provided loan of about 6 percent for total consumption, 73 percent for crop farming and 21 percent for stockbreeding purposes while informal sources of credit provided 65 percent for consumption and only 35 percent for production purposes. The average size of loan, in the informal credit market, was 52 USD and 32 USD higher as compared with formal loan size which was 21 USD.

Klijn (2006) found that the middle and low income group of households in times of emergencies become more obliged as usually poor households, instead of credit, heavily depend on the charity, while middle group of households make an access to credit and the wealthy households utilize their own funds because of rich resources, during the time of urgent needs. The indebtedness of households in the rural Herat (Afghanistan) does not mean that they were extremely poor, but it means that in time of urgent need they borrow and once the crisis is over, the households repay their debt by selling valuable assets.

Boucher and Guirkinger (2006) propose that two types of borrowers are clients of informal lenders, first those who could not fulfill the collateral requirement of formal sources; second those who were able but not willing to take formal loan on the basis of their collaterals. Low expected income were accepted by these two types of borrowers in exchange of lower risk. The provision of partial insurance was also an important role of the informal credit market. The role of informal credit market was very important for relatively poor households and informal sources of credit depended on the performance of the agents. A relatively affluent borrowers' selection is less risky as informal lenders depend on the wealth of agents. The importance of informal credit market depends on the development of formal credit market, its ready availability and the distribution of wealth at the rural areas. The impact of participation of the households in getting formal credit in rural areas was very limited because of the supply side constraints of credit policy of the formal sector.

Okurut (2006) investigated the three credit markets that are the formal financial sector, the semi-formal financial sector, and the informal market. The formal financial sector comprises of commercial banks, semi-formal financial sector, and informal credit means debts of kiths and kins. Lack of access to any form of credit was a key feature with approximately 89.6 percent of the total sample size having no access in the year 1995. This number was reduced to 76.5 percent in the year 2000. The increased accessibility to credit markets in the 2000 survey may be attributed to the rapid expansion of microfinance institutions over the years. Most of the credit accessed was from semi-formal financial institutions over the survey periods (5.9 percent in 1995 and 14.5 percent in the year 2000). The decomposition by poverty status at the national level suggests the proportion of poor households with no access to credit (93.6 percent in 1995 and 84.2 percent in the year 2000) exceeded that of the non-poor (86.9 percent in 1995 and 71.4 percent in year 2000).

Figure 2.1 Households Access to Informal Sources of Credit



Source: Okurut 2006

Thus the poor have less access to credit as compared to the non-poor. Non-poor households were more likely to access bank and semi-formal credit as compared to the poor. Of the rich households, 5.8 percent had access to bank credit in 1995 as compared to 7.1 percent in the year "2000". In terms of semi-formal sector credit, 6.5 percent of the non-poor had access in 1995 and the proportion was more than double that was 17.8 percent in 2000. Access to informal sector credit by the non-poor households was generally low (0.6 percent in 1995 and 3.6 percent in 2000). The poor were more likely to access informal credit, which may be explained by the absence of collateral requirements for such borrowing. The proportion of the poor who accessed bank credit was exceedingly small (0.1 percent in 1995 and 0.5 percent in the year 2000). Access to semi-formal credit by the poor almost doubled over the survey

periods, rising from 5.0 percent in 1995 to 9.6 percent in the year 2000. However, the proportion of the poor that accessed informal credit was dismal 1.2 percent in 1995 as compared to 5.5 percent in the year 2000. Households' age, per capita expense, family size, level of education, gender (being male) and race were found significant and had positive effects on the formal loan access.

Schindler (2006) contends that in the Tamale central market of Ghana in the economy women's access to credit in the informal credit market function and its characteristics were as a strategy coping strategy. Informal credit was used as a safeguard against risks. Rate of interest, credit volume and different types of informal lenders were very complex for the women's access to informal credit. In the informal credit market, the volume of credit was low. In terms of transaction cost market women may be provided by the demand of micro insurance at less cost of coping strategies. The access of market women to formal credit market which were more reliable, and credit provided for longer durations may help to raise their working capital permanently which would be helped in rising the household's standard of living as well as reduce poverty.

Jeromi (2007) adopted a categorical approach which divides informal sector into various sections. Section one of the study focuses on the position of informal money lenders among the formal institutions in terms of deposits and branches, and the position is that the number of money lenders is higher as compared to the number of banks branches. In Kerala, the total number of money lenders was 12000 in which

5700 were registered and 6300 unregistered. In the state, the share of money lenders out of total number of branches was 68.4 percent which indicated that borrower's access to informal loan and money lenders charged higher interest rate. In the selected population, about 5590 borrowers are covered by money lenders while 9431 borrowers by commercial bank branches. Informal lenders advanced loan for a period of minimum 3 months or maximum 6 months. In general, the maturity date of loan was not more than one year. Those money lenders who provided loan for 100 days may recover their loan in 100 equal installments or their collection of loan and interest were on daily basis which was a common practice between money lenders and borrowers. About 66 percent of loans were advanced by the money lenders on the basis of gold as security and the loan amount was 80 percent of the gold value and 20 percent were their margin requirement for their business secured. The money lenders charged varying interest rates depending on the nature of customer demand for loan. In case of emergency, borrowers demanded loan and even did not ask question about the interest that will be charged on loan. Registered money lenders maintain two types of records, one for their personal use and the other for legal compliance. For official bookkeeping, the money lenders mentioned only a normal interest rate that would be charged against loan but in their personal record they charged a very high rate of interest varying from 24 to 60 percent from their customer depending on the amount of loan, loan repayment time and nature as well as security as in gold or personal guarantee.

The Second section encompasses the liability of all the 12000 money lenders which was about Indian Rupees (INR) 4135 crore and their assets around INR 3029 crore. The 1958 Kerala Money Lenders Act (KMLA) which regulates the activities of informal lenders such as interest charges and to provide protection to the borrowers. Although there have been made 12 amendments in the Act till 2004, the law prohibits the informal lenders from resorting to illegal and personal forces for the recovery of loan.

In last section, the author displays some observations and suggestions about informal money lenders. He observes that the rates of interest are varying from lender to lender and from 24 percent to 60 percent in case of registered money lenders. But in case of unregistered money lenders, the ratio of interest rate was high and even reaches to 120 or 180 percent. The reason of this charging high rate by informal lenders is that there is no supervision; no inspection to control their activities even if KMLA warns of measures against non-compliance, the punishment is only a small amount of fine. The need is that an inspection mechanism be chalked out to protect borrowers from the exploitation of those big money lenders whose liabilities are more than 10 Million. Government must involve in their activities and also take some corrective action and monitor their business. In the Indian society, money lenders are considered as anti social elements, as it has many wrong attributes such as the exploitation of poor. Second, the use of informal credit mostly for consumption purposes and then lastly, there is no regulation like monetary policy of the central bank applied to the informal credit market.

Amjad and Hasnu (2007) took 105 households as sample from Peshawar district which was divided into five categories according to their land ownership. They proposes that on average 46 days are taken by formal sector from the loan application to the receipt of loan (lead time) which is a longer duration as compared to the informal sector. In formal sector, the total cost which includes interest and transaction was 20 percent for taking Rs. 46666 of loan and 17.89 percent on the amount of Rs. 6681 of loan. This total cost decreases as the borrowed amount increases with the increase of the land ownership. They pointed out that in informal sector there were two sources of loan: one is friends and relatives; and another one is the landlords. Friends and relatives charge no interest on loan because of goodwill. Landlords provided loan to their tenants and the percentage of these tenants in the total informal borrowings were 72 percent due to the life long relationship between them. Informal borrowers demanded loan for consumption purpose to organize and celebrate their social ceremonies like marriages of their sons and daughters, purchase of gold, clothes, dowry and for emergencies. In informal credit market, the repayment of the loan was not fixed on specific date of time but usually the repayment date of loan is the time of harvest. Borrowers also need loan for production purposes i.e. for the purchase of fertilizers, chemicals, seeds etc. In some cases, the landlords provided loan in cash for agricultural inputs to their tenants or in kinds like fertilizers and seeds and the tenants repaid more than 100 percent on loan to their landlords.

Kongolo (2007) observed that in most of the developing regions of South Africa, about 80 percent of women provided about 70 percent labour, working from 14 to 17 hours of working, spending 50 percent of their time in the agriculture field and 25 percent time in their home activities. These women still have no access to loans and are even excluded from the formal sources of loan and have to be content with informal credit. At the time of emergencies and financial needs, informal sector provided credit to these poor women. There results show that about 86 percent of the respondents used informal loan and only 8 percent depended on formal credit while the remaining 6 percent had no borrowing. The reason for the low rate of taking loan from formal sector is the distance between the villages and banks. Informal credit markets play an important role in the poverty alleviation by providing loan in cash and in kind to million of poor people of the developing countries, in general, and South Africa in particular.

Yunus and Weber (2007) examined the impact of micro credit facilities on the poor households' standard of living and also studied the impact of informal credit on the living standard and development of poor in the developing countries of the world. Yunus (2007) proposes that micro credit should be provided to poor especially poor women on trust basis not on collateral because collateral were the main obstacles in the way for poor households.

Madestam (2009) divided informal lenders into two categories i.e. rich informal lenders and poor. Rich lenders advance loan informally by using own funds

not borrowed formally. Most poor lenders borrowed from formal sources of credit for their business and lent the same amount informally. It could be assumed that both the formal and informal credit markets face monitoring their borrower's constraints in their framework. Informal lenders monitor their borrowers very closely because they personally know them and formal lenders were little hesitant in lending because of possession of limited information about their clients. By the co-existence of both the credit sources, the result shows three effects of the informal credit market. The first was the investment effect of the informal credit, the giving of more funds to informal lenders by the formal sources of credit. A disciplinary effect was next generated by the informal credit market. Informal borrowers need not pay for agency cost charged by the formal sector, and in this way the contribution of informal borrowers in investment was higher than other sources of credit. Informal sources of credit reduced the default rate and increased the lending volume of banking sectors. Bank can also reduce a high agency cost (like screening of borrowers, monitoring problem) in case of providing credit to very poor households through the provision of credit to informal lenders. If in the credit market the effect of rent extraction was prevalent then the borrowers were worse off and the informal lenders better off. If the market powers of the formal sector were higher than informal credit market then the rent extraction effects were minimum and the informal credit market was more important among poor households.

Turvey and Kong (2009) show that in order to increase access of the poor households to formal sources of credit, the Chinese Government and Peoples Bank of

China (PBC) initiated the process of Micro Finance Institution (MFI) in 2006 which got accelerated in the current year. In the rural areas of China, for the understanding of micro credit one must understand the strength and trust role of informal credit market. They found that about two third of rural households were borrowing from friends and relatives and about one third of households borrowed from rural cooperative bank, because of the community's strong trust on the repayment of loan which, in certain cases, was more than 97 percent in both the (formal and informal) credit markets. MFI reported that in the world this repayment rate of loan was the best. According to their survey, farm households were poor with about 13000 Yuan per year income and more than 3000 Yuan their per capita income. The MFIs loan rate assessed in their theoretical framework was based on the assumption that the trustworthiness was more in the rural poor households than richer borrowers.

Tang et al (2010) found that in rural China there was no clear evidence of coexistence between the formal and informal sources of credit. The borrowing decision of rural households with regard to the sources i.e. formal or informal credit market depended on the transaction cost and on the production capacity of borrowers. In order to increase the accessibility of rural households to formal sources of loan, the transaction costs of the formal credits were essentially reduced. Households' credit demands were not satisfied by the credit markets which shows that the potential of credit market function were below and the reason of this low potential of credit market was the inability of the borrowers to meet credit requirements such as possession of land ownership and off-farm constraints.

Jamal (2011) point out that "the medium enterprises with collateral to pledge with the banks have seen some improvement. But the smaller enterprises' access to finance has deteriorated over the years for a variety of factors such as bank fees, unavailability of collateral and lack of documentation and credit history with banks. The lack of formal credit was forcing the smaller entrepreneurs to fund their working capital and new investment requirements from their saving, by borrowing from friends and relatives or from the informal sector at a very high price."

Table 2.1

Market Share of the Informal Credit Along with Author Name, Year of Publication and Country of Origin

Author Name and Year	Country	Borrowing from		Borrowing from no		Informal Credit Market		Amount of Loan	
		Formal Sources	In %	one sources	In %	Production Purpose	Consumption Purpose		Interest Rate In %
		In %	In %	In %	In %	In %	In %		In %
Agabin et al (1989)	Philippine	-	-	-	11	55	120*	2785 Pesos	
Geetha (1992)	Philippine	67	28.5	4.5	62	38	24.4*	39000Pesos	
Mhieldin and Wright (1992)	Egypt	34	30.6	35.4	23	34	-	-	
Zeller (1994)	Madagascar	48	52	-	62.5	7.9	-	USD11.9	
Kochar (1997)	Rural North India	42	58	-	-	-	-	-	

Khandker (1997)	Rural Bangladesh	21	34	45	-	-	-	-
Khandker (1997)	Rural Bangladesh	27	64	9	-	-	-	-
M. Irfan et al (1999)	Pakistan	-	-	-	90	10	48-120*	10000
Besley et al (2001)	Nepal	12	82	6	28.9	81.2	-	2218
Kongolo (2001)	South Africa	8	86	6	11	89	10**	15000
Ramachandran and Swaminathan (2001)	India	14.1	85.9	-	42.1	59.9	60*	4556
Michael 2002	Switzerland Geneva	27	73	-	-	-	-	434188 Uganda Shilling
Francis and Botlhole (2003)	Botswana	-	-	-	-	-	20.4** 244.8* Pula	1299
Giang Ho (2004)	Vietnam	50.1	49.9	-	29.9	70.1	2.93**	2272.3 Dong

12345

Barslund and Tarp (2004)	Denmark	65	35	-	55	20	1.8**	3904
Tomoko (2005)	Japan Tokyo	76.4	6.6	17	35	65	5 to 8**	Dong 57055
Haugen (2005)	Nepal	47.4	52.6	-	-	-	40*	7695
Gathetine (2006)	Peru	18	26	56	-	-	121*	-
Jeromi (2007)	India	-	-	-	-	-	120*	-
Shehla and Hasnu (2010)	Pakistan	39.2	34.2	26.6	-	-	10** 100*	12390

* Interest Rate per Year

** Interest Rate per Month

Conclusion

To sum up the whole discussion on literature review in simple manner, the researcher in this part of dissertation tries to form a launching pad for introducing the concept of informal credit sector by linking it with widespread poverty in Pakistan. Due to unprecedented poverty in the country, an overwhelming majority of the population is badly stranded in the dilemma of informal credit, which to-date is undocumented and hence known as informal credit. Formal credit is mostly extended to large farmers who receive a substantial portion of the pie, whereas small and landless farmers receive a dismal percent due to lack of collateral, no or less transaction costs and the sanctioning process has been compressed due to personal contact and enduring relationship between the parties involved in informal lending. The informal lender provides value added services to the cash strapped farmers to enhance the marketability of the produce of farmer albeit its practices are exploitative in nature as the rate of interest charged is too high when compared to formal sources of credit. Because of easy availability and access to informal credit, almost 86.4 percent of the farmers are clients of informal money lenders who seldom ask about the purpose of loan. Informal credit providers are themselves clients to formal sources of credit thus creating an extra tier which adds to the interest rates being charged from the end user in an indirect and subtle fashion.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter review and discuss the methodology adopted for this study. In order to achieve the objectives of the study, inferential methodology has been incorporated, in which conclusions were drawn from population based on sample (Groebner et al 2008). To follow the inferential approach, data were generated through research instruments such as questionnaires and face-to-face interviews.

3.1 Area Profile of District Peshawar

The area of research is Khyber Pakhtunkhwa province wherein district Peshawar selected for data collection. Peshawar, the capital of Khyber Pakhtunkhwa has long been known as "Frontier Town" which stands right at the entrance of the Khyber Pass. It is the gateway to the sub-continent.

3.1.1 Location

The location of the district is between $33^{\circ} 44'$ and $33^{\circ} 15'$ North Latitudes and $71^{\circ} 22'$ and $71^{\circ} 42'$ East Longitude. The district bounded on the North by Charsadda, on the east by Nowshera district, to the south it is surrounded by tribal areas, and to the west it is surrounded by Mohmand and Khyber Agencies. The total area of the district Peshawar is 1257 square kilometers.

3.1.2 Physical Features

The district is almost a fertile plain. There is small hilly area of the main Khattak range to the south-east. The highest point of the hilly areas is at Tarakai with a height of almost 700 meters. The central parts of the district Peshawar consist of the fine alluvial deposits. The cultivated land consists of very rich, light, and porous soil, which is composed of mixture of clay and sand, best suited to cultivate wheat, sugarcane and tobacco.

3.1.3 Climate

The climate of Peshawar district is extreme. The summer season persists from May to September. June is extremely hot and dry. The mean maximum temperature in June and December then rises to over 40°C and 4°C respectively. Rainfall is received both in summer and winter. In March, the largest winter rainfall is recorded, while in August largest summer rainfall is recorded.

3.1.4 Population Size and Population Growth

The population of Peshawar district has increased more than five times since 1951. The population is 2019 thousand in 1998 as compared to 391 thousand in 1951, resulting an overall increase by 416.37 percent since then. The population of the district Peshawar is increasing at annual growth rate of 3.56 percent. Table below shows population and population growth.

Table 3.1

Population and Population growth in District Peshawar since 1951

Description	1951	1961	1972	1981	1998
Population(000)	391	529	807	1113	2019
Cumulative increase (%)	-	35.29	106.39	184.65	415.37
Average Annual Growth rate	-	3.08	3.70	3.89	3.56

Sources: District Censuses Report, Peshawar 1998.

The population density of the district was 1606.3 persons per square kilometer in March, 1998.

3.1.5 Household Size

The average size of the household of the district has slightly increased to 8.5 persons in 1998 from 7.3 persons in 1981 despite of the fact that growth rate of population per year has decreased to 3.56 percent in 1998 as compare to 3.56 percent.

3.1.6 Health

Details of medical facilities available to the general public of Peshawar district are provided in the table 3.2 below:

Table 3.2
Health Facilities/Centers, Peshawar District

S. No.	Health Facilities/Center	Number
1	Lady Reading Hospital (LRH)	1
2	Khyber Teaching Hospital	1
3	Hayatabad Medical Complex	1
4	Hospital Class 1, Class 2, Class V	10
5	Rural Health Centers Class 1	3
6	Basic Health Units	50
7	TB Clinics Class 1	4
8	MCH Centers	19
9	Leprosy Clinics	1
10	Dispensaries	77

Sources: District Censes Report, Peshawar 1998

3.1.7 Education

The Government has concentrated more on education and has established many educational institutions i.e. universities, colleges, home economics institutions, technical education schools, Maktab schools and Mosque schools in the district. There are 1032 primary, 89 high schools, 10 colleges and a university for general study. In the district, there is university of engineering and technology, Khyber Medical University, an Agriculture University, PCSIR laboratories, and Pakistan Academy for Rural Development (PARAD). Islamia College University, Edwards College and Government College are playing its role in providing educational opportunities to the masses. Details of educational and technical institutions are given in the table 3.3.

Table 3.3
Educational/Teaching Institutions in District Peshawar

S. No.	Institution	Male	Female	Total
1	Degree Colleges	4	3	7
2	Commerce College	1	-	1
3	Polytechnic College	1	1	2
4	Govt. Vocational Institution for Women	-	1	1
5	Higher Secondary Schools	11	6	17
6	High Schools	65	24	89
7	Middle	645	41	689
8	Primary Schools	645	384	1032

Sources: District Censuses Report, Peshawar 1998

Besides the government institutions, there are also a huge number of private educational institutions which are fulfilling the educational needs of the masses of the district.

3.1.8 Literacy

A person is treated as literate if he is able to read newspaper or journal and able to write a short letter. Literacy ratio of the district for the population of 10 years and above is 41.79%. It has increased by 16.07 percent points from 1981 when it was only 25.72 percent. The literacy ratio for male is higher at 55.97 percent compared to 25.85 percent for female. Table 3.4 provides literacy ratios by gender and rural/urban divide for 1981 and 1998 census.

