

**The London School of Economics and Political  
Science**

***The Road to Development;  
Market Access and Varieties of Clientelism in  
Rural Punjab, Pakistan***

Mahvish Shami

A thesis submitted to the Department of  
International Development of the London School  
of Economics for the degree of Doctor of  
Philosophy, London, August 2010

## **Declaration**

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

The copyright of this thesis rests with the author. Quotation from it is permitted, provided that full acknowledgement is made. This thesis may not be reproduced without the prior written consent of the author.

I warrant that this authorization does not, to the best of my belief, infringe the rights of any third party.

## Abstract

*Rural economies in developing countries are often characterised by high levels of inequality, particularly so in their distribution of land. This can lead to the establishment of patron-client relationships between peasants and their landlords with far-reaching social, political, and economic implications for both parties. This thesis investigates whether, and how, clientelist networks change, when connecting isolated villages become connected to the outside economy. It does so from three different perspectives. Firstly, it highlights the ability of resource rich landlords to interlink different markets in the rural economy in an effort to maximise surplus extraction. Yet, when peasants are provided credible exit options, the change in relative bargaining powers alters the character of such interlinkages in favour of the peasants. Secondly, it explores how clientelism enables landlords to use peasant votes as bargaining chips with politicians to appropriate public resources for their own private benefit. Yet, when peasants are given outside options, the landlord has to provide them with public goods in order to maintain his economic and social standing in the village. Lastly, it analyses peasants' difficulty in engaging in community driven projects when residing under a strong patron. Yet, when landlords have to compete with markets outside the village, they no longer have the incentive or ability to block peasant collective action for self provision. In all three areas, it is argued that the patrons' ability to control peasant activities stems from the interaction of inequality with isolation, which provides them with monopoly/monopsony powers. Hence while policy solutions to exploitative forms of clientelism have typically focused on land redistribution, I argue that similar results are attainable by increasing peasants' outside options. In order to test the validity of this hypothesis I make use of a natural experiment found in the construction of a motorway in rural Punjab, Pakistan. The research design compares connected villages dominated by large*

*landlords to isolated ones and uses villages with relatively egalitarian distribution of land as a control group. Making use of field interviews and quantitative survey data the thesis finds that connectivity results in converging outcomes between connected villages dominated by large landlords and those with more egalitarian distribution of land. The results suggest that connecting villages previously isolated from the outside economy can go a long way to help the rural poor.*

## **Acknowledgements**

I would like to start by thanking my supervisor, Jean-Paul Faguet. A supervisor has the difficult task of balancing the tension between pushing their supervisee to the limit without breaking their spirit or making them feel the work is impossible. Jean-Paul did this to perfection. Never once did he express any doubt in my ability to accomplish this great task, but at the same time he questioned all my assumptions and made me think more clearly about what I was trying to do. Having him as my supervisor was probably one of my greatest fortunes and is what enables me to sit here today with a completed thesis.

I would also like to thank Dr. Matthew Nelson for his academic support. Without his help in the difficult stage of survey making this thesis would not have been as rigorous. Moreover, I would like to thank Dr. Ali Cheema for his continued advice on the methodological setup of this thesis. It was through his help that I was able to identify Hafizabad District as a suitable location to conduct this study.

In the field I would like to thank my 14 surveyors who came along as volunteers, driven purely by a desire to learn how to conduct primary research. I am yet to meet a team of such dedicated young individuals who withstood the scorching heat of rural Punjab in May to carry out these surveys. So I extend a big thank you to Zahra Afzal, Ali Hamza, Abdul Rehman, Sidra Rehman, Saba Azeem, Kiran Javaid, Urooj Mukhtar, Zaineb Majoka, Aliza Mahmud, Arij Bashir, Sirah Yusuf, Mohamad Tahir, Salman Zafar, Zainab Ahsan. I also owe an extra thank you to Arij Bashir for accompanying me in the mapping process. And of course, a special thanks to Altaf our resident cook, for accompanying me on my many trips to the villages. In the villages themselves, I would like to thank Mauhamad Hanif Tahir, Zaheer Abbas Asif Rahima and Umar Khizar, for assisting me in the

mapping process. Lastly, I would like to thank the University of London Central Research Fund for funding the fieldwork.

The overall funding for this thesis came from a number of sources. I received tremendous support from my department for which I am very grateful. I would also like to thank the Charles Wallace Trust for providing assistance in my final year. Moreover, I would like to thank the Accounting Department – and Al Noor Bhimani and Charlotte Knights within it – for finding odd jobs around the department for me to do so I could pay the rent every month.

I also wish to thank Teddy Brett for his great insights on the different strands of literature to explore; Dr. Dean Jolliffe, at the World Bank and Dr. Guy Michaels, at the Department of Economics, LSE, for advice on the econometric specifications in this thesis and Hadia Majid for reading multiple drafts and offering many valuable suggestions. I also extend a big thank you to Dr. James Putzel for his extensive support.

I offer a special thank you to Stephanie Davies in the Department of International Development for her constant support throughout this PhD. You once said to me that you thought of PhDs as your children and you truly never let me feel any different. You were always there to help solve problems and with useful advice on many issues. I will truly miss coming to your office ‘just to have a chat’. Thank you for everything!

Thank you also to Sue Redgrave for helping with proof-reading the final draft of this thesis. You sat up till the last minute finding those small missing commas that I had completely lost the ability to see. Also I would like to thank my father for reading multiple drafts, at odd times of the year, often at very short notice, and giving many suggestions on how to improve the thesis.

And of course, I owe a huge debt to my parents, not only for supporting me through this PhD wholeheartedly, but also for raising me as a thinking individual

and teaching me never to take anything for granted. You raised me to appreciate the value of learning and without that I would not be where I am today.

There are three people who helped me keep in touch with reality though out this thesis; my wonderful brother Zarrar Shami who always made it a point to call or message to make sure I didn't get lost in this thesis. You called me with many funny stories which helped me get through the most stressful of times with a laugh. Thank you Bhai! Also I would like to thank Azim Husain for showing me the lighter side of life with your funny emails about nothing at all! No matter where I was in the world, I could always rely on you to be there – a wonderful presence in my mailbox reminding me that I have a friend. Last, but no means least, I would like to thank Hadia Majid. Besides being a great critic you have also been a wonderful friend. I am truly fortunate to know you!

And my dear Lauge, I have no words to describe the gratitude I feel for having you along on this journey. You were my greatest critic and questioned and re-questioned every assumption I made. You read draft after draft - sometimes even when you yourself were faced with a pressing deadline - giving me extensive comments on how to do this better. You believed in me when I myself had doubts. But more than anything you made sure I never felt I was in this alone. I will never forget how you sat up with me in the last few months, often late into the evening, pretending you had to work so I would not feel lonely. I don't what I would do without you. Jeg elsker deg!

I dedicate this thesis to all those villagers who welcomed my surveyors and me into their homes and shared with us their precious time, their hospitality and their stories, without which this study would not have been possible.