Table 3.4

Literacy Ratio by Gender and Rural/Urban Divides in 1981 and 1998 (in Percentage)

Area	1981			1998		
	Both Sex	Male	Female	Both Sex	Male	Female
All Areas	25.72	34.00	16.03	41.79	55.97	25.85
Urban	37.84	46.03	27.83	54.09	65.27	41.11
Rural	11.85	19.63	3.19	29.19	46.14	10.74

Sources: District Censes Report, Peshawar 1998

3.1.9 Educational Attainments

The total percentage of educated persons is 41.41 percent of the population age group 10 years and above. Among them 55.63 percent are male and 25.42 percent are female. Table 3.5 shows the educated persons by sex and urban/rural origin.

Table 3.5

Educated Individuals by Gender and Urban/Rural Divide 1998

Area	Educated Persons as Percentage of Population 10 years and above		
	Both Sexes	Male	Female
All Area	41.41	55.63	25.42
Rural	28.80	45.79	10.31
Urban	53.72	64.95	40.68

Sources: District Censes Report, Peshawar 1998

3.1.10 Enrolment Ratio

It measures the percentage of students to the total population of ages 5-24 years. This value is 49.64 percent for district Peshawar. By gender division this ratio is higher for males which are 57.61 percent as compared to 40.98 percent for females. Table 3.6 provides enrollment ratio by gender and rural/urban divided of district Peshawar in 1998.

Table 3.6

Enrollment ratios by Gender and Rural/Urban Divide of District Peshawar in 1998

Area	Male	Female	Both Sexes
All Areas	57.61	40.98	49.64
Rural	38.78	14.74	27.23
Urban	77.91	69.62	73.95

Sources: District Censes Report, Peshawar 1998

3.1.11 Level of Education

The percentage of the educated students who have passed primary, middle, and matriculation are 24.92 percent, 19.99 percent and 19.61 percent respectively. This percentage falls to 8.88 percent for the intermediate levels, 6.49 percent for the graduate level, and 3.06 percent for the post-graduate level.

3.1.12 Economically Active Population

The economically active population of Peshawar district among the population 10 years and above to the total population comprises about 393 thousand souls, 92.51 percent male and 7.51 percent female. The remaining 80.56 percent economically inactive population consists of 32.07 percent children below 10 years, 31.14 percent domestic workers including 64.23 percent female amongst the total females and 1.26 percent male workers amongst total males. The student share is 13.03 percent while all other categories constitute 4.31 percent in the total economically inactive population of the district. The labor force participation rate as percentage of total labor force to the population aged 10 years and above is computed as 28.62 percent of the district, out of which 50.03 percent are male and 40.55 percent are female. The labor force participation rate is 25.70 percent in urban areas and 31.63 percent in the rural areas of the district. Unemployment rate in the district is 17.82 percent. (District Censes Report, Peshawar 1998)

3.1.13 Accessibility

Peshawar is connected with the country through a wide network of roads, railways and airways. The Bacha Khan International Airport serves the city and the province as the main international airport in the region. It is served by all airlines of Pakistan. The city is linked the main motorway as well as Kurakorum highway form which its connected to all of the major cities of Pakistan including Karachi, Lahore,

Islamabad, Rawalpindi, Faisalabad and Multan. The roads are also linked to Afghanistan and China.

3.1.14 Demographic Information

District Peshawar has one Tehsil i.e. Peshawar. There are 92 union councils in the district with 56 rural and 36 Urban. There are four Towns in Peshawar and one Cantt area.

Table 3.7
Population size in four Towns and Cantt in District Peshawar

S. No.	Towns	Population
1	Peshawar Cantt	88,689
2	Town I	720,878
3	Town II	762,091
4	Town III	674,722
5	Town IV	618,344
	Total	2,864,724

Source: Local Government Department, Government of KP, Peshawar (2008)

Table 3.8
Population size in Urban Union Council in District Peshawar

S. No.	Urban Union Council	Males	Females	Total
1	Khalisa-2	16175	15961	32136
2	Mahal Teri I	16865	16360	33225

3	Mahal Teri 2	18106	17751	35857
4	Shahi Bagh	12720	12963	25683
5	Zaryab Colony	11515	11630	23145
6	Sikandar Town	13801	14071	27827
7	Gulbahar	12914	13093	26007
8	Shaheen Muslim Town 1	15293	15110	30403
9	Sheikhabad	16401	16253	32654
10	Lahori	13119	12898	26017
11	Karim Pura	11694	11918	23612
12	Andar Sher	11966	12173	24139
13	Asia	18163	18491	36654
14	Jhangir Pura	13477	13507	26984
15	Gunj	13207	13390	26597
16	Yaka toot - 1	11766	11935	23701
17	Yaka toot - 2	18783	18384	37167
18	Yaka toot - 3	14695	14043	28738
19	Wazir Bagh	17761	17276	35037
20	Kakshar 1	13693	13446	27139
21	Kakshar 2	13918	13036	26954
22	Shaheen Muslim Town 2	14023	13890	27913
23	Akhunabad	17809	17313	35122
24	Bana Mari	12673	12516	25189
25	Nothia Qadeem	16358	15786	32144
26	Kotla Mohsin Khan	12317	12166	24483
27	Landi Arbab	14993	14781	29774
28	Nothia Jadeed	16181	16718	32899
29	Pawaka	17502	17623	35125
30	University Town	13421	13233	26654
31	Shaheen Town	18179	18471	36650
32	Tehkal Payan 1	12319	12206	24525
33	Tehkal Payan 2	11309	11115	22424

34	Tehkal Bala	18536	18390	36926
35	Hayatabad 1	11973	12193	24166
36	Hayatabad 2	12302	12604	24906
	Total	525927	522694	1048621

Source: Local Government Department, Government of KP, Peshawar (2008)

Table 3.9
Population size in Rural Union Council in District Peshawar

S. No.	Rural Union Council	Males	Females	Total
1	Khalisa 1	11571	11357	22928
2	Hassan Ghari 1	15381	15113	30494
3	Hassan Ghari 2	13121	12988	26109
4	Lala Kali	11837	12406	24243
5	Chamkani	14987	14775	29762
6	Budni	14011	13779	27790
7	Wadpaca	13475	13783	27258
8	Pakha Ghaulam	14070	14306	28376
9	Kankolla	18709	18038	36747
10	Nahaqi	18473	17958	36431
11	Gulbela	17906	17436	35342
12	Saeed Abad	13975	12261	26236
13	Tukhat Abad	20106	19303	39409
14	Khazan	16383	16798	33181
15	Heryana Payan	18706	18127	36833
16	Kafoor Dheri	15396	14908	30304
17	Shahi Bala	15007	14662	29669
18	Jogani	14491	13563	28054
19	Panam Dheri	15672	14238	30000
20	Gari Sher dad	12481	12128	24609

21	Faqir Kally/ Pajagi	15742	16753	32495
22	Larama	10670	10998	21668
23	Terai Payan/Dag	16706	16224	32930
24	Malhra	20699	20387	41086
25	Kaneeza	13511	13411	26922
26	Chaghar Matti	12945	13196	26141
27	Bahadar Kallay	17996	16025	34021
28	Palosi	18653	17383	36036
29	Nasir Bagh	15984	15564	31548
30	Bazid Khail	19006	18482	37488
31	Sarband	15390	15956	31346
32	Pishta Khara	17727	17990	35717
33	Regi	17972	18253	36225
34	Sufaid Dheri	20917	21176	42093
35	Sangu/Achini	19809	19763	39572
36	Hazar Khani 1	17757	18675	36432
37	Hazar Kahni 2	15874	16490	32364
38	Urmar Payan	13804	13524	27328
39	Urmar Miana	13765	13181	26946
40	Urmar Bala	17391	16670	34061
41	Pandu	12387	12185	24572
42	Sheikh Mohammddi	19765	19604	39369
43	Badaber	11336	11992	23328
44	Surizai Bala	11026	10821	21847
45	Badaber Hurizai	11082	11772	22854
46	Mahtani	18598	18745	37343
47	Maryam Zai	13628	13806	27434
48	Mashogogar	21758	21839	43597
49	Suleman Khail	11348	11044	22392
50	Sheikhan	18049	19372	37421
51	Adazai	13695	13884	27579

52	Aza Khel	13887	14052	27939
53	Sherikera	11006	10825	21831
54	Surizai Payan	11756	12000	23756
55	Mera Surizai	11481	12275	23756
56	Mera Kachori	18218	17978	36196
	Total	867096	860312	1727408

Source: Local Government Department, Government of KP, Peshawar (2008)

Figure 3.1
Maps of Pakistan and Khyber Pakhtunkhwa



PESHAWAR DISTRICT (Next Page)

Sources: Retrieved from (http://mapofthecountries.files.wordpress.com/2008/03/map_pakistan.jpg)
(http://pamirhost.pk/maps/NWFP_districts_map_2.jpg)

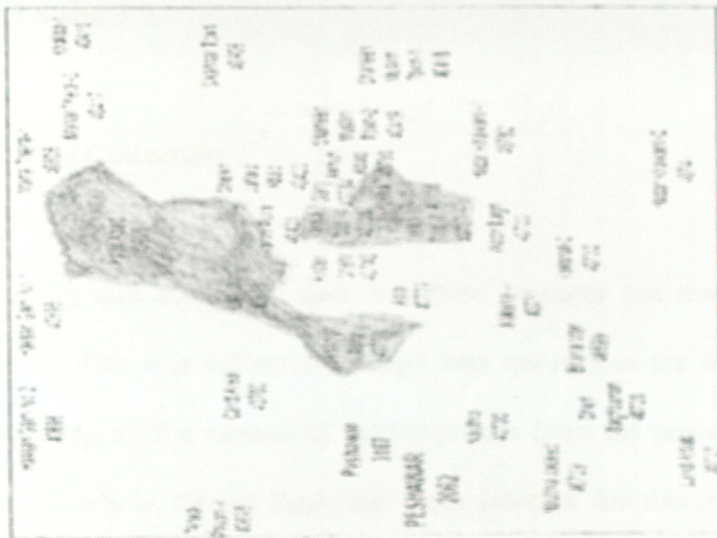


Figure 3.2
Map of District Peshawar



District Peshawar (92 Union Council)

Area of the Study

Sources: www.pdma.gov.pk/images/district_peshawar.gif

3.2 Population of the Study

Population is group of individuals or observations of importance to the research (Ray and Mondal, 2004). For the sake of this research, residents of District Peshawar constitute the population. According to the report of Local Government Department, Government of KP, Peshawar (2008), the total area of the district is 1,257 square kilometers containing a population of 2776029 and has a population density of 16063 individuals per square kilometer. Of this 1048621 people live in urban areas, while the rest 1727408 in rural areas. Previously there were 42 Union Councils in the entire district. The figure, however, rose to 92 Union Council under the Devolution Plan 2001, mainly because of inclusion of the urban areas that were previously either Town Committees, Municipal Corporation or the Development Authority. Under the new set up, there are 92 union councils in which 36 are urban and 56 rural Union Councils as given in table 3.8 and 3.9.

3.3 Data and Data Collection

Both primary and secondary data was used to carry out the objectives of the research. Primary data was collected through two questionnaires from the borrowers and lenders showing all the aspects of the borrowers from the research area. 14 union councils from the whole district Peshawar were selected for this purpose. Secondary data was collected from different sources, like local governments of KP, website, newspapers and books.

3.4 Sample Size and Sampling Techniques

According to (Ray and Mondal, 2004) sample is pure subset of the population. The population chosen, which is District Peshawar, even a sample size in excess of 10 thousands respondents may be insufficient for obtaining desirable results. However, keeping in mind the scope and demands of the study, the researcher resorted to achieve optimal responses and for the purpose, 14 out of 92 Union Councils of district Peshawar were selected on the basis of convenience. These 14 union councils were further divided into two groups on the basis of their population density. The number of households per kilometer square in rural areas is less than that of their urban counterparts; therefore in empirical terms 1000 respondents have been chosen comprising of 50 percent each of informal lenders and borrowers irrespective of the population size. In other words, 500 informal lenders and 500 borrowers were taken as sample from selected Union Councils by using systematic sampling techniques. Two types of questionnaires were designed to collect the data so as to properly obtain responses from the concerned respondents i.e. borrowers and lenders.

Data has been collected from rural and urban areas of district Peshawar. Seven union councils of the rural areas and seven union councils of the urban areas are chosen for research.

The sample size is systematically selected by using the formula

$$n = \frac{Ns^2}{(N-1)D + s^2}$$

Where

n = Sample Size

N = Population Size

$$s^2 = \text{Sample Variance} = \frac{\sum (Y - \hat{Y})^2}{n - 1}$$

$$D = B^2/4$$

B = Bound on the error of estimation

The sample size for each of the 14 union councils is given in the table below;

Table 3.10
Sampling Selection from the Selected Union Councils

Area	Total Union Council	Selected Union Council	Population	Sample Size		Total Sample Size
				Lender	Farmers or Borrowers	
Urban	36	Lahori	26017	36	36	72
		Jehangir Pura	26984	36	36	72
		Shahi Bagh	25683	36	36	72
		Yakatoot 1	23701	36	36	72
		Yakatoot 2	37167	36	36	72
		Yakatoot 3	28738	36	36	72
		Karimpura	23612	36	36	72
Rural	56	Daag	32930	36	36	72
		Chagar Mati	26141	36	36	72
		Mathra	41086	36	36	72
		Shahi Bala	29669	36	36	72
		Pajagi	32495	36	36	72
		Hassan Ghari 1	30494	34	34	68
		Hassan Ghari 2	26109	34	34	68
Total	92	14	410826	500	500	1000

Source: Local Government Department, Government of KP, Peshawar (2008)

A total of 1000 lenders and borrowers were selected, 72 each from all the 14 union councils except in case of Hassan Ghari 1 and Hassan Ghari 2, where only 68 respondents were selected. The households are selected by using systematic sampling (e.g. every K^{th} unit) from a list of total population of the areas of research. Sample size (n), can be defined as selecting every K^{th} household from the total population (N), arranged in order.

The letter, K , called as the sampling interval can be written as:

$$K = \text{Population size} / \text{Sample size} = N/n$$

Where

N = Population size

n = Sample size

K = Sampling Interval

K could be any number nearer to integer (e.g. every tenth or every twentieth unit etc.) and every K^{th} unit from the list of population was selected. Using the above formula for all the three areas, the results are shown in table below;

Table 3.11
Sampling Selection from the Selected Union Councils

Area	Total Union Council	Selected Union Council	Population	Total Sample Size	K th Household
Urban	36	Lahori	26017	72	361 st
		Jhangir Pura	26984	72	374 th
		Shahi Bagh	25683	72	356 th
		Yakatoot 1	23701	72	329 th
		Yakatoot 2	37167	72	516 th
		Yakatoot 3	28738	72	399 th
		Karimpura	23612	72	327 th
Rural	56	Daag	32930	72	457 th
		Chagar Mati	26141	72	363 rd
		Mathra	41086	72	570 th
		Shahi Bala	29669	72	412 th
		Pajagi	32495	72	451 st
		Hassan Ghari 1	30494	68	448 th
		Hassan Ghari 2	26109	68	384 th
Total	92	14	410826	1000	

Source: Survey Results (2009)

Above table 3.11 shows the Kth respondent that will be selected from each Union Council. According to the table 3.11 from Lahori union council 361st respondent will be selected for distributing questionnaire. Similarly in union council Jahangir Pura, 374th respondent will be selected for data collection. Same procedure to the table from rural areas like from union council Daag 457th respondent will be selected for data collection. Same procedure will be adopted for other areas of research as well. Systematic sampling techniques was used because of the reason that it saved much of the time and efforts, it was economical, and was convenient to select a sample from the already prepared list of population and just had to tick them.

3.5 Data Analytical Techniques

The samples from 14 Union Councils (UC) were selected through systematic random sampling in which age, education, land ownership, etc, of the lenders and borrowers was considered. In order to collect the data from respondents, the research instrument used was questionnaire. Since majority of the farmers were uneducated, so for the sake of simplicity or to make questionnaire according to their understanding, the research instrument was designed in Urdu and then their responses were translated into English.

For the estimation of dummy dependent variables, four most commonly used models are Linear Probability Model (LPM), Logit, Probit and Tobit models (Gujarati, 1995). (Amjad and Hasnu, 2007) and (Sai et al 2010) used a logit model in the analysis of informal credit market. In this study a logit model (for the analysis

of variables as well as simple average) and percentage method have been used. By using logit model, the borrowers' borrowing decisions were dummy dependent variable by giving two values 1 and 0. If the borrowers were borrowing its value is equal to 1 and 0 if he or she is not. Similarly, 1 if borrowers borrowed from formal sector and 0 if otherwise. This borrowers' decision depends on education level, land ownership, income, better village (infrastructure facilities, location, bank branches etc.). Another selection reason of logit model is that it is mathematically convenient.

Regression analysis is used to show whether or not the farmers borrow and if yes, then from which source i.e. formal sector or informal sector. Borrowing decision depends upon farmer's characteristics. In addition to this, it is assumed that borrowing depends on literacy status, age of the farmer, volume of the moveable assets, off farm income, village used as a dummy variable, operated area, tenure status and family labour. These factors are important both for lenders and borrowers; lenders essentially use these factors for the assessment of borrower's credit eligibility and these also influences the farmers demand for loan.

The model can be developed as;

$$Y = \alpha + \beta_1 \text{Lit.St} + \beta_2 \text{Age Far} + \beta_3 \text{VMA} + \beta_4 \text{OF Inc.} + \beta_5 \text{Vill.} \\ + \beta_6 \text{L.Own} + \beta_7 \text{Ten.St} + \beta_8 \text{Fam.Lab} + u$$

Where

Y = Dummy dependent variable used for the borrowing behavior of the respondents. Its value is one if the respondent is a borrower and its value is zero if he or she is not a borrower

Lit.St = Literacy Status is a dummy variable used for the literacy status of the respondents. Its value is one if the respondent is literate and zero if otherwise.

Age Far = Age of the farmer

VMA = Volume of the Moveable Assets

OF Inc = Off Farm Income

Vill = Dummy Variable used for infrastructure facilities of a village. Its value is one if a better infrastructural facilities are available in the village and zero if poor infrastructure facilities in the village

L.Own = Land Ownership (security for taking formal loan). Its value will be the amount of the land under the ownership of the respondent.

Ten.St = Dummy used for Tenure Status (to signify the relationship between tenant and lord). Its value is one if there good relations between the tenant and the lord and zero if not good relation between the two.

Fam. Lab = Family Labour. Its value will be the number of family members who are working to earn livelihood for the family.

α = intercept

$\beta_1 \dots \beta_s$ = Slope, which shows relationship between the dependent variable and the corresponding independent variables.

u = Error Term

3.6 Justification of the Variables

The variables used in the model are justified one by one below;

3.6.1 Borrowing Decision

The dependent variable used in this model is the borrowing decision of the respondents. By using Logit Model, where dummy dependent variable Y is equal to one if a borrower has borrowed in the given year 2009. As the data is collected from both borrowers and non-borrowers, and the characteristics of borrowers and non-borrowers are normally different from each other, so the inclusion of this variable as dependent variable in this research is of more importance.

3.6.2 Literacy Status

The education status of the respondent is an important factor which affects the decision behavior of the respondent to borrow from a formal sector or informal sector. Education brings more thinking power to the respondent and the educated person considers the opportunity cost of borrowing loan. The economic theory says that the more a person is educated, the more he or she will get loan from an informal sector other things remaining the same, the reason behind this is high opportunity cost of taking loan from formal sectors. The factors which affect dependent variable including literacy status, expected to positively affect because literate farmers have a better knowledge and information about the credit market as well as the procedure of the formal loan, time of the repayment loan and cost. With this background, he or she can easily access to credit.

3.6.3 Age of the Farmer

Another aspect of the respondents which affect the borrowing decision is the age of the respondents. Age of the farmer; sometimes, negatively affect his hope of seeking loan as the activeness of a farmer decrease with the increase of his age. The lenders normally hesitate to provide loan to aged people. The aged people in the farming sector have less capacity of production and hence earn very less as compare to young and energetic farmers. That's why more informal loaning agencies are not willing to forward more loans to aged farmers.

3.6.4 Volume of the Moveable Assets

This is the most important aspect in the borrowing decision of the farmers. Most of the informal loan agencies seek mortgages in the form of movable and immovable assets to secure their loans. The loaning agencies are more willing to provide them with loan and even provide concessions in the interest rates. However, another aspect can be the opposite of this. Those farmers having more movable and immovable assets show less demand for loans as they can avail the same resources from the selling of those movable properties. Moveable assets of the farmers like tractors and livestock's negatively affect the prospects of seeking loans because the ownership of tractors, thrashers, bullocks, and cows reduces demand for credit as these assets are also sources of income.

3.6.5 Off- farm Income

Off-farm income is important variable in affecting the decision of the borrowers to take loan. Off-farm income is a source of additional money to the farmers. They can generate more cash from off-farm resources or even they can invest funds generated from off-farm sources. High off-farm income (income generation from activities other than farm cultivation) reduces dependency on credit; farmers can purchase inputs on cash. Off-farm income is expected to have a negative affect on lending. A farmer having more cash from off-farm sources will be having less dependency on loans from informal sector and will be showing less interest in taking loan from informal sector.

3.6.6 Village used as a Dummy Variable

Village here is dummy variable used for analyzing the impact of infrastructure facilities on the borrowing decisions of the farmers. Villages differ in infrastructure facilities. Some villages have more facilities of roads telephones etc. while others have less. This aspect affect the decision of the borrowers in the since that if more facilities are there in the village, he will be willing to expand production to supply it to other areas and hence will be taking loans for that purpose. Village is a dummy variable equal to one if farmer belongs to a village with better infrastructure facilities i.e. road, telecommunication, power, natural gas and bank branch and equal to zero if farmer belongs to a village with worst infrastructure facilities i.e. road, telecommunication, power, natural gas and bank branch.

3.6.7 Operated Area

The area under cultivation is another important variable affecting the behavior of the respondents/farmers. A farmer having more area under cultivation will have more needs of seeds, fertilizers, insecticides and pesticides, for which he will be in need of funds. A farmer having less area under cultivation will be in need of less seeds, fertilizers, insecticides and pesticides. The value of this variable over here in this model will be the amount of land which is under the cultivation of the farmer. Operated area is expected to be positively related to the access of credit because the institutional credit market advance loan on the basis on securities.

3.6.8 Tenure Status

The status of the farmers is important factor in determining the behavior of the farmers for taking loan. To analyze here is whether a person is the land owner or the tenant and then what his/her behavior for taking loan from the informal sector. This variable also includes the relationship between the tenants and the lords of the land. If the relationship between the tenants and the land owner are good, the variable will take a value of one and the relation between the land owner and tenant are not good, the variable will take the value of zero in the model. Similarly the repaying capacity of those borrowers' having large and holding with large output was quite stronger and those having less and under use have weak repaying power. This repaying power affects the decision of the farmers in taking loan and similarly affect the behavior of the loaning agencies to provide loan to that particular farmer or not.

3.6.9 Family Labour

Family labour is measured by the number of the family members available for work in the farming sector. The more family members available for work, the more land they need for work, which ultimately creates the need for more seeds, fertilizers, pesticides, and insecticides, creating more demand for loans. So the size of the family labour can be an important factor affecting the behavior of the farmers for taking loan. Family labour is expected to be positively related to the access of credit because the institutional credit market advance loan on the basis on securities.

CHAPTER 4

DATA ANALYSIS I

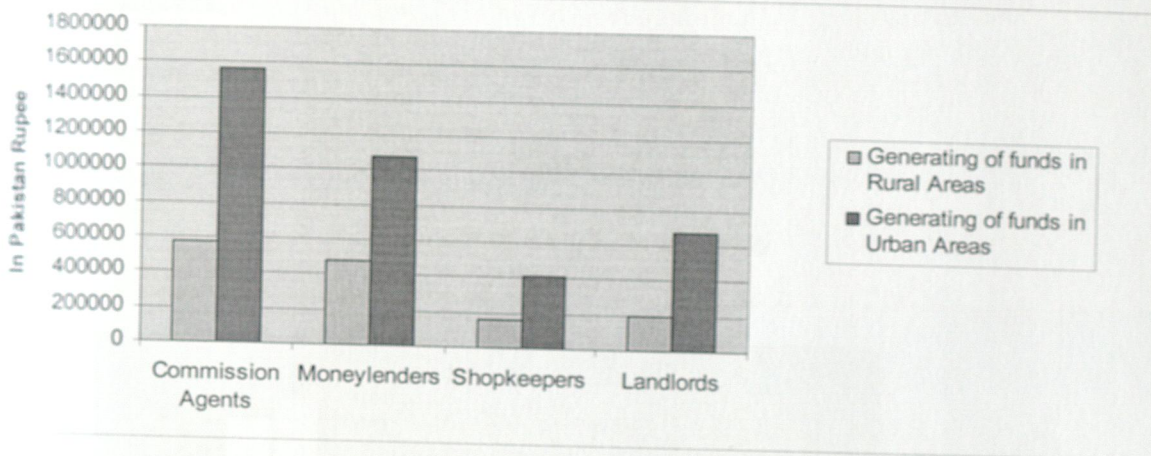
This chapter reviews as to how informal lenders generate funds, from which sources do they generate their funds, and the ability to generate funds in relation to their education, land ownership, work experience and their business coverage or spread. Besides this, the purposes of the borrowing, interest rates and markup charged by the informal lenders are discussed in this chapter.

4.1 Funds Generated by Informal Lenders

On average, about Rs. 349675 were generated for lending by informal lenders in rural and Rs. 932549 in urban areas during the year 2009. In the same way, shopkeepers, on average, generated funds amounting to Rs. 155847, landlords Rs. 197553 and commission agents Rs. 570080. In rural areas, small amount of funds were advanced to borrowers so contingent upon that the rural lenders generated lower figure of funds. But in urban areas this figure was higher because the business opportunities were enormous in comparison to rural areas which required large amount of loan, as evident from the figure 4.1 below.

Figure 4.1

Funds Generated by Informal Lenders (In Rs. and Average)



Source: Field Survey (2009)

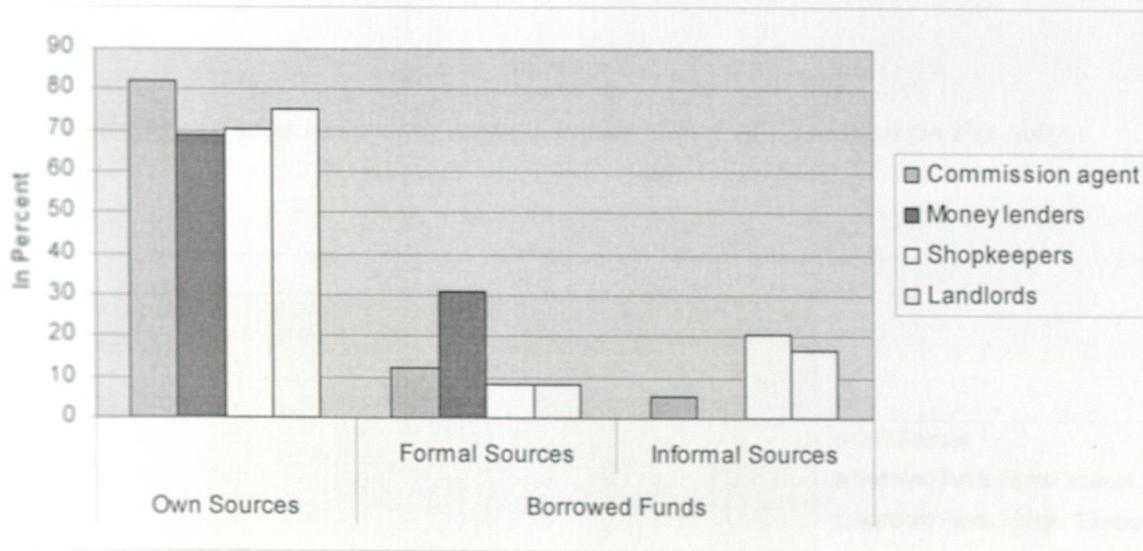
4.2 Sources of Funds

The institutional credit market consisting of commercial banks, Zarai Traqiati Bank Limited (ZTBL) were generating funds from the deposits of individuals or businesses by opening different types of accounts and from Central Bank i.e. State Bank of Pakistan (SBP). On the other hand, the informal lenders were generating funds either from their own resources or taking loans from formal sources at lower interest rates and advancing these to farmers/borrowers. Majority of informal lenders generated funds from their own sources and slightly relied on external sources. About 75 percent of lenders generated funds from their own sources and 25 percent of them acquired loans from formal and informal sources as shown in the figure 4.2. The commission agents secured 80 percent of funds from their own resources, 12 percent from formal and only 5.6 percent from informal sources. Similarly money lenders, shopkeepers and

landlord also generated more than 70 percent of funds from their personal sources and the remaining was taken from hybrid sources which are a combination of formal and informal sources.

Figure 4.2

Sources of Funds (in Percent)



Source: Field Survey (2009)

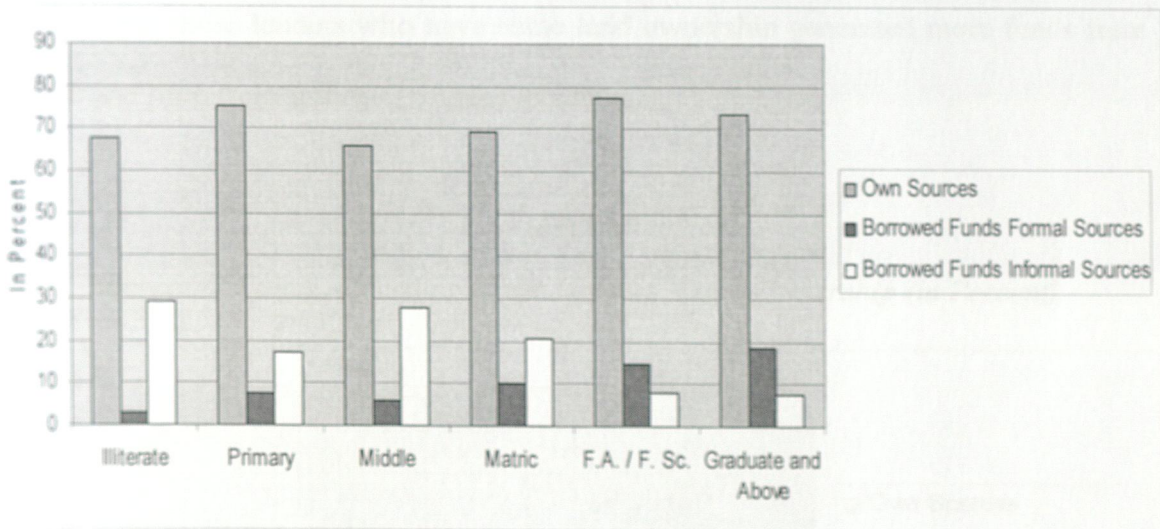
4.3 Lender's Ability to Generate Funds According to Their Education

Figure 4.3 reveals the relationship between educational level of the lenders and their funds generating capabilities. In case of low or no formal education, the funds generated were greatly dependent on personal resources and reliance on formal sources of funds was only 33 percent with illiterate lenders generating 67 percent of their funds from their personal sources. And the loans generated from formal sources, on the other

hand, were a dismal 3 percent. Informal lenders whose qualification was up to graduation accumulated more funds from formal sectors which were about 19 percent and reliance on informal sector was lesser. This trend reveals that generation of funds from informal sector depends on the education of the lenders, as level of formal education increases, funds generation from informal sector decreases and from formal sector increases.

Figure 4.3

Sources of Funds According to the Lenders' Level of Education (in Percent)



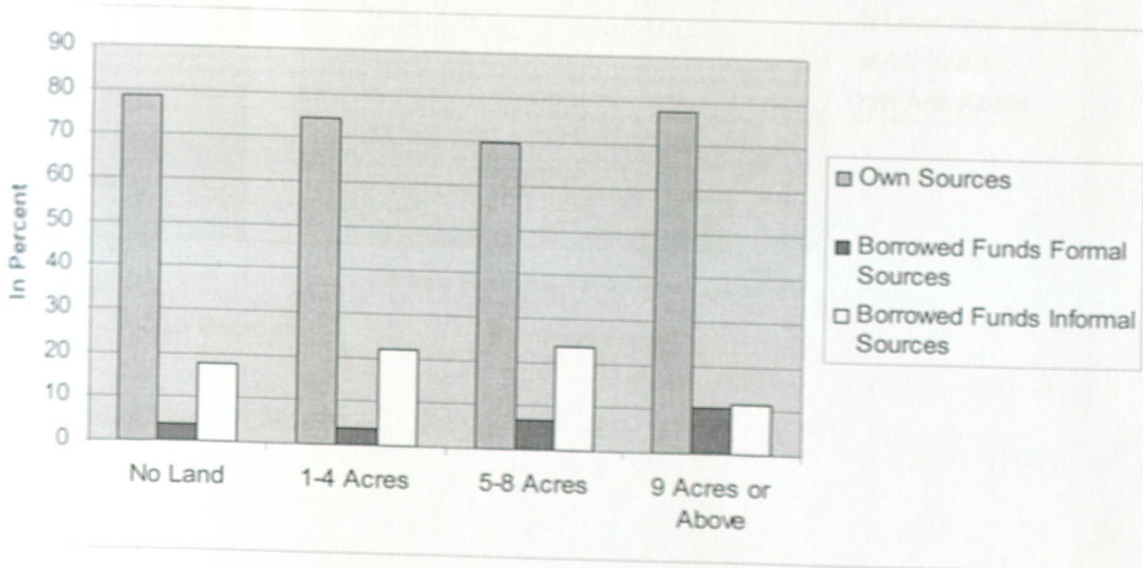
Source: Field Survey (2009)

4.4 Lender's Ability to Generate Funds According to Their Land Ownership

The lenders were characterized on the basis of their land ownership such as: lenders having no land, possessing 1 to 4 acres of land, 5 to 8 acres and above 9 acres of land as shown in Figure 4.4. Informal lenders, who did not have land or having little land, generated funds from either their personal sources or informal sources and relied little on formal sources. The reason may be that they have no security collaterals or lack of knowledge or inability of an illiterate person to convince bank manager which are the basic requirement for taking loan from formal sources (as shown in Figure 4.4). 78 percent of funds were generated from own resources and only 3.9 percent from formal sources. But those lenders who have some land ownership generated more funds from formal and little from informal sources of funds.

Figure 4.4

Sources of Funds According to the Lenders' Land Ownership (in Percent)



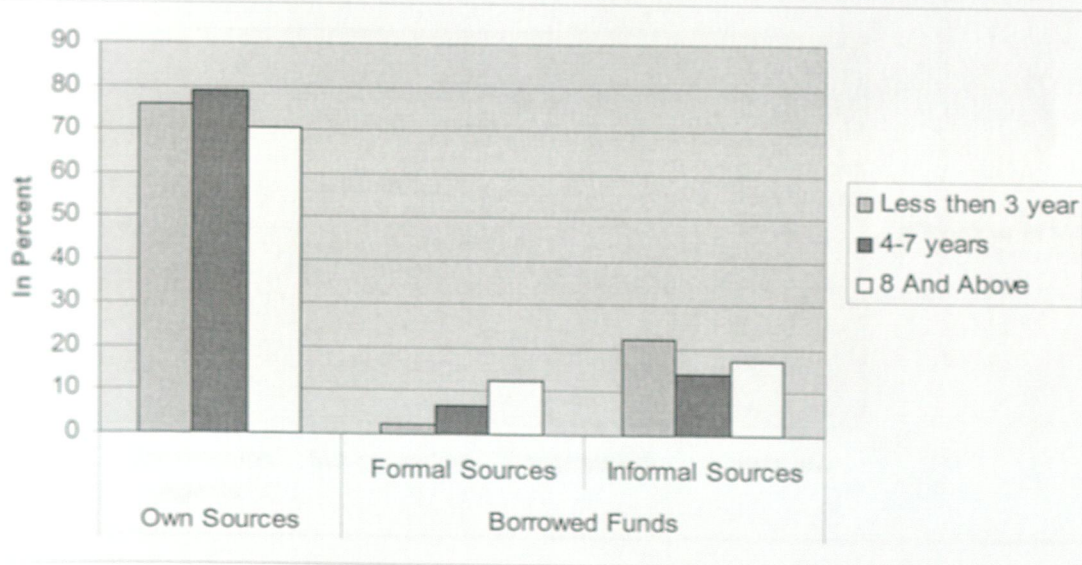
Source: Field Survey (2009)

4.5 Lender's Ability to Generate Funds According to Their Work Experience

Generation of funds from the formal sources depend on the work experience of the informal lenders. Lenders having no experience or less than 3 years experience, in such case, 2 percent of funds were generated from formal and 22 percent from informal sources. On the other hand, those lenders who had 8 or more years of experience generated 12.4 percent from formal and 17 percent from informal sectors as shown below in figure 4.5. The reason may be that experienced lenders had good relations with formal sources of lender.

Figure 4.5

Sources of Funds According to the Lenders' Work Experience (in Percent)



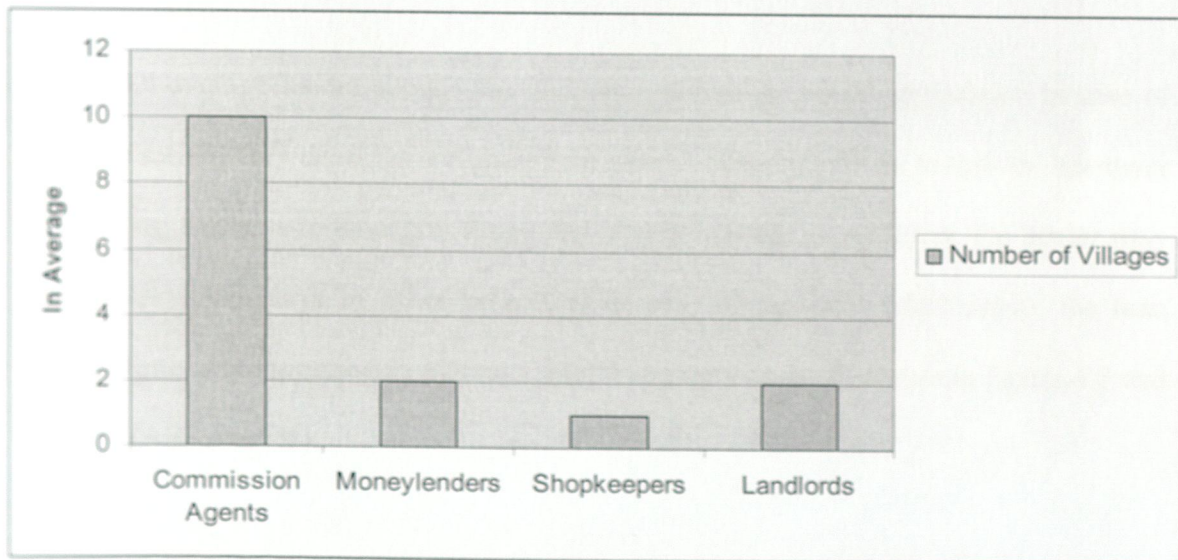
Source: Field Survey (2009)

4.6 The Number of Villages Covered by the Business of Informal Lenders

The business of money lenders' covers, on an average, two villages, while in case of commission agents' business spread over ten village, landlords two and shopkeepers cover only one village. This boundary spanning or coverage of informal lenders depends upon their financial soundness and the ability to service a large number of clients. The number of clients' increase, the risk of default also increase, because it is difficult to track and trace a diversified and large customer base which may also increase transaction costs.