## *Table of Contents*

<b>1. Introduction.....</b>	<b>10</b>
1. Inequality and the Establishment of Interlinked Markets .....	14
2. Patron-Client Networks- A Lopsided Friendship .....	21
3. Patron-Client Relationships and Interlinked Markets – Two Sides of the Same Coin? .....	28
4. Policy Measures to Restructure Incentives to Date.....	30
5. An Alternative Approach – Connectivity.....	43
<b>2. The Political Economy of Rural Pakistan .....</b>	<b>50</b>
1. Inequality and Patronage Networks in Pakistan .....	53
2. Policy Efforts to Alter Relative Bargaining Power .....	62
3. The Empirical Study .....	67
3.1 The Villages .....	82
Section 4: The Research Questions.....	85
<b>3. The Impact of Connectivity on Market Interlinkages.....</b>	<b>88</b>
2. The Game .....	90
2.1. The Model.....	94
3. Empirical Analysis .....	105
3.2. Basic Model.....	106
3.3. Extended Model.....	109
4. Conclusion .....	121
<b>4. The Impact of Market Exposure on Public Goods Provision .....</b>	<b>124</b>
1. The Deals Politicians Make.....	125
2. Empirical Analysis .....	129
2.1. Empirical Results.....	133



<b>3. Conclusion .....</b>	<b>147</b>
<b>5. <i>The Impact of Connectivity on Clients' Level of Collective Action</i>.....</b>	<b>149</b>
<b>1. Collective Action in Context .....</b>	<b>152</b>
1.1 Collective Action Based on Horizontal Networks .....	153
1.2 Collective Action Under Hierarchical Networks.....	154
1.3 Connectivity, Patron-Client Networks and Collective Action .....	156
<b>2. Empirical Analysis .....</b>	<b>158</b>
2.2. Levels of Collective Action .....	158
2.3. Types of Collective Action.....	165
2.4. Collective Action, Connectivity, and the Landless .....	170
<b>3. Conclusion .....</b>	<b>173</b>
<b>6. Conclusion .....</b>	<b>175</b>
<b><i>Bibliography</i>.....</b>	<b>190</b>
<b><i>Interview List</i>.....</b>	<b>228</b>
<b><i>Appendix 1 Payoffs for Chapter 3</i> .....</b>	<b>230</b>
<b><i>Appendix 2 Village Maps</i>.....</b>	<b>238</b>
<b><i>Appendix 3 Household Survey</i>.....</b>	<b>247</b>

# 1. Introduction

Developing countries the world over are plagued by high levels of inequality, particularly in their distribution of land. While this has implications for the economy at large, the effects of land inequality are particularly detrimental in rural areas where the majority of the population relies on agriculture, either directly or indirectly, to generate an income. Given that the World Bank (2008) estimates that three out of four people in developing countries live in rural areas, the effects of land inequality are therefore felt by the vast majority of the population in these countries. Lipton (2009), while pushing for more active land reform policies, argued that land must be treated as a special asset as, unlike other financial assets, it can be used in combination with the poor's main, and maybe even only, endowment which is labour to help generate a livelihood that could pull them out of poverty. Moreover, ownership of this asset enables the holders to use it as collateral for accessing formal credit and insurance markets, thus further increasing their ability to pull themselves out of poverty. Also, land in agrarian economies entails high social value and is instrumental in determining the households' social status within rural society (Deininger and Binswanger 1999). As a result, the poverty faced by landless households is not only economic in nature but also has a social dimension which can at times result in exclusion.

Therefore, the concentration of this asset in a few hands, places the vast majority in a position of economic and social dependency vis-à-vis the resource rich. Dependency of this form can result in the resource holder enjoying considerable leverage over the resource poor, as the goods and services that he provides are vital to the survival of poor households and thus have an inelastic demand. In exchange, the poor provide services such as their labour, their political support by agreeing to vote in accordance with the landlord's political preferences, and their social following by providing loyalty and deference to the service provider (see

for example Powell 1970 for a detailed description). These services, while important to the land owner, are available in abundance and are easily dispensable. As a result, the landlord has been argued to have significantly higher bargaining power in the exchange relationship, which can be used to charge a relatively high price for allowing access to his resources. This is particularly true when dealing with landless households who possess no skills and exist close to subsistence level. Mason (1986) argues that such households would be willing to work for extremely low wages on the agreement that, in times of bad harvests, they would be ensured a subsistence salary by the landlord.

Of course not all peasants are vulnerable to exploitation at the hands of the landlord. Peasants who are better endowed in terms of skills, assets and social status, are likely to receive much better terms from the interaction, as not only are they less dependent on the landlord, but also because their skill sets make them less easily replaceable (Scott 1972, Scott and Kerkvliet 1977). Moreover, not all environments are conducive for the landlord to extract high surpluses off the rural poor. The peasants' dependency on the patron is determined not only by resource distribution but also by the availability of outside options. So while landless peasants, residing in isolated villages dominated by large landlords, have no choice but to accept the high demands of the resource holder, those who reside in areas which give access to outside options have a higher opportunity cost, and thus, a higher threshold below which they would cease interaction with the landlord. These exit options could be in the form of either additional landowners willing to take peasants into their network, or access to alternative options found outside the rural economy. Hence, as will be argued throughout this thesis, for the landlord to enjoy monopolistic control, not only must he own most of the village resources, but also the village economy needs to be fairly isolated so that peasants have limited options aside from the landlord. Put another way, a monopolistic landlord is only able to charge extractive prices off the peasants when inequality is interacted with isolation so as to leave peasants no option but to approach the landlord. The absence of either of these two conditions should considerably weaken the control of the patron over his clients.

The patterns of these exchange relationships and the resultant exploitation due to peasants' high dependence on the landlord, have been addressed quite extensively in the literature. Interestingly, this has been analyzed through two separate, yet possibly overlapping frameworks; interlinked markets – used mostly by economists – and patron client networks – favoured by anthropologists, sociologists and political scientists. The literature on market interlinkages discusses how the owner of resources has control over multiple markets (such as employment, credit and insurance) and is thus able to bundle transactions so that outcomes are no longer independent, thus causing equilibria to be jointly determined (See Bardhan 1980 for an overview. Also see Basu 1986, Bell 1988, Sarap 1991, Srinivasan 1991, Braverman and Srinivasan 1981). The patron-client literature, on the other hand, talks about an exchange relationship established between actors of unequal economic and social status born out of necessity and mutual benefit (Powell 1970, Scott 1972, Mason 1986, Eisenstadt and Roniger 1980, Foster 1963, Wolf 1966). They too discuss how a range of goods and services are exchanged between the patron and his clients, often at a rate advantageous to the landlord.

The literature dealing with both these analytical frameworks is extremely varied and rich and explores, in considerable detail, the nature and structure of exchange relationships established between the resource rich and poor. Moreover, both emphasise the exploitative powers the landlord can enjoy due to his (almost monopolistic) control over an asset whose demand is fairly inelastic. However, despite them both being focused on unequal relationships, most authors talk in terms of one concept or the other to the extent that these theories sit parallel to one another but seldom ever come into dialogue. This chapter aims to bring the two frameworks together by highlighting the similarities between them and thus the benefits of relying on both frameworks for getting a better understanding of interaction in rural societies. The remainder of the chapter is organised as follows. Section 1 gives an overview of the literature on market interlinkages, emphasising the wide range of explanations cited for why this market structure arises and the

detrimental effect it can have on peasants' welfare. Section 2 then goes on to review the literature on patron-client networks and once again looks at why these networks arise and how they impact poor clients. Section 3 puts the two literatures together, highlighting the similarities between the two. It is argued that, if the definition of markets is broadened to include all types of exchanges, and not just those which are monetized or formal,<sup>1</sup> then we find that the patron-client framework is also dealing with interlinkages as interaction in the network is over a range of goods and services and the rate at which they are exchanged is determined based on the value of the bundle that each party is bringing to the table. Of course, as will be discussed, not all interlinked markets result in patron-client relationships but it can be stated that all patron-client exchanges take place in an interlinked market setting.