Figure 4.6

The Business of Informal Lenders in Terms of Territories (in Average)



Source: Field Survey (2009)

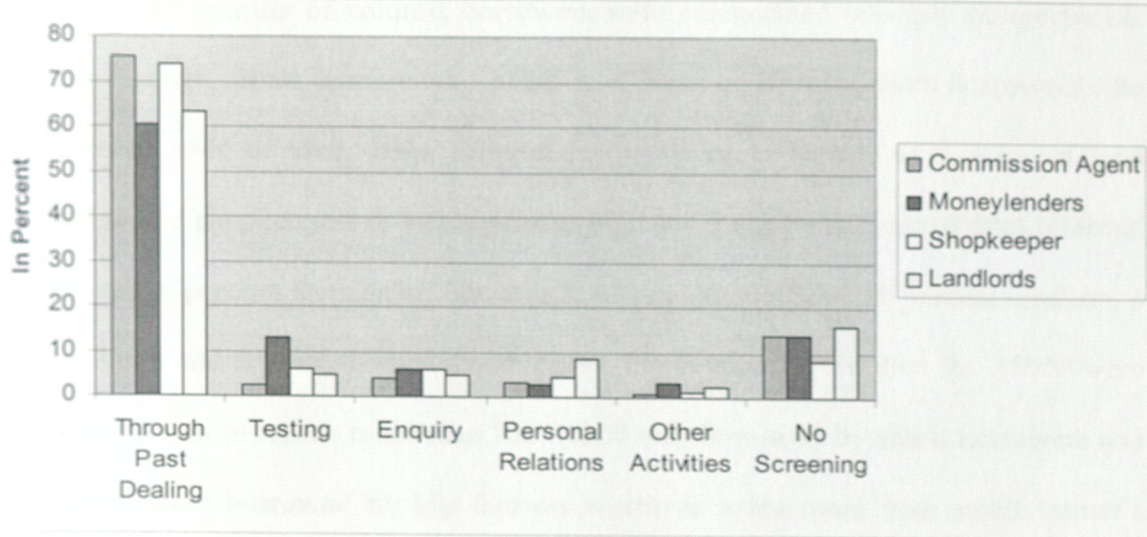
4.7 The Methods Adopted by Informal Lenders for the Assessment of Loan

Informal lenders provide and extend additional loan to borrowers with a positive credit rating from their previous dealings. If applicants are first time asking for loans, the lenders advance either small amount of loan to test them with a trial and may elicit information from their neighbors or from their kiths and kin. The absence of formal screening procedures, more than 60 percent of lenders provided loan on the basis of satisfactory dealing in the past as shown in the figure 4.7. About 13.7 percent of commission agents were conducting no screening of the borrowers, more than 8 percent of lenders provided loan to borrowers on personal relationships and about 16 percent of landlords took no screening measures during the loan advancement.

An average lender spends two days on processing a loan application in case of previous satisfactory dealings and may give a small amount of loan to test the borrower for running finances in emergencies or any urgent matters. In addition, the lender may spend 5 or more days in other activities. In case of personal relationship, the loan process time is compressed to a greater extent in many cases as shown in figure 4.8 and table 19 (Annexure B).

Figure 4.7

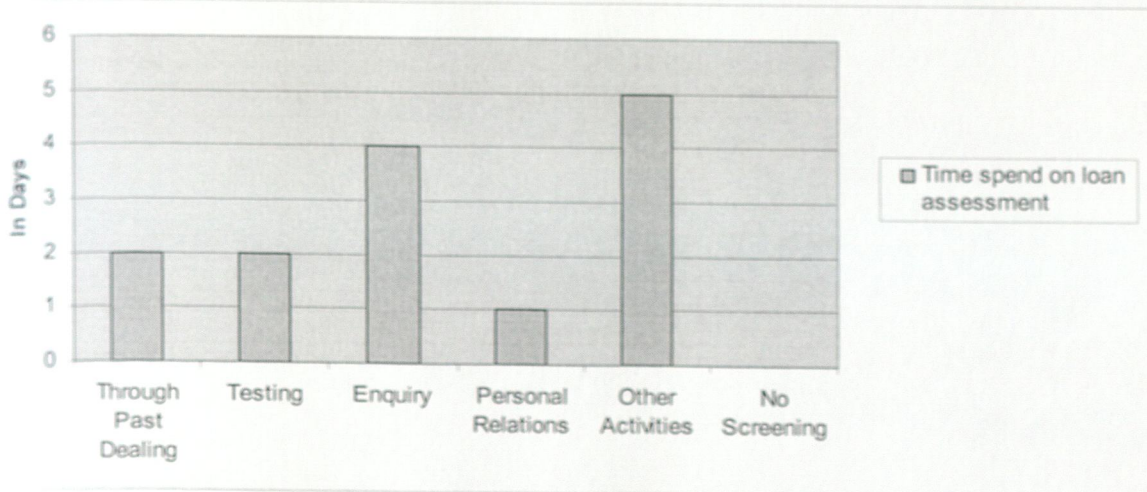
The Methods Adopted by Informal Lenders for the Assessment of Loan (in Percent)



Source: Field Survey (2009)

Figure 4.8

Average Time Spent by Informal Lenders on Loan Assessment (In Days)



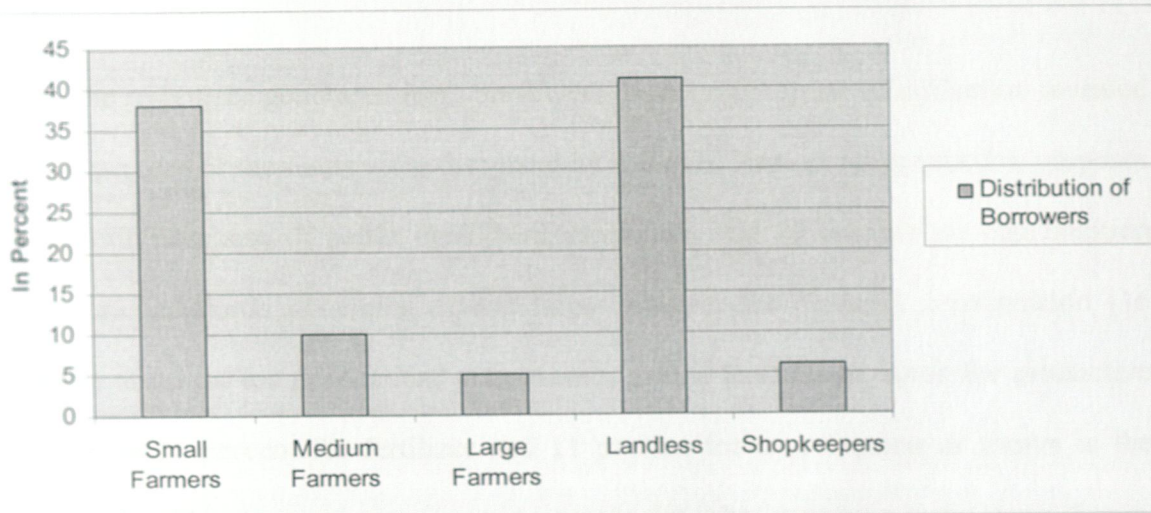
Source: Field Survey (2009)

4.8 Volume of Lending

On the premier of volume, borrowers were categorized into five categories i.e. landless farmers, small farmers who had 1 to 4 acres of land, medium borrowers who had 5 to 8 acres of land, large farmers having 9 or in excess of 9 acres of land ownership and shopkeepers or businessmen. Figure 4.9 shows that out of total informal borrowers, 38 percent were small borrowers, 41 percent landless, 10 percent medium, 5 percent large and 6 percent were shopkeepers. On average, more than Rs. 15000 were the sizes of loan in which more than Rs. 11000 was borrowed by small borrowers and Rs. 25000 were borrowed by big farmers which is twice more than small farmer's borrowed amount. Landless households borrowed Rs. 10500. The share of small borrowers in the total volume of credit was 15 percent while that of landless farmers 13.8 percent and large farmer 33 percent.

Figure 4.9

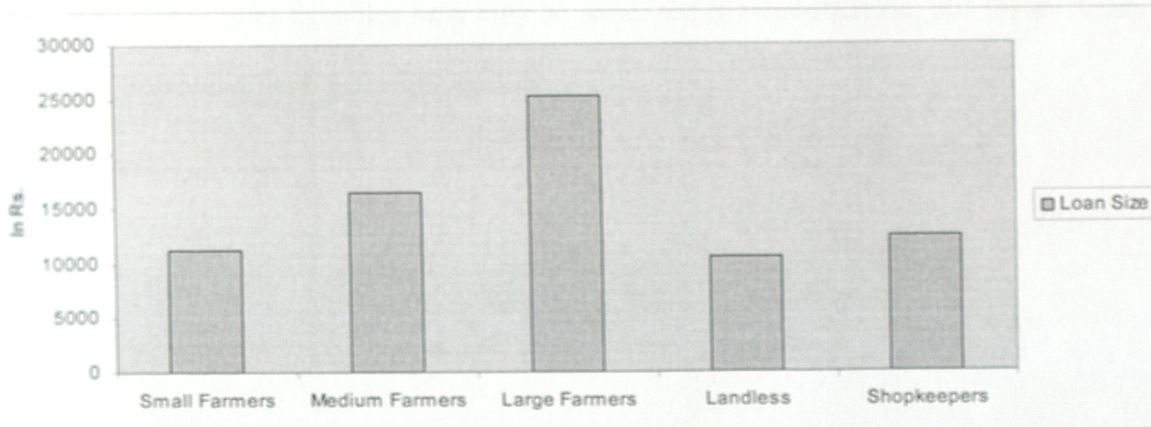
Major Borrower Utilizing Informal Sector



Source: Field Survey (2009)

Figure 4.10

Money Lended According to Different Categories of Borrowers



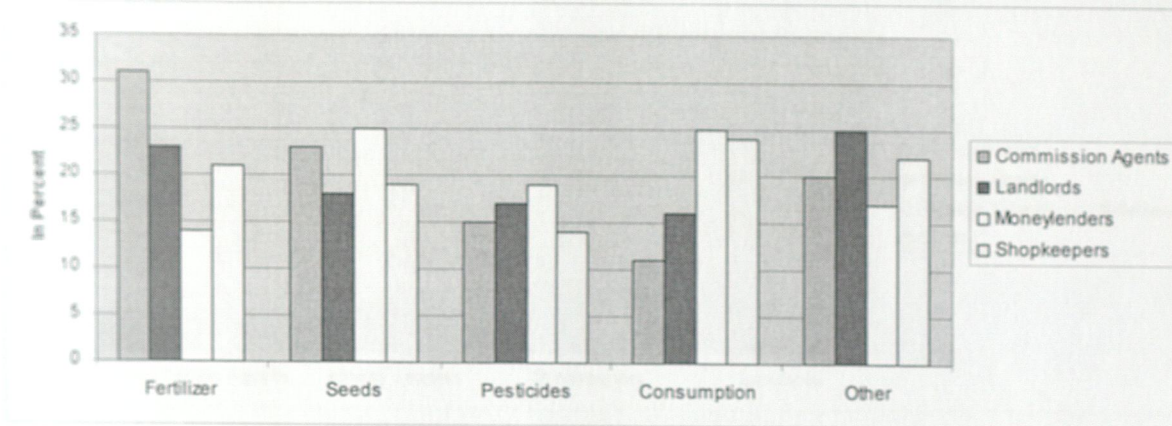
Source: Field Survey (2009)

4.9 Borrowing by Purpose

The responses generated from borrowers regarding purpose of utilization revealed that 80 percent of the loans were dispersed by informal lenders for productive purposes i.e. for the purchase of seeds, fertilizers, chemicals and 19 percent for consumption purposes. Landlords generally extend larger amount for personal consumption (16 percent) and less for production; commission agents lend larger sums for productive purpose as 31 percent for fertilizer and 11 percent for consumption as shown in the figure 4.11. There are no parameters to assess for what purposes loans were drawn. Sometimes, money borrowed for one purpose is utilized for another that warrants instant attention. For instance, in the wake of a natural or man-made disaster, the borrower is dislocated from his village and made to seek refuge in some peaceful area leaving behind all his possession. This creates an interesting scenario where the money generated from donor agencies help may be used, not in rehabilitation, but for servicing the loans borrowed from informal lenders.

Figure 4.11

Borrowing by Purpose (in Percent)



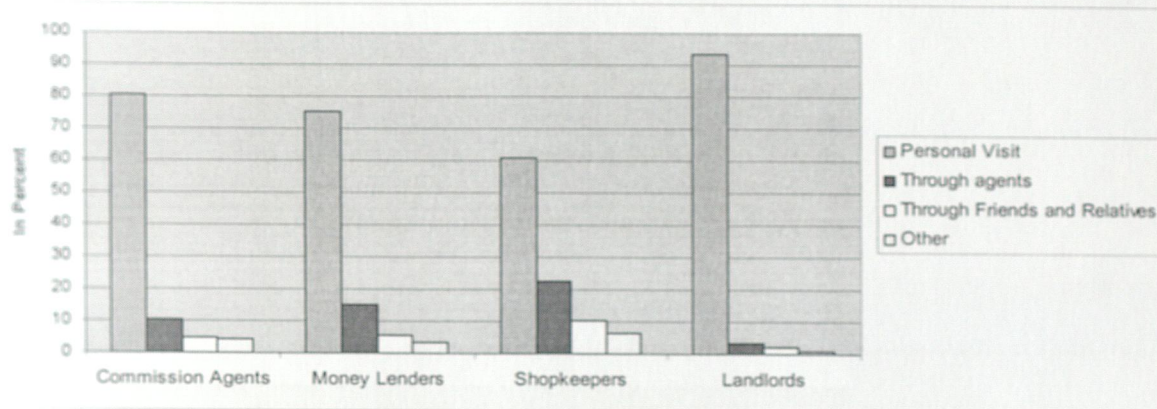
Source: Field Survey (2009)

4.10 Informal Business Creation and Expansion Modalities

Informal lenders often take an expansionist stance by creating new income generation avenues by constantly looking for new prospects. In this regard, the lender may engage in personal visits to farmers, meet them, observe their output, honesty and hard work and on the basis of these factors they may offer credit. Commission agents offer loan to farmers on the requirements that the produce be sold through him or her, making sure that farmers' transactions are occurring under his supervision. Some lenders hire agents in rural areas for collecting information about borrowers' productivity, financial credibility, health, honesty and hard work for lenders. Figure 4.12 reveals that about 80 percent of commission agents extend their business through their personal visits to rural areas, 10 percent through his agents in the villages and 5 percent through friends and colleagues network.

Figure 4.12

Informal Business Creation and Expansion Modalities



Source: Field Survey (2009)

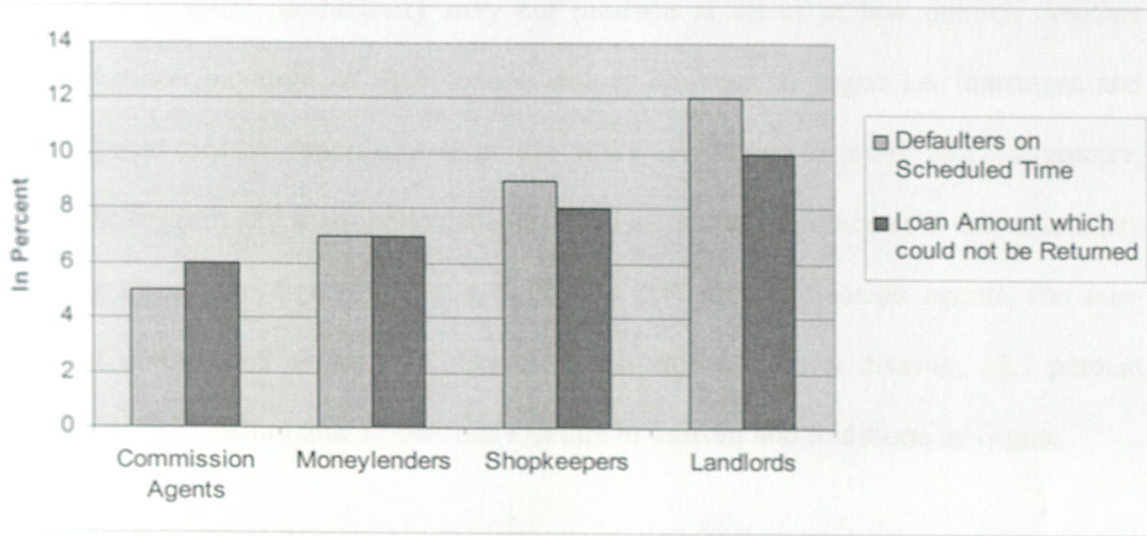
4.11 Defaults in Informal Lending

Although informal lenders were very careful during the time of advancing loans but still there were some borrowers who defaulted and did not return loans on scheduled time. The business of informal lenders depends on the repayment of loans which will be in cash or in kind. Out of the total loan, 5 percent of borrowers of the commission agents were having difficulties in repayment of 6 percent, 12 percent of borrowers of landlords did not return their loans as shown in figure 4.13. Commission agents faced a 5 percent lower rate of default than landlords, shopkeepers and money lenders 9 percent and 7 percent respectively. The reason for this low rate of default for commission agents is that the commission agents, during the time of advancing loans to borrowers, put the condition that if they failed in the repayment of loans then they (the commission agents) will sell all their farm produce to recover the amount of loan. In

this way commission agents, by purchasing the production of borrowers, charge commission. Informal lenders recover more than 90 percent loan.

Figure 4.13

Defaults in Informal Lending (In Percent)



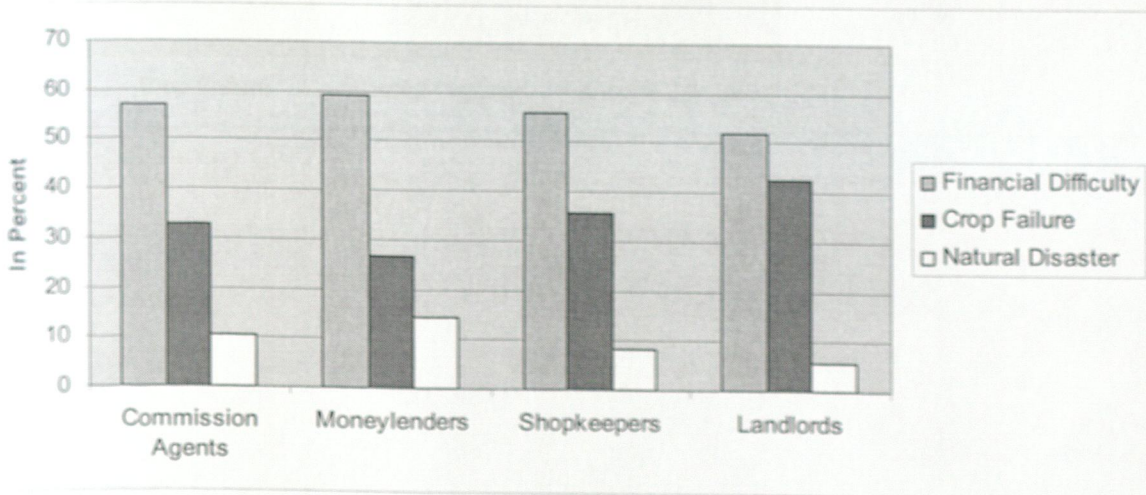
Source: Field Survey (2009)

4.12 Reasons for Non-Payment of Loan

The empirical evidence generated from informal lenders reveals that the borrowers are normally incapacitated in repayment of loan due to harsh weather, customs, natural and man-made disasters. Since Pakistan's economy is an agrarian economy and agriculture mainly depends on weather, due to the uncertainty in weather conditions farmers' productivity may not produce at all or at low quality. Another reason for non payment of their loan is due to customs in vogue i.e. marriages and unanticipated deaths funerals and in the wake of natural disaster like earthquake, floods, heavy rain and man-made disasters such as internal displacement due to military operations etc. The figure below 4.14 shows that for commission agents, the non-payment of loan, on average 10.3 percent, was due to natural disaster, 32.7 percent because of crop failure and 57 percent was due to custom and traditions in vogue.

Figure 4.14

Reasons for Non-Payment of Loan (in Percent)



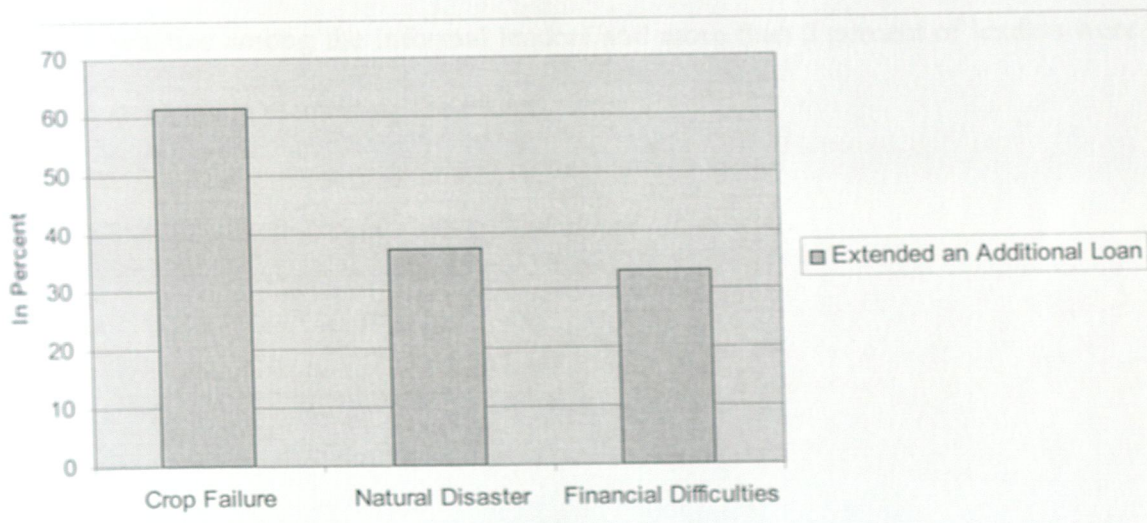
Source: Field Survey (2009)

4.13 Advancing Additional Loans to Defaulters

Informal lenders extended 75 percent of loan to those borrowers who failed in the repayment of loan hoping that they will be able to repay their loan in the next crop. About 61.6 percent of loan extended to those borrowers who were not able to return loan due to crop failure. In this case, the interest rate was considerably higher and the informal lender tried to make all measures to make sure that the loan was returned on time.

Figure 4.15

Advancing an Additional Loan to Defaulters (in Percent)



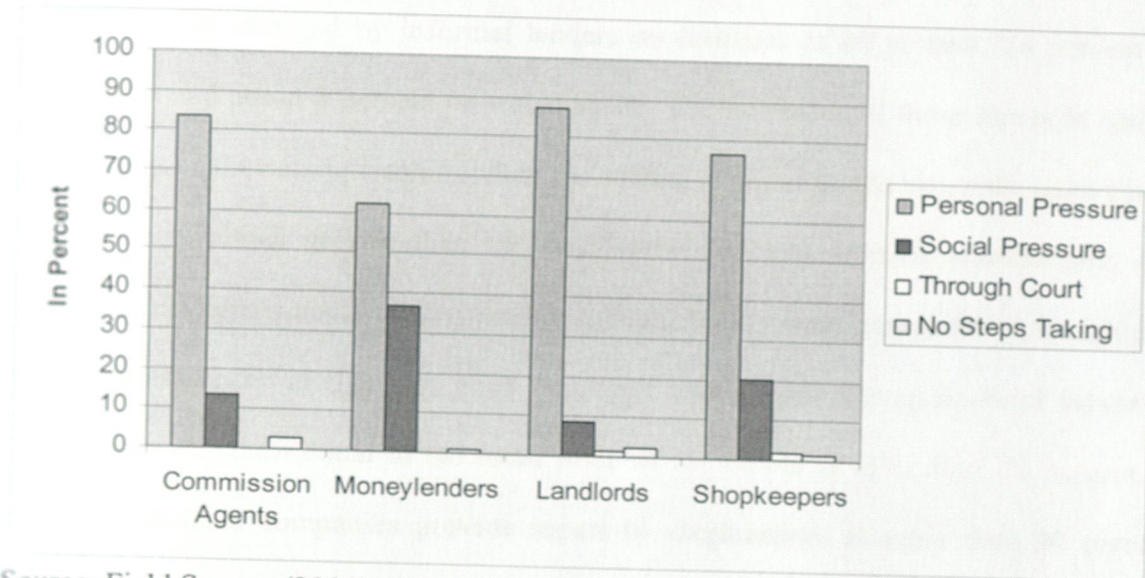
Source: Field Survey (2009)

4.14 Different Steps for Informal Loan Recovery

The default rate in informal lenders were very low especially for commission agents the reason being the fact that the borrowers cannot access to formal sources of loan. Due to future needs, borrowers maintain good relationships with lenders so recovery of loan is smooth. In most of the cases, informal lenders extended supplementary loan to those borrowers who did not repay their loan due to the failure of crop and hoped to recover their loan in next crop. But in case, the borrowers who had defaulted in totality then informal lenders recovered their loans through personal pressure, through courts and social pressure. More than 70 percent of informal lenders recover their loan through personal pressure. Recovery of loan through court is not a common practice among the informal lenders and more than 2 percent of lenders were taken no steps while recovering their loan.

Figure 4.16

Different Steps for Informal Loan Recovery (in Percent)



Source: Field Survey (2009)

4.15 Markup and Interest Charged on Loans

One of the questions asked from the informal lenders was to provide information regarding purchase and sale price both in cash and on credit of the agricultural inputs like seeds, fertilizers and pesticides. In this way the value of markup will be calculated by differentiating the sale price and credit price. In the questionnaire, there were no mentions or questions asked directly from the informal lenders about markup and interest rate because all the lenders and borrowers were Muslims. In Islam the practice of lending on the basis of interest is prohibited and lenders would become emotional if questioned about the charging of interest on loan, but in reality informal lenders are

involved in the practice of lending on the basis of interest, lenders consider it profit (munafa) not interest.

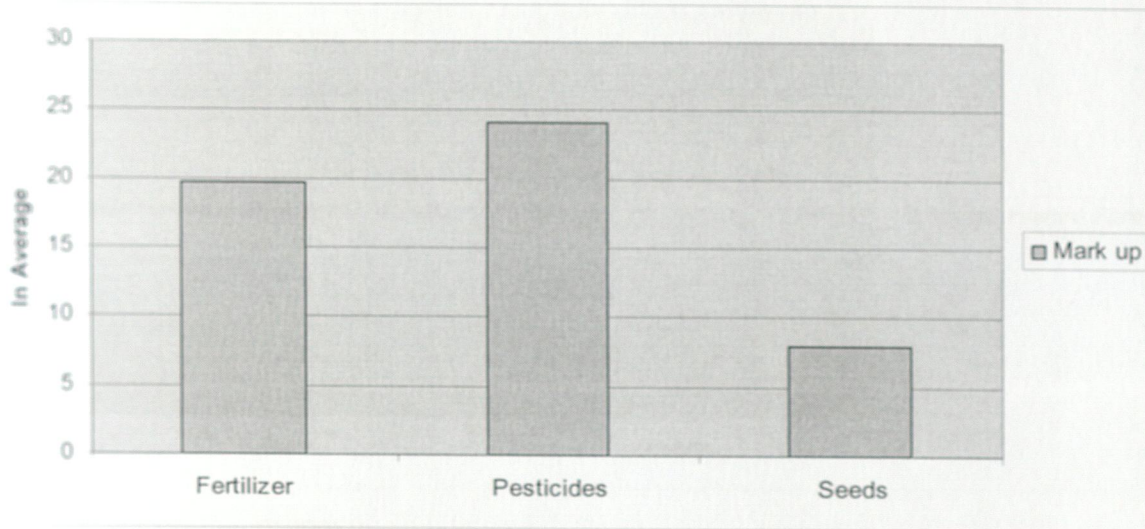
Mark-up charged by informal lenders on fertilizer is 20 percent, 24 percent on pesticides and about 8 percent on tested seeds. The sale price of these inputs in cash is equivalent to the retail price but when the selling of these inputs on credit takes place, the price becomes greater than the retail price. Money lenders, shopkeepers, and commission agents usually purchase agricultural inputs from companies at a high rate of commission or at discount price. Informal lenders provide agricultural inputs to borrowers on credit equal to the retail price of the inputs at more than 20 percent of markup because companies provide inputs to shopkeepers at more than 20 percent discount. In some circumstances a retailer, dealing in fertilizers, seeds and pesticides, may be involved in informal credit without even knowing it himself as it is common place in small villages for farmers to buy agricultural commodities at inflated prices.

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Figure 4.17

Mark up Charged by Informal Lenders on Agricultural Inputs (in Average)

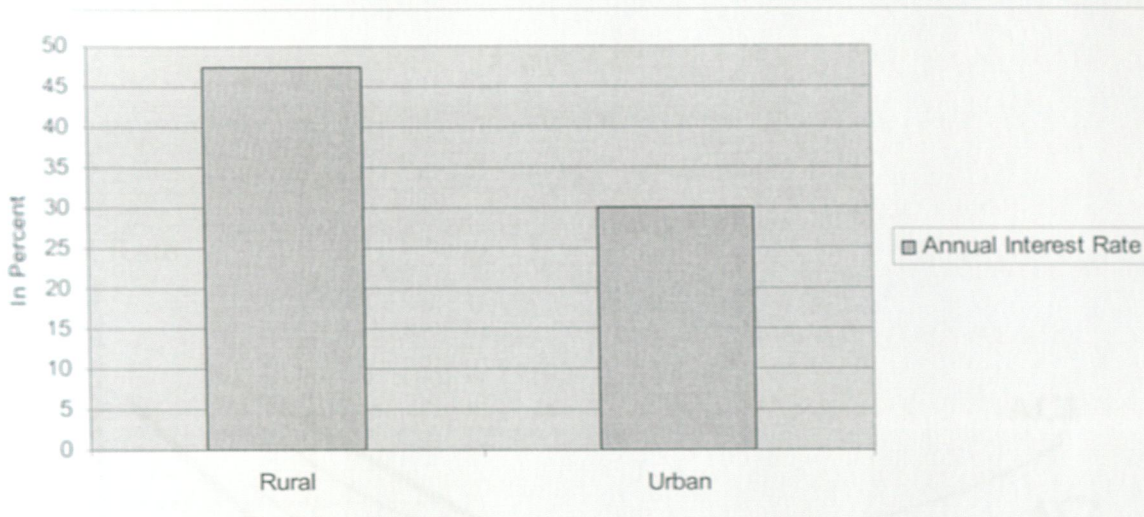


Source: Field Survey (2009)

For one or less than one year the informal lenders charged in the range of 40 to 55 percent of interest and lenders often extended credit at 10 to 13 percent of interest to landless households. The interest rate in rural areas is high as compared to urban areas. The reason of this is that in urban areas there were more opportunities for taking loans from formal sector due to the availability of bank branches, as shown in the figure 4.18.

Figure 4.18

Interest Rate Charged on Loan in Rural and Urban Areas (In Percent)



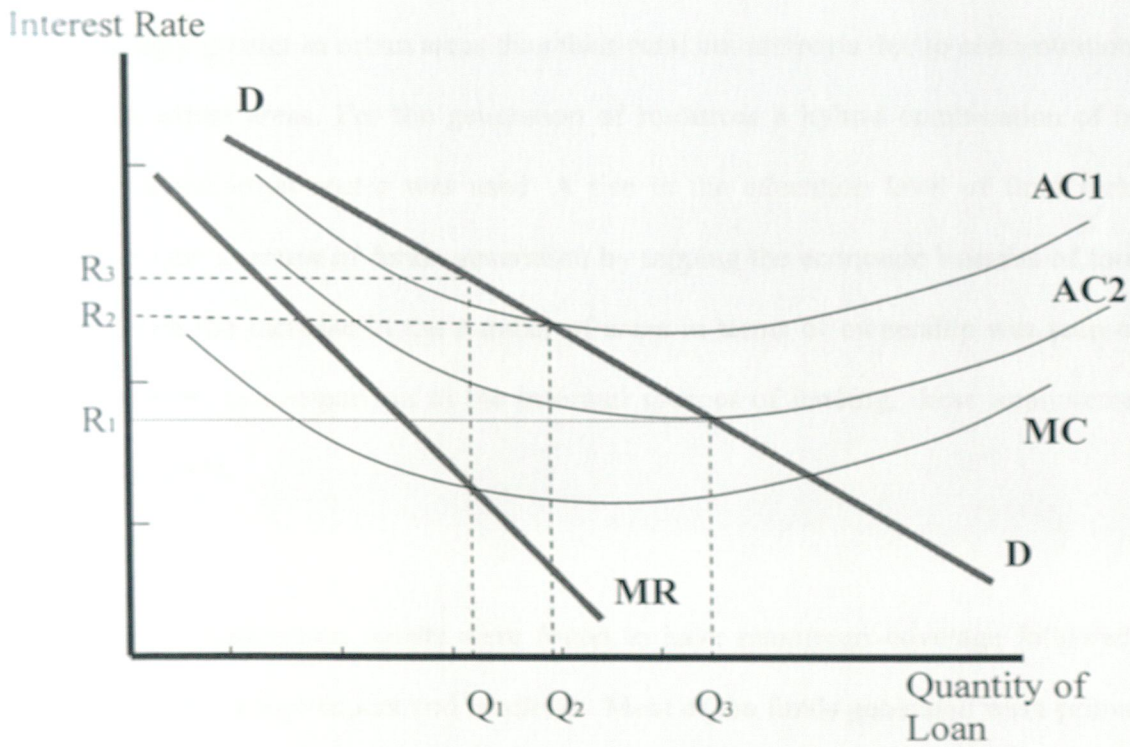
Source: Field Survey (2009)

4.16 Interest Rate and Borrowers' Risk

In figure 4.19, interest rate is measured on y-axis (vertical) and quantity of loan on x-axis (horizontal axis). DD reflects the demand curve, MR is Marginal Revenue, AC1 is the Average Cost of borrower 1 and AC2 is the Average Cost of borrower 2, where borrower 1 is more risky than borrower 2. In the informal credit market each of the informal lenders was considered as monopolistic competitor. The DD curve is relatively elastic curve. The quantity of loan depends upon interest rate as loan quantity and interest rate is inversely related. As shown in figure 4.19, interest rate and quantity of loan depend on the risk of the borrower. Informal lenders advancing loan in less

quantity Q_2 at a high interest rate R_2 as borrower 1 is a risky and borrower 2 is less risky. Informal lenders were advancing more loan as Q_3 at a low interest rate of R_1 .

Figure 4.19
Interest Rate and Borrowers' Risk



4.17 Conclusion

To sum up, the crux of the discussion encompasses key variables of informal credit such as how informal lenders generate funds, from which sources, and the ability to generate funds in relation to their education, land ownership, work experience and market coverage. The analysis indicates that funds generated by the informal lenders are strikingly greater in urban areas than their rural counterparts due to concentration of wealth in urban areas. For the generation of resources a hybrid combination of both formal and informal sector was used. A rise in the education level of fund seekers opens up new avenues of funds generation by tapping the economic benefits of formal sector. With the increase in the number of acres in terms of ownership was seen on a rise, however, in comparison to the informal sources of lending, these improvements were negligible.

The commission agents were found to have maximum coverage followed by money lenders, shopkeepers and landlords. Most of the funds generated were primarily for purchasing fertilizers, pesticides and seeds, with a dismal portion used for personal consumption purposes. Business expansion of the informal lenders was mainly through personal visits, agents, kiths and kin respectively. The default rate in informal sector was low; however, mostly the default was termed as payment beyond allotted time and occasionally the borrowers were unable to return the amount borrowed. Reasons for nonpayment included: borrower's dire financial circumstances, crop failure and natural

calamities. The interest rate in the rural areas was comparatively higher due to scarcity of funds generation avenues as compared to the urban areas.

DATA ANALYSIS

The study identifies the average amount of loan disbursed by the borrower's financial institutions, present in lending and receiving of loan and gifts and the amount of the loan. The study of the financial data in the rural areas indicates that the rural areas are facing lower formal sector and increasing rate of financial inclusion. Data were analyzed in two stages from the year 2010-11 and for results are shown in the form of figure.

Fig. 1: Loans and Gifts by Household

The figure shows that the average amount of loan disbursed by the borrower's financial institutions, present in lending and receiving of loan and gifts and the amount of the loan. The study of the financial data in the rural areas indicates that the rural areas are facing lower formal sector and increasing rate of financial inclusion. Data were analyzed in two stages from the year 2010-11 and for results are shown in the form of figure.

CHAPTER 5

DATA ANALYSIS II

This chapter describes the average amount of loan demanded by the borrower's location wise, borrowers' interest in lending and receiving of loan and gifts and characteristics of the borrowers. Share of the informal loan in the total loan transaction, number of days spent in taking loan from formal sector and transaction cost of formal sources of loan were also discussed. Data were analyzed in this chapter from questionnaire 2 (Annexure A) and the results are shown in the form of tables.

5.1 Receiving of Loans and Gifts by Households

The empirical data generated from 500 households/ borrowers interviewed in the informal sector reveals that informal credit is more appealing as more than 80 percent of households were taking loan and gifts from informal sectors and less than 20 percent from formal sources of credit during the year 2009. Similarly, the households received an average, of Rs. 75000 from informal and, an average of Rs. 18000 from formal sources of loan. It means that total households receiving both loans and gifts from informal were 83 percent and loan taking from formal sector was only 17 percent as shown in figure 5.1 and 5.2.

CHAPTER 5

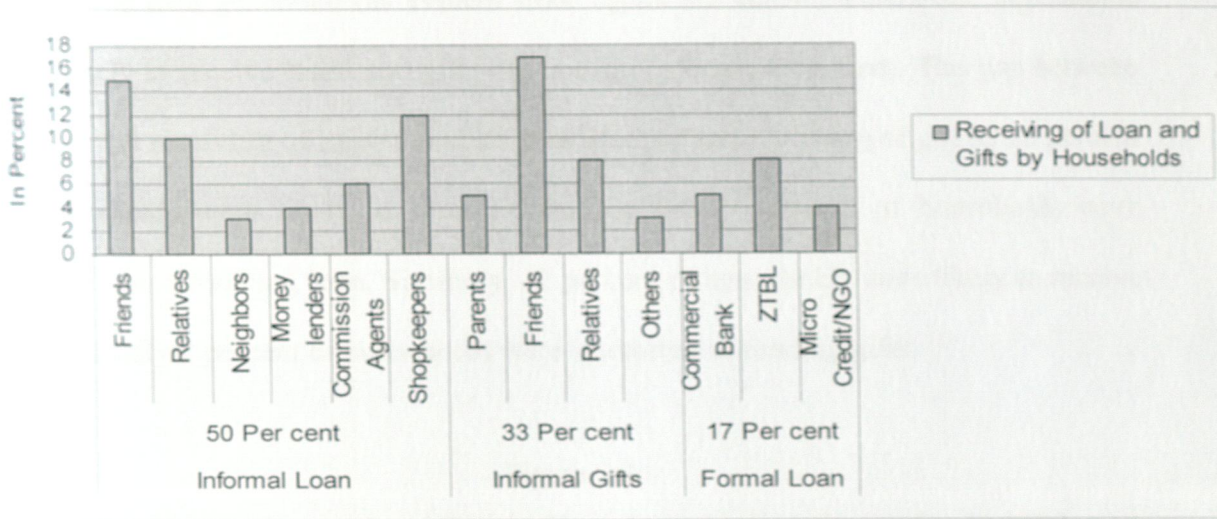
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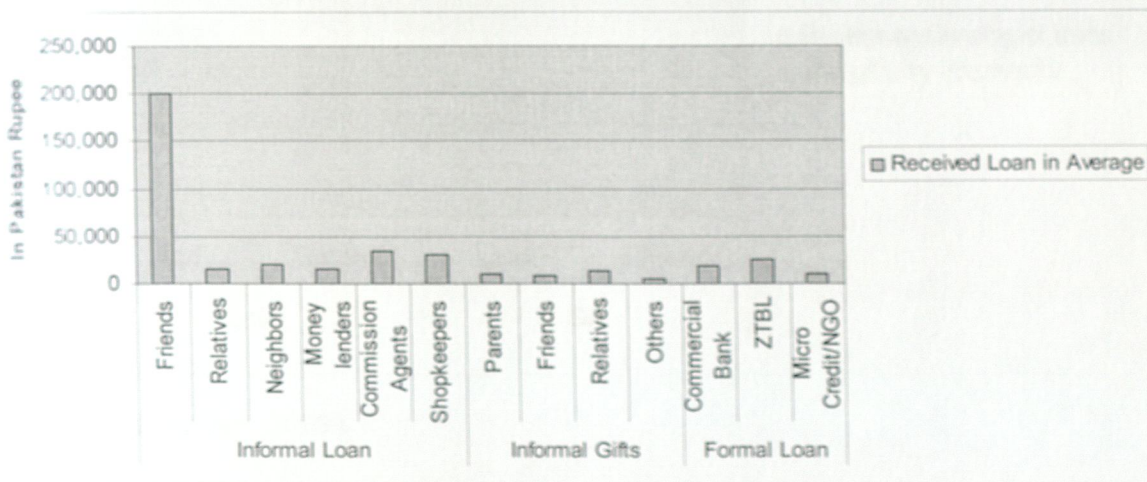
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Figure 5.1
Loans and Gifts Received by Households (in Percent)



Source: Field Survey (2009)

Figure 5.2
Loans and Gifts Received by Households (in Rs.)