While there is intellectual value in placing the two literatures in dialogue, as it enables us to draw on both frameworks for getting a better understanding of the socio-economic effects of inequality, there is also a policy value to this exercise as it allows the formulation of more nuanced policy recommendations which should enable us to better attack the problems created by inequality. In this vein, Section 4 briefly synthesises the policy options popularly used in the past to help mitigate the harmful effects of poverty. These are policies such as land reforms, micro-credit schemes, cash transfers and rural works programs. However, given the persistence of inequality in many developing countries, even in those that have tried to implement the abovementioned policies, the concluding section extends an alternative, less advocated, policy option of increasing connectivity so as to provide peasants with an alternative to the local landlord for satisfying their needs. The basis for this policy prescription comes from the argument that the landlord's monopoly is dependent not only on inequality, but also on the level of seclusion of the rural economy. Thus this section argues that reducing isolation can go a long way towards altering the power dynamics within the rural economy. This policy prescription then forms the basis for the rest of the thesis, which

---

<sup>1</sup> This is the definition of markets Bardhan (1980) uses in his review of the literature on interlinked markets.

evaluates the success of infrastructural development for restructuring incentives in rural exchange relationships.

## **1. Inequality and the Establishment of Interlinked Markets**

Asset inequality has meant that a considerable majority of the population in developing countries has very little, other than their labour services, to rely on for satisfying their basic consumption needs. While this creates problems for the resource poor population at large, its adverse effects are particularly pronounced in the rural economy where the population mostly depends on agriculture to employ their labour services (World Bank 2008). The problem faced by these poor households, aside from having to rely on others for gaining access to land, is that their employment and resultant income vary seasonally, thus causing them to rely on their savings and/or credit during slack seasons (Mahajan and Ramola 1996, Hulme and Mosley 1996, Marcus et al 1999). Also agricultural workers, whose income is tied to the output they produce, face considerable uncertainty due to random shocks that are outside their control – such as bad weather. Therefore, in years of bad harvests, poor households find it particularly hard to meet their consumption requirements solely from their own assets and have to seek alternative avenues for satisfying their needs. Often this takes the form of loans meant to sustain consumption (Hussain et al 2004). However, since the only asset that they can offer as collateral is their labour, the result is the interlinking of markets.

The problem, as formulated in the literature, is that households who do not own tangible and/or marketable assets are barred from formal credit agencies and possibly also from village moneylenders.<sup>2</sup> The only recourse left to them then is to approach the local landlord for credit in exchange for a guarantee to work on his fields during peak seasons. While this loan helps households get through lean

---

<sup>2</sup> As noted by Ray and Sengupta (1991) while models on interlinkages have focused on credit markets their findings can just as easily be applied to other market interlinkages.

seasons, the benefits of this relationship for them have been questioned as not only is the implicit interest paid for this loan often very high (Aleem 1990), but also, once established, poor households may find themselves tied into an interlinked relationship indefinitely (Bhaduri 1973). Therefore, as argued by Sarap (1991), in the long run the gains from such interlinkages for the borrowing households may be perceived rather than actually realised, as households tend to get caught into a debt-trap that forces them to trade their labour at below market rates.

The non-desirability of interlinked markets, from the poor villagers' perspective, has also been illustrated by Srinivasan (1991), who questions the circumstances under which a household would opt for an interlinked relationship.<sup>3</sup> The model he builds is one in which sharecropping households have the option of approaching either formal lending institutions or the local landlord for credit. The decision is assumed to be voluntary but, once made, cannot be changed – i.e. a household cannot oscillate between the two creditors, particularly after it has defaulted with one creditor. Sharecroppers, in this model, are assumed to be identical in all respects except for their non-agricultural incomes. The decision of the sharecropper needs to take into account, among other things, the difference in the reaction between the two creditors. A formal credit agency would consider a lapse in payment as a default and would penalise the borrower by confiscating his current income and denying him further access to credit. On the other hand, while an inability to repay the landlord would also result in his current income being confiscated, the shortfall would be met through amortised labour services at a rate determined by the landlord. Moreover, contrary to the formal lending agency, once the sharecropper has repaid his debt to the landlord, he can continue to enjoy credit facilities. However, despite the flexibility regarding repayment when dealing with the landlord, the model reveals that households with high non-

---

<sup>3</sup> The term Srinivasan (1991) uses in his model is bonded labour. He defines a bonded labour contract as one in which the landlord gives consumption credit to the sharecropper, on the understanding that the latter will make up repayment, not met by output, through his labour services which are valued below the workers' opportunity cost. Whether interlinked markets result in bonded labour, depends on the relative bargaining power of the two parties. This is discussed in more detail at the end of this section.

agricultural income would always approach the formal lending agency, thus keeping their labour market independent and protecting the value of their labour services. On the contrary, households that rely mostly on agricultural income approach the local landlord and hence run the risk of having their labour under-valued. Therefore, his model finds that, similar to the argument made by Sarap (1991), even though the decision of where to obtain credit from is voluntary, it is resource constraints that effectively make the decision for the sharecropping household.

The incentive of the landlord to offer credit to his sharecropper would be based on the extent of benefits he receives from the relationship. As stipulated by Ray and Sengupta (1991), the landlord will only interlink markets if the surplus from the interlinked deal is greater than the sum of the surplus extracted from these markets when operating independently. These benefits can take the form of either higher profits or lower costs. In this vein, most of the classic models of market interlinkages establish, quite conclusively, the benefits that accrue to the resource holder from these tied relationships. This is mostly illustrated through one of two main models; that of the landlord-cum-moneylender and the trader-cum-moneylender. Examples dealing with the landlord-cum-moneylender draw scenarios much like the one described above. It has been shown that the landlord can take advantage of the agricultural workers' need for credit, when his collateral is non-marketable, by charging an interest rate equal to his own opportunity cost for capital, but paying wages below the market rate (Bardhan 1984, Bhaduri 1973, Braverman and Srinivasan 1981, Braverman and Stiglitz 1982, Mitra 1983). Through market interlinkages the landlord then essentially increases his own surplus by lowering his wage bill, while still recovering his opportunity cost of capital.

The other main example of interlinked markets and their exploitative potential is that of a trader-cum-moneylender (Bhaduri 1986, Harriss 1992, Crow and Murshid 1994, Ray and Sengupta 1991, Gangopadhyay and Sengupta 1987). The farmer's need for working capital creates an opportunity for the trader who buys



the farmer's output to interlink the output and the credit market. By offering the farmer credit at his own opportunity cost of capital, the trader is able to extract a guarantee from the farmer to sell him his output at a price below that of the market thus enabling him to make a higher profit. The benefits enjoyed by the interlocker from this relationship stem largely from his privileged position of being active in one market, but also having the ability to engage in another (Ray and Sengupta 1991). While the pure moneylender may also be able to charge the same interest rate as the trader, it is not possible (or even feasible<sup>4</sup>) for him to include the output market in his contract with the borrower. Similarly, as the pure moneylender is not active in the labour market, he has no utility for the borrower's labour services due which he cannot extract a profit from those services.

Precisely because of the extractive powers that interlinkages offer, it has been argued that the landlord may actually actively try and interlock markets (Bhaduri 1973). According to Bhaduri, interlinked transactions isolate markets as interlocked households may face high costs of switching to another supplier, and thus create monopolistic conditions for the landlord to exploit. However, Basu (1983) argues against this and instead stipulates that outcomes in an interlinked market, when viewed jointly, are in fact competitive and efficient. His basis for this argument is that while certain imperfections lead to the interlinkage of markets (discussed later), these imperfections do not create a monopoly as the landlord does not have the power to increase the price in one market without simultaneously reducing the price in another so as to maintain the overall equilibrium. If the landlord was to price above the joint equilibria the peasants would, according to Basu, cease all interactions with him. What affords the landlord monopoly power is peasants not having alternative options, as this curtails their ability to walk away from an exploitative interlinked deal. Therefore, monopoly power arises not due to interlinkages, but due to high "transfer costs or exogenous barriers to entry" (Basu 1983, pg 272).

---

<sup>4</sup> Trying to enter the output market may entail high transaction costs for the pure moneylender.