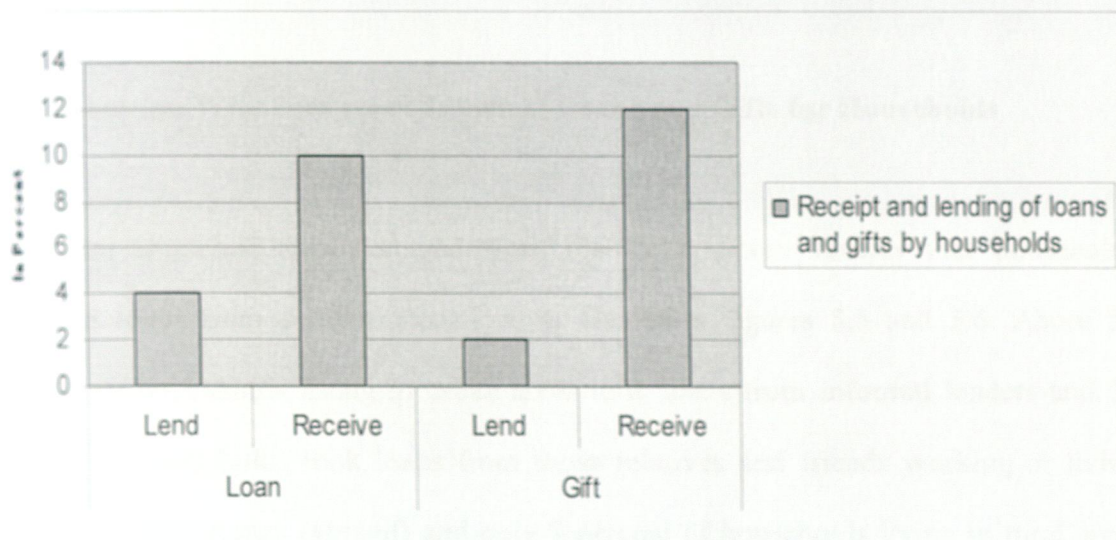
Source: Field Survey (2009)

5.2 Households Temptation to Receipt and Lending of Loans and Gifts

The data generated (as evident from figure 5.3 below) shows that households were likely to receive loans and gifts but not likely to advance them. The gap between lending and receiving of loan is smaller than sending and receiving of gift as 10 percent of households were likely to receive loan and only 4 percent of households were entrusting in advancing loan. Similarly, 12 percent of households were likely to receive gifts and only 2 percent of households were interested in sending gifts.

Figure 5.3

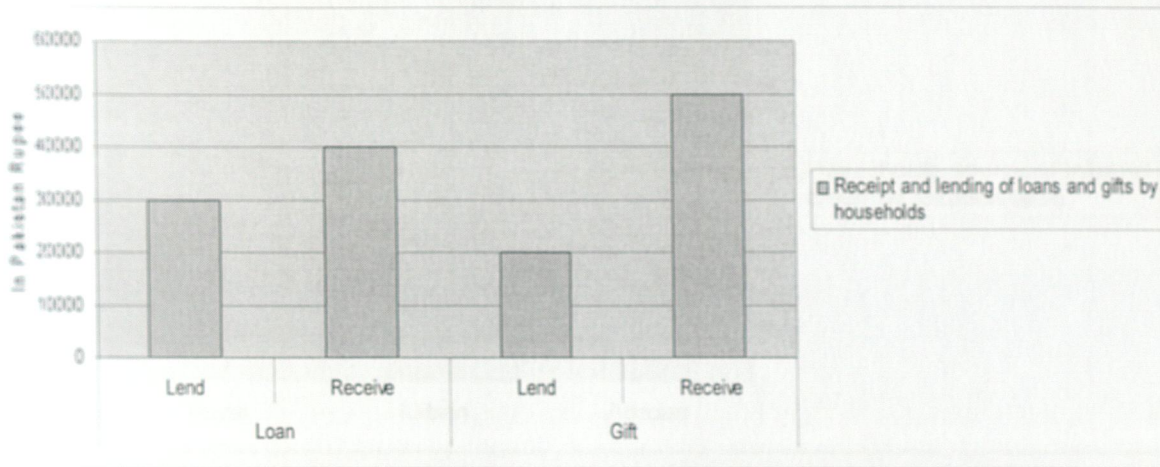
*Gifts and Loans Received and Sent by Households in the Informal Credit Markets
(In Percent)*



Source: Field Survey (2009)

Figure 5.4

Gifts and Loans Received and Sent by Households in the Informal Credit Markets (In Rs.)



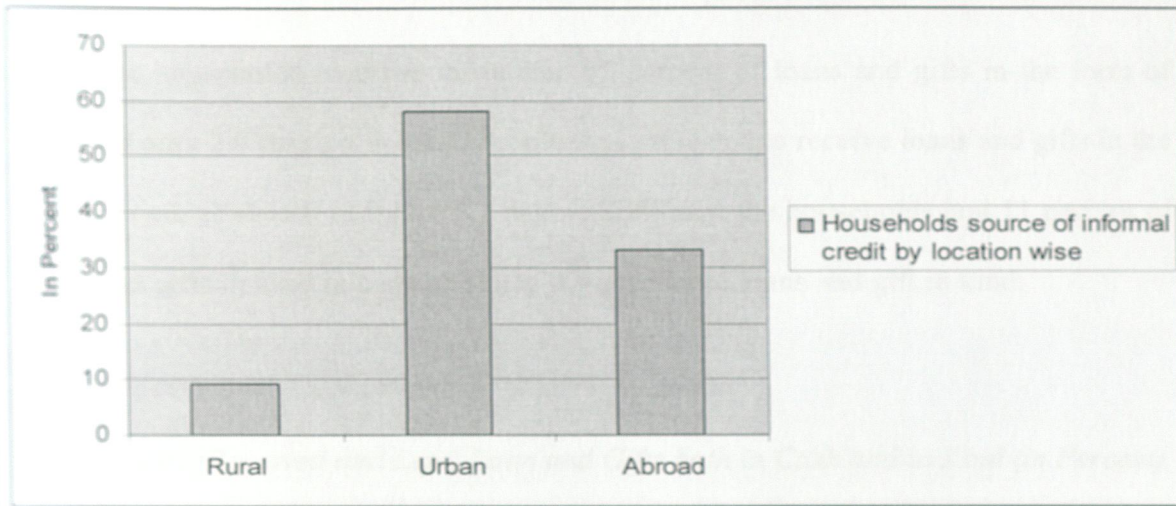
Source: Field Survey (2009)

5.3 Location Wise Sources of Informal Loans and Gifts for Households

The empirical data gathered from the field survey reveals that households received loans from different locations as shown in figures 5.5 and 5.6. About 58 percent of households living in urban areas took loans from informal lenders and 33 percent of households took loans from those relatives and friends working or living outside of the country (abroad) and only 9 percent of households living in rural areas took loans and gifts from money lenders.

Figure 5.5

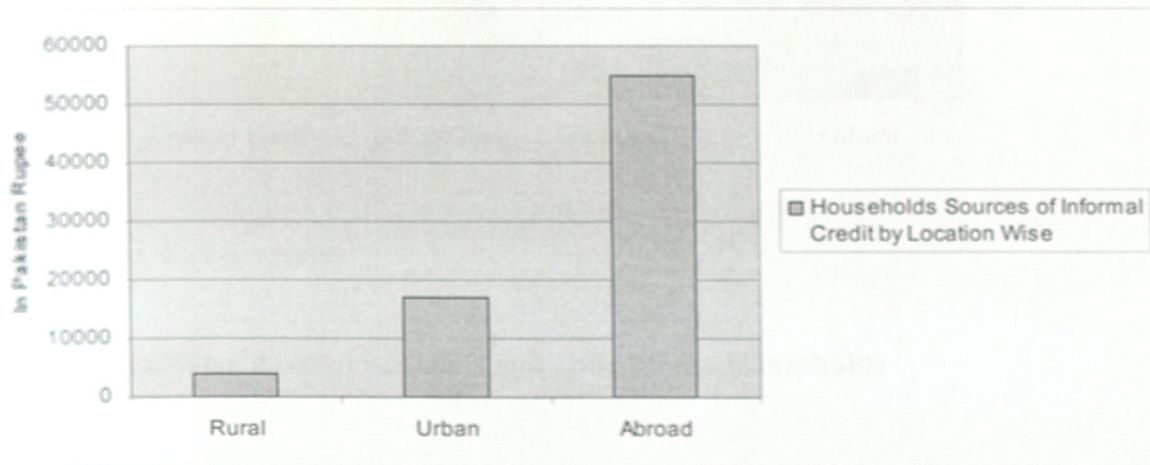
Location Wise Sources of Informal Loans and Gifts for Households (in Percent)



Source: Field Survey (2009)

Figure 5.6

Location Wise Sources of Informal Loans and Gifts for Households (in Rs.)



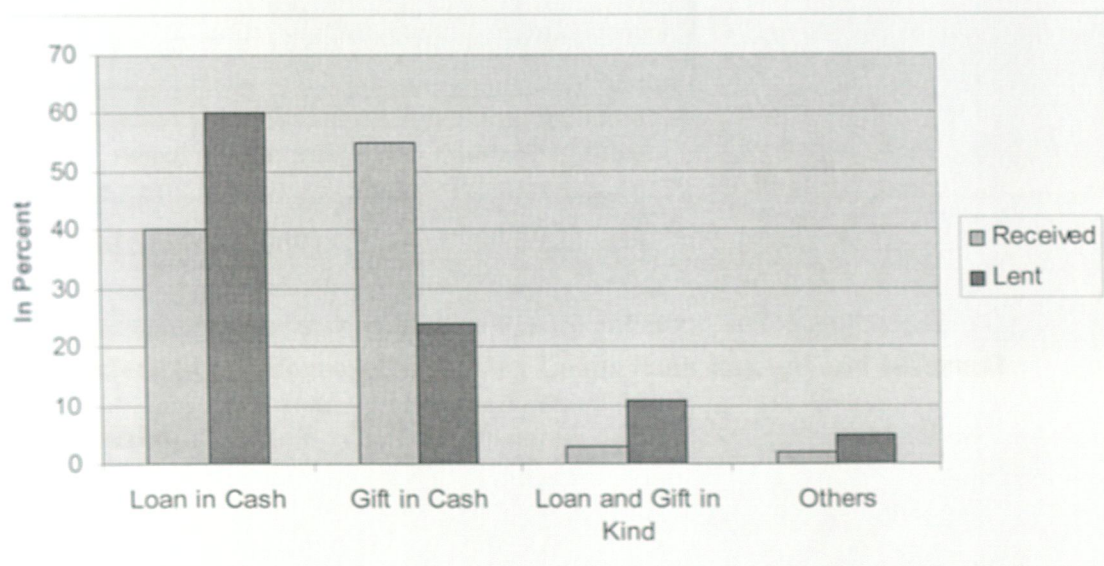
Source: Field Survey (2009)

5.4 Informal Gifts and Loan Sent and Received by the Households in Cash and in Kind

The households received more than 90 percent of loans and gifts in the form of cash and only 2.9 percent in kind. People thus preferred to receive loans and gifts in the form of cash as shown in figure 5.7 below. Similarly, the households lent 11 percent of loans and gifts in kind in comparison to 2.9 percent of loans and gift in kind.

Figure 5.7

Households (Received and Lent) Loan and Gifts both in Cash and in Kind (in Percent)



Source: Field Survey (2009)

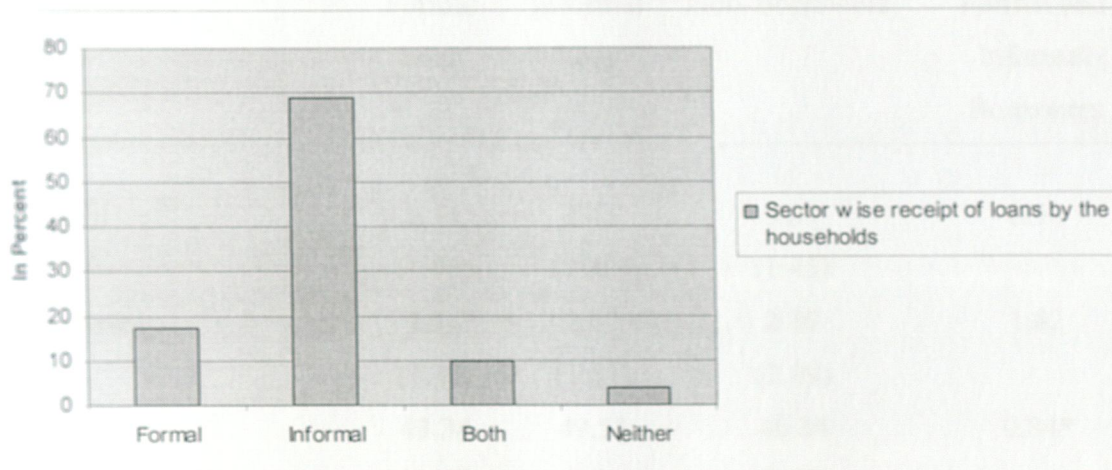
5.5 Sector-Wise Receipt of Loans and Gifts by the Households

About 14 percent of the households neither received loans from formal nor from informal sector as shown in the figure 5.8. Upto 66 percent of households took loans from informal sector because of its being readily available, nearness and requiring no

collateral as figure 5.6 shows that 70 percent of lenders were giving loan without any collateral. Only 12 percent of households were the customers of formal sector on account of their being educated and knowing the procedure of banking transaction.

Figure 5.8

Informal Gifts and Loans Sent and Received by the Household (in Percent)



Source: Field Survey (2009)

5.6 Characteristics of Borrowers Seeking Loans from Formal and Informal

Sources

Taking loans from informal sector was mainly due to the lack of education, landlessness or shrinkage of farm size, age, marital status, family size and income levels of borrowers. Table 5.1 indicates that borrowers having some education were drawing loans from formal sector and illiterate borrowers were clients of the informal lenders. Similarly, family size also influenced the borrowers' decision making of loan from formal or informal sector. In case the family size, in terms of households, is small,

then their family is inclined towards formal sources but when the family size, in terms of headcount is large, then the probability of resorting to informal sector increases.

Table 5.1
Characteristics of Borrowers (Formal and Informal) Lending Sectors

Households	Formal Loan	Informal Loan	Non-Borrowers	Formal and Informal Borrowers
Married	2.34 (1.98)	2.45 (2.30)	3.89 (1.45)	0.58
Unmarried	2.54 (1.45)	2.67 (1.54)	2.89 (2.09)	1.82
Age	43.34 (9.03)	49.53 (7.98)	46.34 (8.34)	0.84*
Total Income (Average)	20152 (15546)	8775 (6635)	12520 (6175)	-0.23
Education	58	38	15	3.99
Farm Size	5.83 (2.9)	4.98 (3.02)	5.34 (3.38)	-2.34
Family Size	2.34 (6.34)	9.45 (4.45)	9.93 (4.48)	-0.58

Source: Field Survey (2009)

Chi-Square tests have been used for the last column.

* Significant at 5 percent level.

Figure in the Parenthesis are Standard Deviation.

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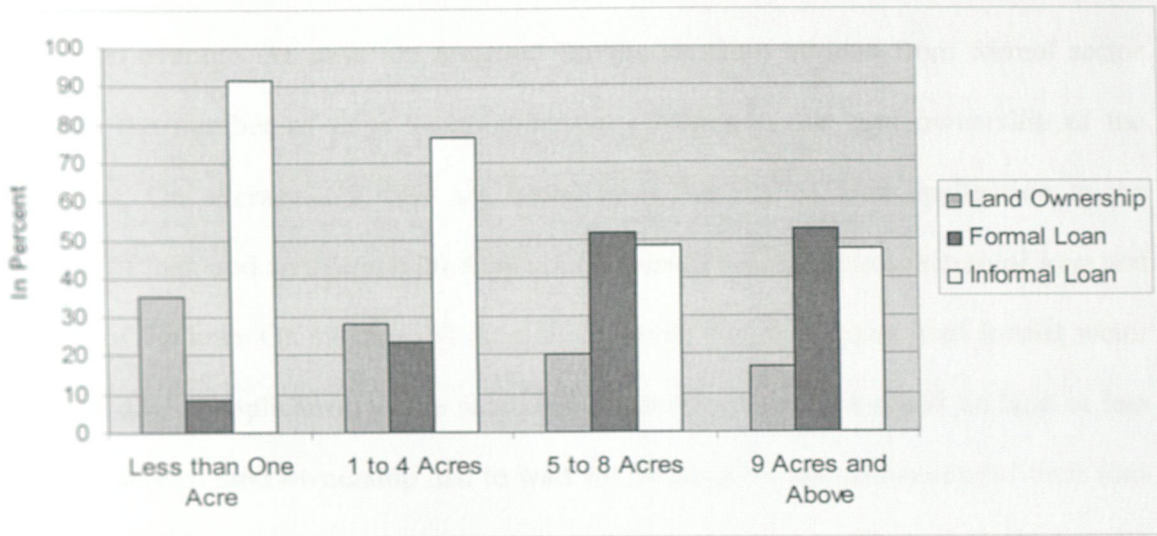
Figure in the Parenthesis are Standard Deviation.

5.7 Share of the Informal Loans in Total Borrowings

The share of the informal loans in the total amount borrowed by the households were recorded in figure 5.9 which indicates that 35 percent of the borrowers were in possession of less or equal to one acre land and 17 percent were having 9 acres of land or above. Households, having one or less than an acre of land ownership, took 4 percent of formal loans and the remaining 96 percent were drawn from informal sector. Households were having 1 to 4 acres of land, 21 percent of loan from formal source and 79 percent from informal sources. Households, having no or less than one acre of land ownership, took upto 8.54 percent of formal loans and 91 percent of informal loan out of the total amount borrowed. An increase in the size land ownership increases demand for formal loan and decreases demand for informal lending. Figure 5.9 indicates that as land ownership increased from 1-4 to 5-8 acres, demand for informal loan decreased from 76 to 48 percent and formal loan increased from 23 to 51 percent.

Figure 5.9

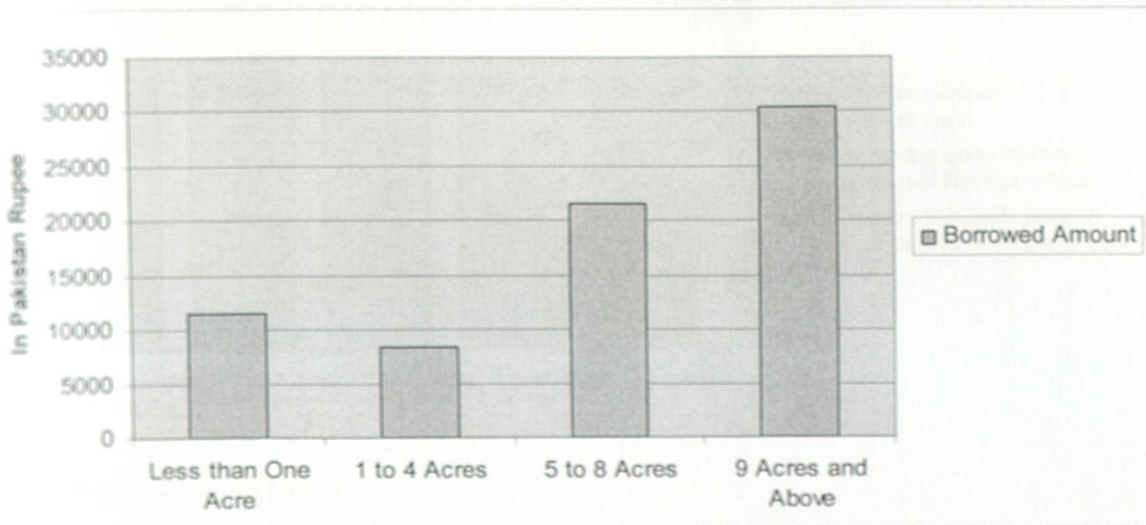
Share of the Informal Loans in Total Borrowings (In Percent)



Source: Field Survey (2009)

Figure 5.10

Share of the Informal Loans in Total Borrowings in Rs.



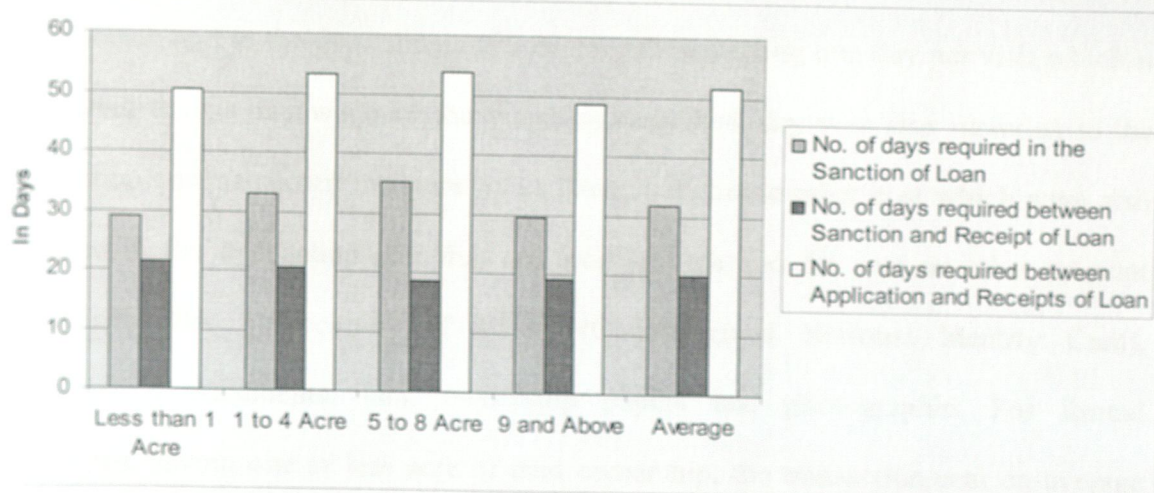
Source: Field Survey (2009)

5.8 Number of Days and Transaction Cost in Formal Credit

On average, 31 days are required for the sanction of loan from formal sector although the number of days varies with the changes in the land ownership of the borrowers. On average, 29 days are taken from the day of loan application to the sanction of loan and an average 20 days are consumed between the sanction of loan and receipts of the loan. On average, 51 days are required for taking loan from formal sector from the day of application to the receipts of loan. Borrowers who had no land or less than one acre of land ownership had to wait for 50 days for the assessment of their loan application in formal sector. Likewise, about 48 days are taken for the scrutiny of loan application of those borrowers who have 9 or more than 9 acres of land ownership.

Figure 5.11

Number of Days and Transaction Cost Incurred in the Formal Lending



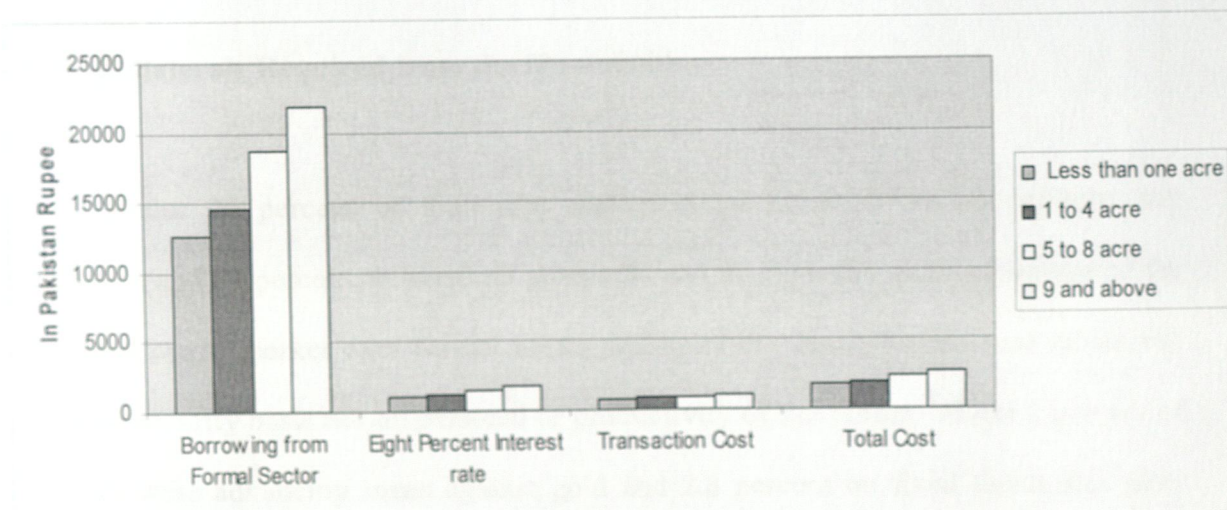
Source: Field Survey (2009)

During the year 2009, the formal sector charged nominal interest at the rate of 8 percent which varied from bank to bank and amount to amount and for different duration of loan but it is assumed that the interest rate has been kept fixed as 8 percent for all the borrowers and also irrespective of their land ownership. Figure 5.12 indicates an average amount of loan taken from the formal sector at the rate of 8 percent on the respective loan. Borrowers having no or less than one acre of land ownership, taking loan from formal sector was Rs. 12580 and were to pay Rs. 1006.8 interest at the rate of 8 percent. Figure 5.12 also indicates that formal borrowers face transaction cost which is to be low if the bank branch is situated in village and high if the bank branch was in the city or in town. It is very interesting that there is no bank branch in the selected 7 union council from rural areas of district Peshawar. The borrowers, taking formal loans, were required to visit city or town. The transaction cost includes first, the transportation cost of the borrowers at least 4 or 5 visits and in some cases more than 5 visits to the bank branch and to the department of land revenue spending one day per visit which is equivalent to one day wage so the wage on each visit day was also included in the transaction cost as shown in figure 5.12. There were some other cost which were also included in the transaction cost that are food and tea and the cost on other relevant documents like photocopies of CNIC (Computerized National Identity Card), qualification documents, land ownership papers and photographic. For formal borrowers, having one or less acre of land ownership, the transaction cost on average was Rs. 752 and for those having 1 to 4 acres of land ownership, the average transaction cost was Rs. 836. Thus, the transaction cost increases as the land ownership increases. On average, the total cost on formal loan which includes the interest and

transaction cost for farmers who have one or less than one acres of land ownership was Rs. 1758 for taking Rs. 12580 amount of loan. For farmers, having one to four acres of land ownership, Rs. 2008 was the total cost for seeking a loan of Rs. 14650. Transaction and total cost decreases with the increase of land ownership as shown in the figure 5.12.

Figure 5.12

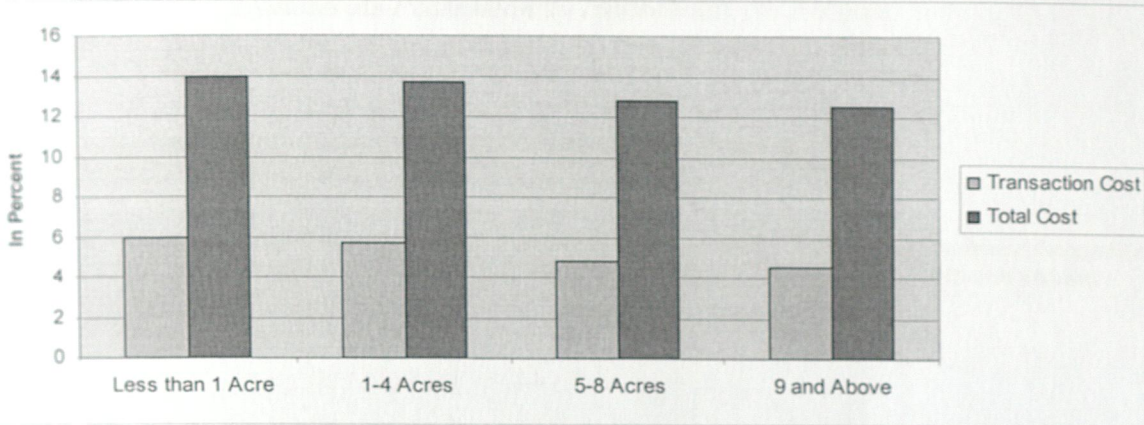
Transaction Cost in the Formal Sector of Credit (in Rs.)



Source: Field Survey (2009)

Figure 5.13

Transaction and Total Cost in the Formal Sources of Credit (in Percent)



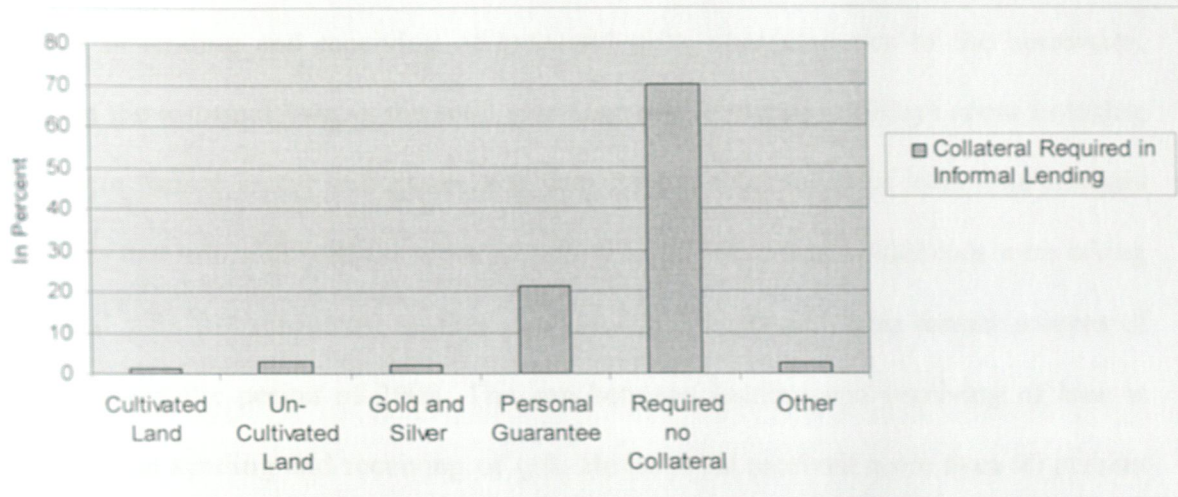
Source: Field Survey (2009)

5.9 Collaterals Required from the Households

About 70 percent of loan was disbursed by informal lenders without any collateral and 21 percent on personal guarantee and this was the main advantage of the informal credit market over formal sector where as the formal sector was advancing loan on security basis not on personal or productivity of the farmer. About 2 percent of lenders were advancing loans against gold and 2.8 percent on fixed assets like plot, house and building.

Figure 5.14

Collaterals Possession by Households (in Percent)



Source: Field Survey (2009)

5.10 Conclusion

To sum up, the crux of the discussion encompasses key variables of borrowers such as average amount of loan demanded by the borrowers location wise, borrowers' interest in lending and receiving of loan and gifts, characteristics of the borrowers, share of the informal loan in the total loan transaction, number of days spent in taking loan from formal sector and transaction cost for formal sources of loan. The analysis indicates that informal credit is more appealing as 80 percent of households were taking loan and gifts from informal sectors and less than 20 percent from formal sources of credit during the period of 2009. The gap between lending and receiving of loan is smaller than sending and receiving of gift. Households received more than 90 percent of loan and gifts in the form of cash and only 2.9 percent in kind.

Households having one or less acre of land ownership took 4 percent of formal loan and the remaining 96 percent were drawn from informal sector. Households who were having 1 to 4 acres of land drawn 21 percent of formal loan and 79 percent from informal sources. Households having no or less than one acre of land ownership took up to 8.54 percent of formal loan and 91 percent informal loan out of total borrowed amount. Land ownership increased demand for formal loan and decreased demand for informal lending. On the average, 51 days were required for taking loan from formal sector from the day of application to the receipt of loan.

Chapter 6

Regression Analysis

6.1 Introduction

For the estimation of dummy dependent variables, four most commonly used models are Linear Probability Model (LPM), Logit, Probit and Tobit models (Gujarati, 1995). In this study a logit model (for the analysis of variables as well as simple average) and percentage method have been used. By using logit model, the borrowers' borrowing decisions were dummy dependent variable by giving two values 1 and 0. If the borrowers were borrowing its value is equal to 1 and 0 if he or she is not. Similarly, 1 if borrowers borrowed from formal sector and 0 if otherwise. This borrowers' decision depends on education level, land ownership, income, better village (infrastructure facilities, location, bank branches etc.). Another selection reason of logit model is that it is mathematically convenient.

6.2 Dummy Dependent Variable Equal to One if Farmer has borrowed and equal to 0 if he has not

The results of logit model are shown in table 6.1 for 500 borrowers. All the independent variables have some relationship with the farmer's decisions about borrowing. Literacy status shows that increase in literacy can increase the probability of borrowing by a factor of 21 (exponential values). Age of the farmers and volume of the moveable assets have almost same effect on the changes of being a borrowers by a factor of 1.32. Farmers belonging to village with a better infrastructure and facilities

can increase the probability of borrowing by a factor of 18. Operated area, tenure status and family labour have almost 1.50 effects on the chances of being borrowers.

Table 6.1

Access's Determinants of the Households

Dummy Dependent Variable Equal to one if Farmer has borrowed and equal to 0 if he has not

Independent Variable	Coefficient of Independent Variable	Wald Statistic	Exponential Values
Intercept (α)	-3.43	6.54**	--
Literacy Status	3.25	10.45**	21.63
Age of the Farmer	0.132	1.13	1.32
Volume of the Moveable Assets	-0.0231	6.34*	1.32
off Farm Income	0.024	3.23	1.002
Village	3.412	11.43**	18.47
Operated Area	0.314	5.34	1.46
Tenure Status	0.002	3.69	1.74
Family Labour	0.324	1.32	1.76
Degree of Freedom	7	--	--
Chi Square of the Model	42.534*	--	--
Goodness of Fit	89.043	--	--

* Significance at 5 Percent

** Significance at 10 Percent

Table 6.2

Access's Determinants of the Households

Dummy Dependent Variable Equal to one if Farmer has Borrowed from Formal Sector and Equal to 0 if Otherwise

Independent Variable	Coefficient of Independent Variable	Wald Statistic	Exponential Values
Intercept (α)	-1.98	0.95	--
Literacy Status	5.01	11.34	60.85
Age of the Farmer Head	-0.103	0.232	1.32
Volume of the Moveable Assets	-0.002	5.52*	1.002
off Farm Income	-0.042	4.835*	1.032
Village	3.546	6.34	15.89
Operated Area	0.343	1.023	1.435
Tenure Status	-0.014	4.53	1.34
Family Labour	2.03	5.39	3.64
Degree of Freedom	7	--	--
Chi Square of the Model	46.56**	--	--
Goodness of Fit	56.58*	--	--

* Significance at 5 Percent

** Significance at 10 Percent

6.4 Dummy Dependent Variable Equal to One if Farmer has Borrowed from Informal Sector and 0 if Otherwise

The results of logit model as shown in table 6.3 where dummy dependent variable $Y = 1$ if farmers were informal borrowers and $Y = 0$ if otherwise and literacy status, age of the farmers, off-farm income, village, land ownership, tenure status, and family labour were independent variables. The table 6.3 reveals that, farmers' age, moveable assets, off farm income, village and operated areas are negatively related and literacy status and family labour are positively related with informal borrowings. The probability of being informal borrower increases by a factor of 8.65 with the increase of a unit farmer literacy. With the increase of farmer's age, moveable assets, and off-farm income reduces the probability of being informal borrowers by factor of 1.04, 1.54 and 1.01 respectively. Larger land ownership reduces the chances of informal borrowing by a factor of 2.34. An increase in the family labour (one male member) increases the chances of informal borrowing by factor of 2.38. With the increase of labour in the family means that the demand for goods and services also increase and the chances of being borrower also increases. Informal lenders also advance more loans to larger labour family hoping of more earning hands as well as recovery of loans without hurdles.

Table 6.3

Access's Determinants of Households

*Dummy Dependent Variable equal to One if Farmer has Borrowed from Informal Sector
and Equal to 0 if Otherwise*

Independent Variable	Coefficient of Independent Variable	Wald Statistic	Exponential Values
Intercept (α)	3.35	2.853	--
Literacy Status	2.214	4.403*	8.651
Age of the Farmer Head	-0.132	1.341	1.037
Volume of the Moveable Assets off Farm Income	-0.0022	2.103	1.543
	-0.002	4.211	1.014
Village	3.412	11.43**	18.47
Operated Area	-0.685	3.563	2.34
Tenure Status	0.002	3.69	1.74
Family Labour	1.361	4.453	2.38
Degree of Freedom	7	--	--
Chi Square of the Model	23.643**	--	--
Goodness of Fit	73.136**	--	--

* Significance at 5 Percent

** Significance at 10 Percent

In Conclusion, in all the logit model results, the goodness of fit was high i.e. Literacy status of the farmers and better village is the most important variables which influences the farmers' access to formal sources of loan. However, land ownership and family labour also affect the farmers to borrowers from formal sector. Family labour and farmers' literacy are positive and strongly affected if the farmers are informal borrowers. For all farmers, literacy status, family labour and village infrastructure are very important variables which influence farmers being borrower from either formal or informal sources of credit.

CHAPTER 7

SUMMARY, CONCLUSION AND RECOMENDATIONS

7.1 Summary

The present study was conducted in the area of district Peshawar where 14 out of 92 Union Councils were purposively chosen. Data were collected through personally administered questionnaires from 1000 respondents in which 500 informal lenders and 500 borrowers were randomly selected from the concerned areas. The main findings of the study are summarized as under:

1. Informal lenders generated an average amount of Rs. 349675 from rural areas and Rs. 932549 from urban areas. However, the range of funds generation in urban areas was between Rs. 48747 and Rs. 1564360. Informal lenders generated more funds in urban areas than rural because of the availability of bank branches and business opportunities.
2. Informal lenders generated more than 70 percent of funds from their own sources and the rest from a hybrid combination of formal and informal sectors.
3. In order to generate funds, informal lenders depend on informal sources of credit, whose academic qualifications were less than Secondary School Certificate (10 years of schooling), no land ownership and work experience of less than 3 years.

4. On average, the business of informal lender was spread over two villages, while the business of commission agents was over 10, money lenders 2, and landlords spread their business over 2 villages.
5. More than 75 percent of lenders advanced loans on the basis of past dealing with borrowers. On average two days were spent to make decision about advancing loan by informal lenders.
6. On average, the size of loan was more than Rs. 15000 in which more than Rs. 11000 were advanced to small farmers, Rs. 16000 to medium sized farmers. Out of total borrowers, small farmers contributed 38 percent and got only 15 percent in total volume of credit.
7. More than 70 percent of informal lenders expanded their business through their personal visits to the field, collected information about borrowers' productivity, honesty and working capabilities and in the light of these, the lenders advanced loans. So lenders were very careful in selecting borrowers.
8. Informal lenders advanced more than 75 percent of loans for production purposes like purchase of fertilizer, chemical sprays, tested seeds and less than 25 percent for personal consumption purposes. However, landlords and shopkeepers were found advancing more for consumption purposes.

9. In informal credit market, the default rate was as low as 6 percent. The reason of this low rate was that lenders possessed personal information about borrowers and the borrowers also wanted to maintain a good relation with lenders for future needs.

10. The reasons for default were mainly financial and crop failure and lenders extended additional loan of about 75 percent in case of the defaulted farmers' due to crop failure.

11. More than 80 percent of informal lenders recovered their loans through personal pressure (means use of power, *Jirga*) and less than 1 percent of lenders recovered their loans through Court.

12. In informal credit market, the markup rate varied from product to product, lender to lender as well on the nature and type of borrowers. However, about 20 percent markup in case of fertilizer, 25 percent in pesticides and 8 percent in tested seed was charged. The estimated annual interest rate charged by lenders in urban areas was 30 percent and in rural areas it ranged between 40 to 55 percent.

13. Interest rate, in the informal credit market, depended on the risk of borrowers with lenders advancing less amount of loan at a high rate of interest to risky borrowers.

14. Out of total borrowings, 83 percent were informal borrowers and only 17 percent were formal. Almost 10 percent of households were interested in receiving loan and gifts while 2 percent were interested in lending.

15. About 58 percent of borrowers, receiving loan from informal lenders, lived in urban areas, 33 percent from those lenders working/living abroad and 9 percent from rural lenders.

16. Households received more than 90 percent of loan in the form of cash and 2.9 percent in kind. Out of total borrowed amount, more than 90 percent of loans were taken from informal sector and only 8.54 percent were from formal sector by those households/ borrowers who had no land or less than one acre of land. However, borrowers having 9 or more than 9 acres of land ownership had taken up to 47 percent loan from informal and 53 percent from formal sector.