However, given that monopoly power exists due to lack of exit options, the question then arises why the landlord needs to interlink markets in order to extract higher surpluses in isolated villages. Sarap (1991) argues that this may be done in order to overcome customs and traditions which may constrain the landlord's surplus extraction in any single market. Basu (1986), on the other hand, argues that interlinking transactions and having multiple dealings in the village economy, can allow a monopolistic landlord to coerce peasants to interact in an exploitative deal, without having to resort to violence. Interlinkages, Basu argues, may give the resource holder enough influence to interfere with peasants' independent relationships and can empower him to use the threat of interrupting those independent interactions to induce the peasant to accept his (exploitative) offer. Interaction with such a monopolistic landlord, according to Basu, is not voluntary as once the agreement has been entered into, the peasant no longer has the ability to go back to the scenario that existed before the interaction, i.e. a state where he has no dealings with the landlord but still has ties with his other relationships.<sup>5</sup>

However, interlinkages, even in isolated villages, need not always be established to extract high surpluses. While it is agreed that the landlord must be able to draw additional benefits from the interlinked deal, these could also come through a reduction in the costs associated with interacting with the peasants in the rural economy. These costs range from adverse selection to moral hazard problems to transaction costs arising due to uncertainty. Basu (1983) argues that the inherent risk faced by lenders in the rural economy, due to market imperfections, induces them to interlink transactions with other markets so as to minimise their 'potential risk'. This, he argues, is achieved through two mechanisms. Firstly, interlinked credit transactions effectively increase the cost of defaulting for the borrower, as he not only loses credit facilities but also forsakes any other dealings that he has with the lender. Secondly, by restricting loans to households with whom the lender has other interactions, he is assured of the borrower's type and can

---

<sup>5</sup> This model is dealt with in much greater detail in Chapter 3.

significantly reduce his chances of lending to a non-credit worthy household. Therefore, in a rural economy where the lender faces high risks of default, credit would only be offered as part of an interlinked deal so as to minimise the chances of loss. The savings that result from the lowered probability of loss means that the landlord gains from the transaction even if it is at market rates.

While Basu's (1983) argument makes analytical sense, the extent of its applicability is questionable when we consider the closed-knit nature of village societies. Here, not only is the household's 'type' well known due to its reputation in the village (Bell 1988), but the social and economic costs of defaulting are also extremely high as they tarnish the villager's reputation and impede him from obtaining credit in the future (Rao 1980, Sarap 1990). Therefore, even when loans are not secure, the chances of wilful default should be very low in rural society. Also, for households that do put up collateral, defaulting would result in their losing their pledged asset – possibly even all of it and not just the portion that covers the loan (Bhaduri 1973).<sup>6</sup> This should considerably reduce the landlord's risk.

Bell (1988), on the other hand, argues that landlords may interlink markets in an effort to curtail the moral hazard problem inherent in agriculture. The high costs involved in monitoring the agricultural worker create strong incentives for him to shirk. One way of reducing these incentives is to interlink markets. The example Bell uses is of a landlord who gives workers sowing the field exclusive rights to harvest them and a share of the output produced, thus tying their income to the effort they put in. Alternatively, the landlord may insist that the agricultural worker borrow only from him (Bhaduri 1973, Braverman and Srinivasan 1981, Braverman and Stiglitz 1982, Mitra 1983). Transactions are bundled with the intention of increasing the worker's cost of shirking, as his ability to repay the loan would depend on the total output he is able to harvest. Once again, the savings to the landlord by curtailing peasants' incentive to shirk means that the

---

<sup>6</sup> Bhaduri (1973) goes as far as to argue that the lender may keep the interest rate high enough to actually induce default, as then he is able to take control of the borrower's collateral.

transaction need not be conducted below market rates for him to benefit from the interlinkage. The benefits of these deals to the peasants, on the other hand, are questionable, particularly with regards to the extent of protection it affords them in times of crop failure. While Atchi Reddy (1996) has argued that, in the event of a bad harvest, the landlord forgoes some of the contractual claims on the peasant, Bhaduri (1973) claim that such an event may place the peasant deeper into the debt trap and may even result in him losing his collateral.

Interestingly, Bell (1988) argues that markets may be interlinked even when there are no market failures. The advantage he foresees in these interlinkages is their ability to minimise transaction costs, which can then be enjoyed as added surplus by one or both of the agents. This is illustrated by the example of a landlord who offers agricultural workers consumption loans during slack seasons, on the guarantee that they will work for him during peak seasons. By tying in workers early, the landlord not only reduces the uncertainty of labour availability during crunch periods, but also pre-determines the wage rate at which the work would be done. Thus, the greater the demand for labour in peak seasons, the higher will be the tendency of landlords to tie in labour through such interlinked contracts (Bardhan 1978). The wage rate negotiated in the contract may be lower than the marginal cost of labour in the spot market, but it need not be so. The benefits to the landlord from this deal are the search costs he saves and the lowered uncertainty from not having to frequent the spot market during peak seasons (Bell 1988). These saved costs are transformed into higher profits which would be split between the landlord and the worker, based on their relative bargaining position. This bargaining position, Bell argues, is determined by the opportunities each party has in unbundled transactions. Once again, the saving of transaction costs means that the landlord benefits from interlinkages even if he offers the worker the spot market wage rate and charges competitive interest rates.

While the various justifications for interlinkages can and are discussed in isolation for analytical purposes, in reality it is most likely a variety of reasons that lead to the interlinkage of markets (Bell 1988). Moreover, despite the variation in

explanations for why interlinkages arise, the one commonality, as explicitly stated by Ray and Sengupta (1991), is that interlinkages would only arise if the benefits to the landlord from the linked deal out-weigh the benefits from interacting in these markets independently. However, as this section has highlighted, while the benefits to landlords from linked deals can come through surplus extraction, this is not the only avenue available. In the presence of market imperfection, interlinkages offer the resource rich a means of lowering their costs by reducing uncertainty, and incentivizing peasants to increase their efforts. Which option the landlord chooses, depends not only on his preferences but also on the environment in which the relationship is cultivated. Thus when inequality is found to exist in isolated villages, the landholder can enjoy levels of control high enough to facilitate surplus extraction off the peasants, as they have few alternatives to turn to (Sarap 1991, Desai 1984). However, in the absence of either inequality or isolation, the exploitative nature of interlinked markets breaks down as the peasants would then have the option of walking away from the landlord's offer – either to their external options, if the village is not isolated, or to other service providers if there are multiple landowners. Thus in such an environment the landlord arguably no longer has the option to extract high surpluses and, therefore, has to maximise his benefits by lowering his costs of interacting in the rural economy.

## **2. Patron-Client Networks- A Lopsided Friendship**

Relationships based on inequality have also been analysed using the theory of patron-client networks. The patron-client relationship is described as an exchange relationship established between actors of unequal socio-economic status, cultivated due to necessity and mutual benefit. While this framework has been applied to exchange relationships at various levels of social interaction and in a wide variety of settings (see Eisenstadt and Roniger 1980 for an overview), the focus here is on rural agrarian societies and how the relationship plays out in the presence of inequality. In the rural economy clients consist of those villagers who

own few, if any, tangible assets (Hall 1974) and are under considerable threat from fluctuations in their environment; both natural (diseases, famines, accidents and deaths) and manmade (threats of violence, injustice and exclusion) (Powell 1970). In order to try and ameliorate these hazards, and to gain access to tangible income generating assets, clients approach a figure of authority to act as their 'patron'. The patron, on the other hand, is someone who has control of the village's income generating assets and has the resources necessary to provide peasants with protection from external threats (Scott and Kerkvliet 1977).