17. In institutional credit market, on average 51 days were spent in the formal sector on the assessment of loan application. However, on average, 31 days were taken by banks on the loan applications to the sanction of loan and, on average, 20 days between sanction of loan to the receipts of loan.

18. In the institutional credit market, borrowers having less than one acre of land ownership, obtained loan and faced on average Rs. 752 or 6 percent transaction cost and the total cost (including interest) was 14 percent on a loan amounting to Rs.12580. The transaction and total cost decreased with the increase of land ownership of the borrowers.

The results of the logit regression analysis show that farmers' literacy status and better village having good infrastructure facilities with a bank branch were the most important factors which affected farmers' access to formal credit. However, land ownership and family labour also affected the farmers to become borrowers from formal sector. Family labour and farmers' literacy were positive and had strong affects on the farmers' capacity to become informal borrowers. For all farmers' literacy status, family labour and village infrastructure were very important variables which influenced farmers being borrowers to either source of credit (formal and informal).

7.2 Conclusion

In Pakistan 67.50 percent of population is living in rural communities and 32.50 percent in urban areas, about 70 percent of population is engaged directly and indirectly receiving income from agricultural sector, 40 percent of population is dependent on farming. Agricultural farms are fragmented due to the law of inheritance and transfer in Islam. Farmers are divided into small farmers and the access to the institutional sources of credit was very limited for small farmers. The informal credit market has become increasingly popular among farmers to meet short term consumption needs than production purposes. Informal credit market is regarded as exploitative in two ways; first the informal lenders seldom ask question for which purpose farmers demanded loan and this system encourages borrowing for consumption purpose; and second, informal lenders charging hidden cost (interest) on loan is very high as compared to the interest charged by formal credit market.

Informal credit market has some advantages over institutional credit market, which cause the success of informal credit sector in Pakistan; these advantages are summarised as under:

1. In informal credit market, there was no or less administrative cost because informal lenders are self employed while institutional lenders employ cashiers, credit officers, branch managers etc.

2. No communication gap in informal credit market. Informal lenders were available in the rural area where landless, small and medium farmers are living, while formal lending banks were concentrated in towns and mainstream cities.
3. Informal lenders accepted repayment of loans in kinds as well and the mechanism was very flexible (cost effective) to those items beyond economical usage (such as scrap and salvage) were accepted in cases of default.
4. Informal lenders were unconcerned about the use of loan, even they were willing to lend for consumption purposes.
5. In informal credit market, no strategic planning was required, no loan or deposit targets, no auditing and even no proper record of their transaction was maintained.
6. The risk of the repayment of loan was very low in informal credit market as informal lenders possessed personal information about clients and in view of future needs borrowers maintained good relationship with the informal lenders and seriously repaid their loans.
7. Informal money lenders advanced loans against little or no collateral with no paper work.

The data analysis shows that informal credit market is the primary source of loan. It was observed that informal lenders were offering differentiated loan contracts focusing

on the various provisions for the reduction of cost and risk during lending activities without any collateral use. Informal credit markets consisted of different types of informal lenders i.e. landlords, shopkeepers, money lenders, commission agents, friends and relatives. Money lenders and commission agents were specialized lenders who were found to be predominant sources of loan. Farmers demanded short term loan especially from commission agents and shopkeepers for the purchase of seeds, fertilizers and chemicals and which required repayment after the harvesting of crops.

7.3 Recommendations and Policy Implications

The institutional credit can only play a major role if the volume of lending by the informal sector is minimized. The study has the following recommendation and policy implication for improvement in this field.

1. Specialized agencies, cooperatives, commercial banks, development banks should create parallel facilities in order to attract the small farmers and the landless tenants to borrow more and more from the institutional sources. Needless to say that institutional credit should be the cheaper source as compared to the non-institutional sources.
2. Any attempt by the formal sector to drive the informal lenders out, or at least compete with them, by lowering the interest rates, has not been particularly successful. This suggests that it is not appropriate to think exclusively in terms of rates of interest and overlook other credit traits essential for the farmers such as procedural simplicity, adequacy and timeliness.
3. Contrary to the formal system, the informal sources are easily accessible and the service is virtually available at the farmers' doorstep. Hence, a large number of farmers prefer to borrow from informal sources in spite of the high cost and shows that the demand for agricultural credit is highly service elastic.

4. The banks advancing loans to small, landless farmers should be shifted from town/city to the villages to enable the farmers' easy access to credit.

5. The recovery of loan should be linked with the agricultural production of the farmers which will be possible if the credit officers have friendly relationship with farmers. So co-operation of the credit institutions officials with the farmers is suggested.

6. The procedural formalities like opening of account and loan application for farmers should be simplified and minimized.

7. Advancing of loan should be linked with the land's fertility and productivity capacity rather than with the personal security offered by the farmers.

8. The balance between formal and informal credit can be struck by enhancing the number of branches of government bodies in rural areas which inwardly would have multi-pronged and multi-layered ramifications by reducing the transaction costs, making formal sector lean and agile, and above all the cash strapped widows and their dependants would benefit from such initiatives.

9. The informal credit has proven as the only hope of calamity prone nation by citing examples from recent military operations, earthquakes and the monsoon floods of 2010. Informal credit is not a bad option, but for the benefit of general public, the government should somehow strike a balance between formal and informal sector.

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DEPARTMENT OF ECONOMICS
UNIVERSITY OF PESHAWAR

INFORMAL CREDIT MARKET IN PAKISTAN (1991-2008):
A CASE STUDY OF DISTRICT PESHAWAR

QUESTIONNAIRE 1

Sample No _____

Date of Interview _____

Q1 Respondent Profile

- a) Name of Respondent (optional) _____
- b) Name of Union Council or Village _____
- c) Type of Lender _____

Q2 Lenders' Level of Education

- a) No formal Education b) Primary
- c) Middle d) Matric
- e) F.A. / F. Sc. f) Graduation and Above

Q3 Lenders' Land Ownership

- a) No Land
- b) 1-4 acres
- c) 5-8 acres
- d) 9 and above

Q4 Lenders' Work Experience

- a) Less than 3 years
- b) 4-7 years
- c) 8 years and above

Q5 How much fund is generated and from which sources?

- a. Own resources _____
- b. Borrowed from formal sources _____
- c. Borrowed from informal sources _____

Q6 The informal loan is available in how many villages?

Q7 Which method of assessment they follow?

- a. On the basis of past dealing _____
- b. Enquiry in applicant's village _____
- c. Testing him by giving a limited loan _____
- d. Personal Relation _____
- e. Access through other activities _____
- f. No screening _____

Q8 How much time is spent by lenders to assess borrowers?

Q9 How much credit is distributed in Rs. to different types of borrowers and what is the number of these borrowers?

- a. Small farmers _____ Number _____
- b. Medium farmers _____ Number _____
- c. Large farmers _____ Number _____
- d. Shopkeepers _____ Number _____
- e. Landless farmers _____ Number _____

Q10 What is the sale price and credit price of the following inputs?

- a. Fertilizers a) Sale price _____ b) Credit price _____
- b. Pesticides a) Sale price _____ b) Credit price _____
- c. Seeds a) Sale price _____ b) Credit price _____

Q11 What is the rate of interest charged?

Q12 For which of the following purposes loan is demanded and how much?

- a. Fertilizer _____
- b. Seeds _____
- c. Pesticides _____
- d. Consumption _____
- e. Others _____

Q13 The number of borrowers, who did not pay loan on scheduled time and how much?
In Rs.

The number of borrower's _____ Amount (in Rs.) _____

Q14 How will you expand your business?

- a. Personal visit in the farmers' fields.
- b. Through your agent in the villages
- c. Through your friends and/or borrowers in the villages
- d. Others

Q15 How much of additional loans were extended to those borrowers who failed to pay back in due time last year (2009)? _____

Q16 How do you make loan recovery?

- a) Personal pressure
- b) Social pressure
- c) Through court
- d) No steps

Q17 What are the reasons for non-payment of loans at scheduled time?

- a) Financial Difficulties
- b) Crop Failure

c) Natural Disaster

d) Other

Thank you!

DEPARTMENT OF ECONOMICS
UNIVERSITY OF PESHAWAR

INFORMAL CREDIT MARKET IN PAKISTAN (1991-2008):
A CASE STUDY OF DISTRICT PESHAWAR

QUESTIONNAIRE 2

Sample No. _____

Date of Interview _____

Q1 Respondent Profile

- a) Name of respondent (Optional) _____
b) Name of Union Council or Village _____

Q2 Marital Status

- a) Married
b) Unmarried

Q3 Your Age _____

Q4 Level of Education

- a) No formal education b) Primary
c) Middle d) Matric
e) F.A. / F. Sc. f) Graduation and Above

Q5. Your Farm size (Tick any one)?

S. No	Land Ownership
1	No or less than 1 acre
2	1-4 Acres
3	5-8 Acres
4	9 and above

Q6. Number of family member

- a) Male _____ b) Female _____

Q7. Number of income earner

- a) Male _____ b) Female _____

Q8. Total family average monthly income (Tick any one).

<input type="checkbox"/>	Less than 5000 Rs.	<input type="checkbox"/>	5,000 to 10,000 Rs.
<input type="checkbox"/>	10,000 to 15,000 Rs.	<input type="checkbox"/>	15,000 and above Rs.

Q9. Total average monthly expenditures (Tick any one).

<input type="checkbox"/>	Less than 5000 Rs.	<input type="checkbox"/>	5,000 to 10,000 Rs.
<input type="checkbox"/>	10,000 to 15,000 Rs.	<input type="checkbox"/>	15,000 and above Rs.

Q10. What are the sources of credit available to you and on which one of the following you rely mostly?

- a) Friends and Relatives _____
- b) Shopkeepers _____
- c) Commission Agents _____
- d) Landlords _____
- e) Money lenders _____
- f) Commercial Bank _____
- g) ADBP _____
- h) NGO / Micro Credit _____
- i) Other _____

Q11. What are the reasons for your choosing a particular source from among the above?

- a) Nearness
- b) Taking less time
- c) Require no securities

- d) Inform of goods
- e) No or low administration cost
- f) No communication gap
- g) Willingness to lend for consumption

Q12 For what purpose you need credit?

- a) Production b) Personal

Q13 For how much time you normally get a loan? (Tick any one)

Less than 6 months	1/2 to 1 year
1 year to 2 years	2 years and above

Q14 How many times a credit source was used? _____

Q15 Your interest in sending and receiving of loan and gifts

- a) Sending loan _____
- b) Sending gifts _____
- c) Receiving Loan _____
- d) Receiving gifts _____

Q16 From which sources and how much you have been getting loan and gifts?

- a) From Rural Areas _____
- b) From Urban Areas _____
- c) From Abroad _____

Q17 How many days are required?

- a) From loan application to sanction of loan _____
- b) From sanction of loan to receipts of loan _____

Q18 At what rate of interest does a formal sector provide loan to you?

Q19 What are the forms of transactions cost involved in formal sources of credit?

- a) Photograph charges _____
- b) Photostat of NIC _____
- c) Number of visits to the Bank branch and land revenue office _____
- d) Transportation cost per visit _____
- e) Per day wages _____
- f) Time spent on the visit (in hour) _____

Thank you!

Annexure B

Table A1
Funds Generated by Informal Lenders in Rs. (In Average)

Types of Lender	Generation of Funds	
	(In Rural Areas)	(In Urban Areas)
Commission Agents	570080	1564360
Money lenders	475303	1078543
Shopkeepers	155847	408747
Landlords	197553	678546
Total (In Average)	349675	932549

Source: Field Survey (2009)

Table A2

Sources Through which Funds were generated by Informal Lending Sector (in Percent)

Types of lender	Own Sources	Borrowed Funds		All Sources
		Formal Sources	Informal Sources	
Commission Agents	82.2	12.2	5.6	100
Money lenders	68.7	31.2	0.1	100
Shopkeepers	70.5	8.6	20.9	100
Landlords	75.2	8.3	16.5	100

Source: Field Survey (2009)

Table A3

Sources of Funds According to the Lenders' Level of Education (in Percent)

Lenders' Level of Education	Own Sources	Borrowed Funds		All Sources
		Formal Sources	Informal Sources	
Illiterate	67.6	3.1	29.3	100
Primary	75.1	7.4	17.5	100
Middle	66.1	6.1	27.7	100
Matric	69.1	10.2	20.7	100
F.A. F.Sc.	77.4	14.6	8.0	100
Graduate and Above	73.7	18.7	7.6	100

Source: Field Survey (2009)

Table A4

Sources of Funds According to the Lenders' Land Ownership (in Percent)

Lenders' Land Ownership	Own Sources	Borrowed Funds		All Sources
		Formal Sources	Informal Sources	
No Land	78.4	3.9	17.7	100
1-4 Acres	74.3	3.7	22.0	100
5-8 Acres	69.8	6.7	23.5	100
9 Acres & Above	77.7	10.7	11.6	100

Source: Field Survey (2009)

Table A5

Sources of Funds According to the Lenders' Work Experience (in Percent)

Lenders' Work Experience	Own Sources	Borrowed Funds		All Sources
		Formal Sources	Informal Sources	
Less than 3 year	75.8	2.1	22.1	100
4-7 years	79.1	6.7	14.2	100
8 years & Above	70.5	12.4	17.1	100

Source: Field Survey (2009)

Table A6

The Business of Informal Lenders in Terms of Territories (in Average)

Informal Lenders	Number of Villages
Commission Agents	10
Money Lenders	2
Shopkeepers	1
Landlords	2

Source: Field Survey (2009)

Table A7

Amount of Loan (in Rs.) Borrowed from Informal Sector by Type of Borrower

Type of borrowers	Distribution of borrowers (In Percentage)	Size of Loan (In Average)
Small Farmers	38	11305
Medium Farmers	10	16466
Large Farmers	5	25300
Landless	41	10520
Shopkeepers	6	12343
All / Average	100	(15186.8)

Source: Field Survey (2009)

Table A8

Distribution of Loan by Purpose of Use (in Percent)

Purpose of Loan	Commission Agents	Landlords	Money Lenders	Shopkeepers
Fertilizer	31	23	14	21
Seeds	23	18	25	19
Pesticides	15	17	19	14
Personal Consumption	11	16	25	24
Others	20	25	17	22
Total	100	100	100	100

Source: Field Survey (2009)

Table A9

Default Rate of Borrowers and Funds Controlling by Type of Lenders

Types of lenders	Borrowers who did not pay Loan on Scheduled time (In Percent)	Amount of loan that could not be returned (In Percent)
Commission Agents	5	6
Money Lenders	7	7
Shopkeepers	9	8
Landlords	12	10

Source: Field Survey (2009)

Table A10

Reasons for Non-Payment (in Percent)

Reason for non-Payment of Loan	Commission Agents	Money Lenders	Shopkeepers	Landlords
Financial Difficulty	57.0	59.1	56.1	52.0
Crop Failure	32.7	26.6	35.7	42.4
Natural Disaster	10.3	14.3	8.2	5.6
Total	100	100	100	100

Source: Field Survey (2009)

Table A11

Advancing an Additional Loan to Borrowers Who Failed the Repayment of Loan (in Percent)

Reason for non-payment of loan	Informal lenders who extended additional loan
Crop Failure	61.6
Natural Disaster	37.2
Financial Difficulties	33.2
All	46.8

Source: Field Survey (2009)

Table A12

Tactics Loan Recovery Mechanism Used by Informal Lenders (in Percent)

Different Steps Taken by lenders	Types of Informal Lenders			
	Commission Agents	Money Lenders	Landlords	Shopkeepers
Personal Pressure	83.5	62.4	87.6	76.6
Social Pressure	13.7	36.5	8.7	20.1
Through Court	0.0	0.0	1.5	2.0
No Steps Taken	2.8	1.1	2.2	1.3
Total	100	100	100	100

Source: Field Survey (2009)

Table A13

Mark up Charged by Informal Lenders on Agricultural Inputs (In Percent)

Inputs	Mark up
Fertilizer	19.7
Pesticides	24.1
Seeds	7.9

Source: Field Survey (2009)

Table A14

Interest Rate Charged by Informal Lenders (Rural and Urban Areas)

Region	Annual Interest Rate (In Percent)
Rural	40-55
Urban	30

Source: Field Survey (2009)

Table A15

Loan and Gifts Received by Households (in Percent and Average)

Sources of Loan	Households Received Loan (In Percent)	Amount of Loan Received (In Average)	Total gifts and Loan (in Percentage)
<u>Informal Loan</u>	50%	(75,000)	100
Friends	15	200,000	63
Relatives	10	15,000	4.8
Neighbors	3	20,000	6.5
Money Lenders	4	15,000	4.7
Commission Agents	6	35,000	11.21
Shopkeepers	12	30,000	9.6
<u>Informal Gifts</u>	33%	(9,000)	100
Parents	5	10,000	27.78
Friends	17	8,000	22.2
Relatives	8	13,000	36.13
Others	3	5,000	13.89
<u>Formal Loan</u>	17%	(17,666)	100
Commercial Banks	5	18,000	34
ADBP	8	25,000	47.15
Micro Credit/ NGOs	4	10,000	18.85

Source: Field Survey (2009)

Table A16
Collaterals Possession by Households (in Percent)

Kinds of Collateral	In Percentage
Cultivated Land	1.4
House/ Plot/ Building/Property	2.8
Gold/ Silver	2
Personal Guarantee	21.4
No Collateral Required	69.8
Other	2.6
Total	100

Source: Field Survey (2009)

Table A17

Share of the Informal Loans in Total Borrowings of Households

Land Ownership	Households Land Ownership (In Percentage)	Total Borrowed Amount (In Average)	Formal Loan Borrowed by Households (In Percentage)	Formal, Informal and Total Loan (In Percentage)	
				Formal Loan	Informal Loan Total Loan
Less than 1 Acre	35	11560	4	8.54	91.46
1-4 Acres	28	8380	21	23.34	76.66
5-8 Acres	20	21530	36	51.52	48.48
9 Acres & Above	17	30380	58	52.73	47.27

Source: Field Survey (2009)

Table A18

Transaction Cost in the Formal Sector of Credit (in Rs.)

Land Ownership	Borrowed Amount from Formal Sector	Interest at the rate of 8 Percent (per year)	Transaction		Total Cost of		Transaction Cost	
			Cost (In Average)	Loan (Average)	Loan (In Percentage)	Total Cost (In Percentage)		
Less than 1 Acre	12580	1006.4	752	1758.4	6	14		
1-4 Acres	14650	1172	836	2008	5.7	13.7		
5-8 Acres	18820	1505.6	910	2415.5	4.8	12.8		
9 Acres & Above	21850	1748	985	2733	4.5	12.5		

Source: Field Survey (2009)

Table A19

Types of Informal Lenders on the Basis of Loan Application as an Assessing Instrument (in Percent)

Methods of Assessment	Commission Agents	Money Lenders	Shopkeepers	Landlords	Time Spent on Loan Assessment (In Days)
On the basis of past dealing	75.4	60.6	73.7	63.2	2
Testing him by giving small					
Initial loan	2.5	13.2	6.2	5.0	2
Enquiry in applicant's village	4.2	6.0	6.2	5.0	4
Personal Relations	3.4	3.0	4.6	8.6	1
Assess through other activities	0.8	3.2	1.3	2.3	5
No screening	13.7	14.0	8.0	15.9	0
Total	100	100	100	100	2.3

Source: Field Survey (2009)

Table A20

Number of Days and Transaction Cost Incurred in the Formal Credit

Land Ownership	No. of days required in the Sanction of Loan	No. of days required between Sanction and Receipt of Loan	No. of days required between Application and Receipts of Loan
Less than 1 Acre	29.12	21.32	50.44
1-4 Acres	32.83	20.54	53.37
5-8 Acres	35.32	18.55	53.87
9 Acres & Above	29.50	19.25	48.75
Average	31.7	20	51.6

Source: Field Survey (2009)

Table A21

Expansion in the Business of the Informal Lenders (in Percent)

Business Expanding Methods	Commission Agents	Money Lenders	Shopkeepers	Landlords
Personal Visits	80.3	75.3	60.7	93.3
Lender's agent in the village	10.4	15.4	22.5	3.6
Through friends and borrowers in the village	5.0	5.7	10.3	2.3
Other	4.3	3.6	6.5	0.8
Total	100	100	100	100

Source: Field Survey (2009)