Thus a relationship of exchange is established where the patron provides his clients with goods and services pertaining to their material and physical well-being, and clients reciprocate by providing the patron guaranteed access to their labour – the main asset that they have control over – by providing social following and by agreeing to vote for the political candidate supported by the patron (Powell 1970, Scott 1972, Mason 1984, Eisenstadt and Roniger 1980, Foster 1963, Wolf 1966, Berman 1974). The benefits that the landlord derives from this exchange come not only in the economic market – in the form of guaranteed labour during cropping seasons – but also in the political sphere as the patron is able to use his clients' political support to negotiate with the local politician. By having control over the peasants' voting decisions, the patron is able to offer the politician a cluster of guaranteed votes in exchange for access to public resources, that are to be spent at the patron's discretion (Cheema and Mohmand 2004). While there are variations in the nature of the patron-client network, depending on the environment in which they are cultivated and the relative bargaining powers of the two parties (discussed later), Powell (1970) argues that there are certain aspects of the relationship which are considered necessary for it to be classified as a patron-client one. First and foremost, the relationship is based on inequality, both of wealth and influence. These relationships are often found in rural societies, where inequality results in a large number of households being either landless or having very small land holdings (Hall 1974). Thus, a major income generating asset in the economy is owned by a few individuals. Aside from economic inequality, land ownership also affords the holder considerable social authority that results in him

wielding considerable influence in the social and political sphere (Deininger and Binswanger 1999). Secondly, interaction in the network must be face-to-face as it is proximity that allows the relationship to be highly particularistic and individualised.

These particularised services provided by the patron are not done so out of the goodness of his heart, thus bringing us to the third defining feature of the relationship – reciprocity. Of course, given the unequal status of the two parties, reciprocity is by no means on a one to one basis. While the goods vary in value, Lande (1977) argues that what allows this exchange to be acceptable is the relative costs incurred by the provider for delivering these goods and services. He stipulates that, even though the patron's resources are extremely valuable to peasants, the costs to the patron for providing them are considerably low. Similarly, while the peasants' labour services are not too valuable, they enable the patron to reduce his costs and enhance his status. Moreover, as will be discussed in greater detail in Chapter 4, the political support of the clients is a valuable asset for the patron in his negotiations with local politicians. Therefore, as stated by Scott (1977), the lopsidedness of the relationship is not in question, as that is a given, rather, it is the degree of lopsidedness that matters, and it is that which determines the legitimacy of the relationship. As long as the relative value that each party places on what it provides, is lower than the value of what it receives, the exchange would be deemed fair and would perpetuate in the future (Scott and Kerkvliet 1977).

The actual rate at which goods and services are reciprocated is determined by the relative bargaining powers of the two parties. By definition, of course, the patron has the upper hand in this relationship as the needs of the clients tend to be vital, while those of the patron are desired, but by no means life threatening (Eisenstadt and Roniger 1980, Scott and Kerkvliet 1977). However, this is not to say that the patron does not value the services provided by the clients. As a collective, peasants are of great value to the patron. But individually the value, and thus the bargaining power, of each peasant is considerably low (Mason 1986). It is

dependent, to a large extent, on the needs the peasant aims to fulfil through the patron's resources and the number of other clients with whom he has to compete for patronage. Hence, the greater the inequality the stronger will be the patron's control and his ability to make high demands on his clients. Therefore, while landless peasants would be in a particularly precarious position vis-à-vis the patron – with the terms of the exchange possibly even approaching serfdom (Waterbury 1977) – landowning households would be considerably better off.

Moreover, bargaining power is also influenced by the number of alternative options available to peasants for satisfying their needs (Scott and Kerkvliet 1977). This could take the form of either additional patrons co-existing in the village, or peasants having the ability to pursue options outside the rural economy. While multiplicity of patrons should result in competition for the clients' following, thus leading to better terms for the peasants, access to outside markets should broaden the sphere from which peasants can extract benefits in exchange for their services. Thus isolation, like inequality, would also steer the network in a direction advantageous to the patron, thereby enabling him to increase his demands considerably without jeopardising the legitimacy of the relationship (Mason 1984). In addition, isolation can insulate the rural economy from government approach. This should further widen the scope and need for the patron's resources, as services such as dispute resolution, social security and basic public goods would be obtained through the patron rather than the state (Weingrod 1968, Scott 1969, Cheema, et al. 2007). Moreover, limited government presence may also enable the patron to indulge in activities which would otherwise be deemed illegal (Chabal and Daloz 1999). Therefore, as maintained by Mason (1984), when material exchange fails him, the landlord can resort to the use of force to exert his will on the peasants. Lastly, in isolated village economies, where the patron is the main conduit of communication with the outside world, Hall (1974) argues that social change would be very slow to come, thus resulting in the reproduction of these relationships of dependency.



According to Scott (1972), the extent of a patron's level of control could possibly be measured by the way the exchange relationship plays out, i.e. whether the patron uses the carrot or the stick to extract services from the clients. He argues that, when the patron has considerable power over his clients, the exchange would be based mostly on the threat of sanctions rather than the payout of rewards. These sanctions could be economic – entailing the termination of employment, eviction and/or refusal of credit. They could also be social in the form of social exclusion, or political with the patron using his alliance with the local politician to bar non-complying peasants from access to public resources (see for example Scott 1972, Mason 1986, Powell 1970). The perpetuity of this network would then depend on the patron maintaining his control established due to peasants' lacking other options. In contrast, a weaker patron, who is less confident about the resilience of his network, would maintain support through the disbursement of rewards or the promise of future rewards. In that case, the continuity of the network would depend largely on the patron's ability to come through on the promises made to the clients. Therefore, while the network of a powerful patron would be largely based on coercion, a patron whose clients had alternative options would have to establish a network which is arguably more beneficial for the clients and, at the very least, matches the value of their exit options. However, it is worth mentioning that, while the monopolistic patron may have considerable discretion regarding the setting of the terms of the exchange, there is a threshold below which the patron would stand to lose legitimacy, thus causing the patronage network to break down (Scott and Kerkvliet 1977). This threshold must, at least, provide peasants with guaranteed subsistence living and physical protection.

The resilience of the patron-client network would also depend on the motivation that drives reciprocity within it. Silverman (1977), based on her study in Central Italy, stipulates that peasants engage in the patronage network not only to satisfy their needs, but also out of a sense of loyalty and deference towards the patron. She bases this on her findings that peasants offered their best produce as gifts to their patron, or made available a family member to work in his house, or repaid his patronage by simply refraining from cheating him. However, whether this

displays selfless reciprocity is debatable, as it could be argued that peasants engage in these practices to gain better standing with the patron or to obtain more privileged access to his resources. Hall (1974), on the other hand, argues that the interaction in the patronage network is in fact one based on pure exchange, where every good and service provided is recorded and must be repaid. He claims that the voluntary nature of patron-client relationships is often overstated, as clients would quite willingly accept an offer to earn an income outside the traditional network. Scott (1972), taking a middle (and probably more realistic) stance, argues that peasants' motivation for reciprocating with the patron is most likely not homogenous across all households. He stipulates that peasants who share some extra traits with their patron, e.g. kinship or familial ties, are more likely to find their relationship to be based on traditional legitimacy, reinforced by feelings of affiliation, rather than feelings of material self-interest. This is contrasted with peasants who have no extra link with the patron and are likely to see the relationship as one of a pure exchange, where their intention would be to merely satisfy the terms of the relationship. The resilience of the network, when faced with change, would then depend on the ratio of the two types of clients in the relationship. If it consists largely of clients interacting based on material self interest, then the network would disintegrate fairly rapidly. On the contrary, if the network is composed largely of clients who feel some extra ties to the patron, then they are likely to stand loyally by his side when the village economy starts to change.

This discussion, regarding peasants' motivation for reciprocating in the exchange relationship, raises the question of whether these networks are merely a way for the resource rich to exercise power and extract benefits from the poor who have few other alternatives, or whether they do in fact have a functional aspect, particularly so for the clients who do not share any extra ties with the patron? While a number of authors have stipulated that patronage networks are also beneficial for the clients (Eisenstadt and Roniger 1980, Foster 1963, Wolf 1966), Stein (1984) argues otherwise by claiming that the functional aspect of the network is only present in the short run. A deeper analysis, he maintains, reveals

an inherent contradiction in the setup of the network, which is the continuity of the relationship being dependent on the existence of the very imbalance and stress that it is aiming to mitigate. The patron only benefits as long as the clients are dependent on him, due to which he has an incentive to perpetuate this dependency. However, the two purposes of the network – the patrons’ desire to exercise power and the clients’ need to find survival strategies – need not be mutually exclusive. In the presence of scarcity, patron-client networks enable peasants to assure their subsistence while simultaneously providing the patron with the opportunity to maximise his surplus. Therefore, as argued by Waterbury (1977), how this question is answered depends largely on what one’s ideological preferences are. For those who believe that egalitarian societies are achievable, both in terms of wealth and power, these networks would indeed be deemed exploitative and would be perceived as a way for the resource rich to subjugate the poor into a perpetual relationship of dependency. However he states that, for those who believe that inequality is inherent in society, patron-client networks may be seen as a ‘second-best’ solution for the poor to gain access to resources by linking themselves to the rich. This is particularly true when the state is largely absent in providing citizens with the goods and services necessary for ensuring their welfare and protection (Mason 1986). Bari et al (2005), looking at rural Pakistan, support this argument by asserting that, in the presence of state failure, patronage networks are an alternative means for poor citizens to gain privileged access to state resources.

Thus as with the case of interlinked markets, the patron-client network itself need not be exploitative or harmful for the peasants’ welfare. The ability of the patron to exercise power would depend, to a large extent, on the number of options peasants have for satisfying their needs. In villages which are secluded from the external economy and where land is mostly concentrated in the hands of a single landlord, the patron would have considerable discretion regarding the setting of the terms of exchange. Conversely, in villages where peasants have alternative options, the control of the patron would be fairly limited. Therefore, for those who perceive patronage networks as a second-best option in the presence of inequality,

policy recommendations would need to focus on altering the relative bargaining powers in favour of the poor, so as to reduce their vulnerability to exploitation and hence enhance the functional value of the network. However, before getting into a policy discussion, the next section highlights the relative similarity between the two frameworks used for studying inequality in agrarian societies.

### **3. Patron-Client Relationships and Interlinked Markets – Two Sides of the Same Coin?**

The two literatures surveyed above set out to understand exchange relationships that arise in the presence of inequality. The interlinkage literature frames this in terms of the resource holder dealing with the resource poor in multiple transactions, resulting in the outcomes of one market having an impact on another completely unrelated market. The patron-client framework, on the other hand, articulates this problem as the establishment of personalised, face-to-face exchanges over a number of transactions, occurring between individuals of unequal economic and social status. For both these frameworks, the rate at which goods and services are exchanged is determined by the relative bargaining power of the two parties which, by definition, is tilted in favour of the resource owner. Still, there is considerable variation that can take place regarding the size and nature of the bundles exchanged, depending on the setting in which the relationship is cultivated. Hence, while extreme power asymmetry resulting from the landlord's monopolistic control over resources allows him to set the equilibria price unilaterally (Mason 1986), those who face competition in any form have to alter the terms so as to align them with their competitors. However, both frameworks argue that the setup itself is not inherently exploitative, rather it is the environment in which it is cultivated that determines the impact it will have on peasants' welfare. In fact it is argued that, provided the right environment exists, these structures have a functional value that benefits both the resource holder and the poor by lowering transaction costs and giving each party access to resources they themselves do not have (Basu 1983, Bell 1988, Eisenstadt and Roniger 1980,

Foster 1963, Wolf 1966). Therefore, in the presence of inequality and state and market failures, these set-ups can be seen as second-best solutions meant to minimise costs and uncertainty.

The fact that there are two major frameworks developed to explain interaction in rural societies, in the presence of inequality, is by no means surprising. Given that they are both trying to explain social actions and human motivations, it would be unlikely to have one best way of approaching this (Waterbury 1977). Therefore, in this regard, each discipline applies its analytical tools in an effort to get a better understanding of the nature of interaction occurring under inequality. However, it is surprising that these two literatures have never been in dialogue, nor do they seem to acknowledge the work done by the other. As a result, authors have been treating these two frameworks as completely separate, thus approaching the problem of inequality in terms of one theory or the other, so that the two have developed parallel to one another rather than in consultation.

By surveying the two frameworks together, this chapter has tried to highlight the similarities between these structures and the outcomes they predict. However, I stipulate that, depending on how we define a market, we can go further than merely looking for similarities. If we broaden the definition of markets to include not only formal monetized exchange, but also informal non-monetized ones (Bardhan 1980), it can be argued that patronage networks too are a type of interlinked market, in which exchange takes place through face-to-face interaction between members of unequal economic and social status. Thus while all patron-client relationships are conducted in an interlinked market setting, interlinked exchange relationships that satisfy the conditions established by the patron-client literature, can also be classified as patron-client relationships.

Putting the two together then allows us to draw on both frameworks so as to get a more holistic analysis of rural exchange relationships, as each discipline has a different approach to the problem and has a different set of questions that it considers to be important for inquiry (Bardhan and Roy 2008). So, while

economists studying interlinkages are concerned with the market exchange that takes place within relationships with asymmetric power distribution and the effect it has on equilibria, the patron-client framework places focus on the intangible aspect of the exchange, existing in the form of the political support and social following that peasants offer their patron in return for his services. Moreover, while the former treat the exchange as a bargaining relationship where each party is out to maximise its own surplus, the patron-client literature argues that the exchange need not always be driven by a desire to maximise profit. Rather, it may also be influenced by traditions and customs that create a sense of loyalty and deference and thereby tie the peasant to the landlord, so that the interaction is more than a simple material calculation of profits. By placing the two sets of literature together, we are forced to consider that the motivating factor behind these exchange relationships may not be known a-priori, nor can we assume that they are homogenous across communities and across peasants. Moreover, given that both frameworks highlight the potential these set-ups have for improving peasant welfare, policy recommendations may be better served if, as a first attempt, they tried to alter the relative bargaining powers in rural society rather than trying to break these networks completely. Hence, the next section looks at some policies adopted over the years that do exactly that. The section starts with looking at land reforms which would in effect break patron-client networks and would arguably also reduce, if not eliminate, market interlinkages. The remainder of the section looks at policies which are more likely to change bargaining powers but still maintain the integrity of the set-up.

#### **4. Policy Measures to Restructure Incentives to Date**

One of the most extensive measures used to alter power relations in rural societies is through land reforms, which in its extreme form aims to redistribute land to the landless population. At a minimum, these reforms strive to strengthen tenant security by making the conditions for eviction more stringent and legislating an upper limit on the extent of rent that can be charged (see Lipton 2009 – see

particularly the appendix – for a detailed description of the various types of land reform policies enacted). As can be expected, each type of land reform affects rural households differently and has varying impacts on the household's relationship with the local landlord. For instance, redistribution provides poor households with ownership of a tangible asset which can be used not only to generate an income, but also to gain access to formal credit and insurance markets, thus enabling the household to be fairly independent of the patron for its economic needs. Land ownership should also have a beneficial effect on a household's social status due to the high social value attached to this asset (Deininger and Binswanger 1999). Lastly, Herring (2005) argues that land ownership also has a positive impact on a household's political participation as such households are more likely to be more active at demanding their rights. Also, since landowning households are less dependent on the patron, they are less likely to agree to vote according to his preferences and are more likely to demand some amount of return from the politician for their political support. Reforms that alter tenancy agreements, on the other hand, improve the households' security of tenure and help lower their costs, but it still leaves them dependent on the landlord for services such as credit and insurance. Nonetheless, even though the latter is not as extensive as the former, it does have the benefit of increasing tenants' bargaining power vis-à-vis the landlord as it takes away the explicit threat of eviction<sup>7</sup>.

The case in favour of land reforms can also be made on efficiency grounds which, of course, benefit the poor but also extend to the economy at large. Not only is it believed that family cultivators would be more efficient at managing the farm, but also, increased access to formal credit markets should incentivise these households to increase their level of investment, thus resulting in higher capital formation in the economy (Deininger and Binswanger 1999). Furthermore it is argued that, providing peasants with an income generating asset, would also increase the likelihood that they would invest in the development of their children through increased schooling and better health and nutritional outcomes (Banerjee

---

<sup>7</sup> Of course this does not bar landlords from using implicit forms of harassment to force tenants into leaving.

1999). Such investment should provide the future generation with stronger skill sets and thus lower their chances of having to establish unequal exchange relationships.

However, despite the benefits in terms of equity and efficiency, the success of land reform policies has been relatively limited. The problem, as highlighted by Radhakrishnan (1990), is that policies altering land ownership structures are a political rather than an economic decision. Thus, in order to be successful, they must be backed by a state that has the political will needed to change land holding patterns and the resultant power structure in the rural economy (Barraclough 1999). However, such political will has not always been present as politicians have either been large land owners themselves, or have their support base strongly embedded in the landed elite (Zaidi 1999, Hussain 1989). As a result, countries have tended to enact land reforms without proper implementation, leading to land owners circumventing land confiscation and thus preserving their land holding. For instance Ahmed (1977), looking at Pakistan, found that in some ways land reforms made peasants worse off as landlords evicted tenants and shifted to owner-cultivation in an effort to maintain their estates. Hence, for the landless households the effect of land reforms was an increase in insecurity as it converted them from tenants to casual agricultural labourers.

Countries which have been successful in altering the land tenure system have done so while taking advantage of some extraordinary circumstances. These range from a communist revolution as in the case of China, which drew its support from rural peasants, to external intervention as in the case of Japan, Korea and Taiwan (see Dorner and Thiesenhusen 1990 for an overview of land reforms in East and Southeast Asian countries) to strong political mobilization of the poor as in the case of Kerala (See Herring 1983 Chapters 6 and 7 for a detailed account of the process that led to land reforms in Kerala. See also Herring and Edwards 1983, Balakrishnan 1999, Radhakrishnan 1981). The success in each case was largely due to a state (through internal or external pressure) strongly motivated to change land ownership patterns.



Nonetheless, despite the success in the above mentioned and other countries, the last few decades have seen such redistributive policies fall off mainstream agendas to the extent that some have argued that land reforms are either dead as a policy option, or are in effect politically impossible. In this context Herring (2005) highlight how there has been a shift in emphasis from redistribution to economic growth, so as to benefit the poor by increasing the size of the pie. However, the extent to which increased growth benefits the poor can be debated, as it is stipulated that the benefits of growth tend to be more evenly spread in egalitarian societies (World Bank 2006, Hussain 2008). However, in the presence of inequality, it is quite likely that these fruits of growth would be captured by the resource rich thus perpetuating inequality. Therefore, it is still important to keep land reforms at the forefront of the policy agenda. Lipton (2009, see Chapter 7) argues in favour of this by stating that, even in countries where land reforms have popularly been viewed as failures, a certain amount of land has been redistributed causing land inequality to be lowered to some extent.<sup>8</sup> Lipton (2009, see Chapter 6) also states that new waves of land reforms – those which are less confiscatory in nature – are still quite popular amongst governments and donor agencies, thus making it premature to call land reforms dead. Herring (2005), taking a similar line of argument states that, before burying land reforms, it should be considered that there are always new opportunities arising which can be exploited for redistributive purposes. For instance, he gives the example of Columbia where the agricultural minister in 1996 was hopeful of redistributing assets captured from drug dealers amongst the rural poor. Moreover he finds that land reform policies, unsuccessfully implemented in the past, can mobilise future generations to claim the promises made to their fathers and grandfathers, thus resulting in redistribution. Such claims were made in the 1990s in the southern part of the United States by the descendents of freed slaves who had been promised land redistribution but never received it.

---

<sup>8</sup> This optimistic view has to be weighed against the cost faced by tenants who are evicted by landlords trying to circumvent land confiscation (See Ahmed 1977).

When successful, land reforms have the potential to alter the power structure in rural societies and can significantly benefit the poor – not only by lowering their dependence on the landlord for generating a livelihood, but also by increasing their economic, social and political status (Deininger and Binswanger 1999, Barraclough 1999, Ghai et al 1979). However, for land reforms to be truly beneficial, they need to be accompanied by a number of additional services such as credit, insurance and access to markets, to fully benefit the poor. Deininger and Binswanger (1999), Dorner and Thiesenhusen (1990) and Barraclough (1999) all find that landless households, which were given ownership of land, often found themselves unable to run the farms effectively due to the absence of credit. As a result they ended up selling the land as it did not meet their subsistence needs. Moreover, while reforms that transfer ownership to tenants change little in terms of the management of the fields, those that distribute land to landless agricultural workers puts the responsibility of managing farms on to households who have no prior experience of doing so. Therefore, it is questionable whether they would have the skills and capacity needed to do this (FAO 2003). Thus, for land redistribution to be truly beneficial for the recipient household, it must be accompanied by auxiliary services such as credit, insurance, physical infrastructure and possibly also training programs on how to manage and run farms.

Aside from land reforms, governments have also made other attempts to increase the welfare of poor households. One such effort has been the instituting of micro-finance programs to cater for poor households (both landless and small landowners) need for credit. The idea behind these programs is to provide the poor with small loans that can be used to set up micro-enterprises, or invest on their fields. These investments, it is hoped, should enable poor households to establish a reliable and steady source of income that can possibly pull them out of poverty. Moreover, these programs also strive to reduce the poor households' need to approach informal moneylenders and local landlords so as to prevent them from falling prey to exploitatively high interest debt traps (Marcus et al 1999). The benefits of these programs for poor households can arguably be of two types;

to reduce poverty, or to reduce the households' level of vulnerability (Zaman 2000). While the former aims to increase the level of the households' income, the latter attempts to keep them from falling deeper into poverty by smoothing their consumption, providing them with emergency funds and helping them to engage in activities that can earn them a small income. Zaman (2000) asserts that, while there is clear evidence of micro-credit having beneficial impacts on the households' state of vulnerability (see also Hashemi et al 1996, Montgomery et al 1996, Hussain et al 2004), the evidence on poverty reduction is fairly mixed. He claims that this may be because of their being a threshold level for loan sizes, below which households are unable to invest in activities that could increase their income levels. Moreover, the highly fungible nature of money means that it is not uncommon for poor households to use these loans for consumption purposes (Hulme and Mosley 1996) – which in any case tends to be a more pressing requirement for poor households (Mahajan and Ramala 1996, Marcus et al 1999) – rather than investments. Furthermore, as argued by Wright (2000) micro-credit loans, by themselves, may not lead to increased productive activities. It is his contention that, for this to happen, the households need to be exposed to an environment conducive to entrepreneurship. Amongst other things, this requires them to have access to a market large enough to absorb the goods and services that they sell. In rural economies, which are isolated from the external market, this becomes very difficult. As argued by Khan (2009), in the case of rural Pakistan, where women were given small loans to set up businesses, the skills possessed by most borrowers were that of tailoring. However, the village market was not large enough to provide the demand necessary for multiple households to set up such enterprises. Therefore, in isolated semi-autarkic rural economies, micro-credit may at best be able to only reduce households' vulnerability – particularly for those engaged in agriculture. However, within this setting it may have only a limited effect on reducing poverty and the unequal exchange relationships that the poor inevitably tend to engage in.

Furthermore, for micro-credit to be able to fulfil its goal of reducing poverty it needs to be accessible to the poor in general, and to the extremely poor in

particular. Evidence on the accessibility of these micro-credit institutions is found to be fairly mixed, with the more optimistic studies finding these programs successfully reaching the poor, and the relatively pessimistic ones highlighting the extent of leakages and elite capture. For instance, Van de Ruit et al (2001) looking at South Africa, found that in the case of targeted micro-credit programs 52% of the client households belonged to the poorest category, while 9% came from the least poor group. However, in the case of non-targeted programs, the majority were found to come from the least poor category. On the other hand, studies that are more pessimistic regarding the benefits of micro-credit, argue that leakages in micro-credit programs have caused loans to be skewed away from the poor and have been captured by households who could otherwise afford non-subsidised market based loans (Seibel 1994). However, a common finding amongst researchers is that, while these programs do tend to reach poor households, they are generally inaccessible to the poorest of the poor. For instance, Navajas et al (2000) found that, while the five leading micro finance institutions in Bolivia lent to 52000 borrowers in rural areas, only 8.65% of these came from the poorest households. Furthermore, Sebstad and Cohen (2000) in their synthesis of a number of empirical studies concluded that, while destitute households do not have access to micro-credit programs, most of the clients of these schemes are either moderately poor households or vulnerable but non-poor households. Thus, while the segment reached by these schemes may not comprise the extremely poor households, they are mostly households which are not affluent and are in need of subsidised financial assistance.

Aside from capture, the benefits to poor households of micro-credit have been documented to be limited due to either micro-finance institutions discriminating against them – either directly or indirectly – or due to poor households themselves opting not to participate. Hashemi and Rosenberg (2006) argue that many micro finance institutions, in their desire to stay financially viable and thus reduce the probability of default, tend to favour those households who have some source of income aside from the loan. This condition often excludes the poorest of the poor. Moreover, since most institutions rely on the group lending strategy, again to

minimise the risk of default, this too may act as a barrier to entry for extremely poor households, as other members may not want to act as a guarantee for them due to their being a high default risk (Khan 2009). In addition, households which are socially excluded and marginalised may also find it difficult to gain membership into groups for the purpose of borrowing. On the demand side, interestingly, Dunford and Denman (2000) argue that conditions such as small loan sizes, high interest rates, short repayment schedules etc disincentivize poor households from approaching these institutions. Also, poor households, who lack an income source, may be hesitant to take these loans out of the fear of defaulting (Khan 2009). In fact Hashmi and Rosenberg (2006) go a step further and argue that extremely poor households may avoid such loans out of fear that they will get embroiled in a debt trap. Therefore, whether due to a choice made by the household based on its financial status, or due to external constraints barring them, households which are most vulnerable in rural society and most in need of formal credit facilities for breaking out of exploitative debt relationships, are least likely to receive them.

An alternative policy tool that has received considerable attention over the last ten years, particularly in Latin America, is cash transfers. These have been given out both unconditionally (e.g. old age pensions in India) and conditionally (e.g. cash transfers in exchange for children's school attendance in Mexico). The aim of this policy tool is to provide poor households with a steady flow of income that helps them to both increase and smooth out consumption. Unlike micro-finance, these cash transfers do not have to be repaid and thus do not impose the same constraints upon poor households. However, up until recently, cash transfers were relatively unpopular amongst governments and donor agencies as it was feared that cash would be more susceptible to corruption and elite capture when compared to in-kind transfers (Harvey et al 2006). Also, there was the concern that providing poor households with cash may result in it being misused (for drinking or gambling). Therefore, it was felt that the poor could be better served by directly providing them with the goods beneficial to their welfare (Farrington and Slater 2006, Gelan 2006). However, recent experiences with in-kind and cash

transfers have demonstrated that the above mentioned bias may in fact be ill-founded. This claim is made, not only on the findings that in-kind transfers too are prone to corruption (Deshingkar et al 2005, Farrington et al 2006), but also that cash transfers are more efficient and can have a greater impact on poverty alleviation, as they have fewer administrative costs associated with them (Gelan 2006). In-kind aid, on the other hand, has costs such as storage and transferring attached to it, making it much more costly to provide to poor households. Lastly, contrary to the argument that cash would be misused, it has been proposed that cash transfers may be better as they give the household the flexibility to procure the type and quality of goods and services that they want to consume (Chirwa et al 2002). In particular, cash transfers have the benefit of reducing poor households' need for credit, thus reducing their dependence on the resource rich and their chances of falling into debt-traps like those described in Section One. As a result cash transfers should enable poor households to keep their credit activities independent of all other markets, particularly their labour market.

Aside from their direct effect on consumption, cash transfers have also been used by governments to incentivise poor households to undertake activities that can lead to improved human development indicators. This has been used particularly in Mexico and Brazil, where governments have given poor households cash in return for sending their children to school and having regular health checks (See Handa and Davis 2006 for an overview of conditional cash transfer programs in Latin America and the Caribbean). Faguet and Shami (2008) find that targeting in conditional cash transfer schemes has been fairly successful – particularly in Mexico – not only because of the target group being easily identifiable, but also due to there been a social stigma attached to rich households accepting these transfers. Hence, aside from lowering poor households' dependence on the resource rich, such transfers also equip poor children with better skill sets that could help pull them out of poverty in the future – thus reducing the likelihood of them engaging in unequal exchange relationships.

However, despite Latin America's success with conditionalities, their feasibility needs to be evaluated carefully as some countries may not have the capacity to provide the services that these transfers are conditioned on. Schubert and Slater (2006) find that in the case of education in Africa, the constraint to child attendance is not always unwillingness on the part of the parents, but rather is due to teacher absenteeism and the fact that the school is more than an hour's walk away. Schubert and Slater also argue that, a further drawback of conditionalities is that it may take the focus away from poverty reduction and place it more on the condition itself. In fact the emphasis may fall so strongly on increasing poor households' demand for certain services – such as health and education – that little attention may be paid to the quality and adequacy of the services in place.

Thus, as an alternative, some governments have relied on unconditional transfers to households that have limited alternative means of earning an income. These include programs such as old age pensions in India (see Farrington et al 2003 for details), social cash transfers in Zambia (see Schubert and Goldberg 2004) and income stipends through a charity tax in Pakistan (see Gazdar 2009). However, even though these programs are solely focused on reducing poverty, they have not always been able to achieve this goal. This is largely due to developing countries lacking the capacity to implement such programs. For instance, in the case of Ethiopia, Kebede (2006) found that district level governments often lacked the ability and the machinery needed to handle and distribute cash to the poor, but were quite well equipped to distribute food. Furthermore, Kakwani, Saores and Son (2005), using a simulation model based on 15 African countries argued that, in order for cash transfers to help reduce poverty, the extent of the transfer would have to be fairly large which would thus place considerable strain on governments' budgets. Also, as with the case of micro-finance, Farrington and Slater (2006) argue that for cash transfers to be effective in helping households to pull themselves out of poverty, they need to be accompanied by a number of auxiliary goods and services, such as access to external markets and road networks, that help apply the cash to profitable and productive activities. In the absence of such goods and services, these cash transfers may have a limited

impact on a household's ability to pull itself out of poverty and could result in the perpetuation of unequal relationships of dependency.

Aside from budgetary constraints, these programs have also been criticized for having no, or limited, productive value and may even disincentivize households from working. In line with this concern, a number of transfer schemes come in the form of employment on rural infrastructural projects (Farrington and Slater 2006). The benefits of such schemes are arguably two-fold. Firstly, and foremost, they provide poor vulnerable households with employment, thus reducing their economic dependence on others for generating an income. This reduction of households' vulnerability has made these programs particularly popular in times of drought and financial crises, as they provide households in distress with a means of stabilizing their income (Chirwa et al 2002). Secondly, these schemes come with the additional benefit of supplying the rural economy with a public good that has advantages for the economy at large (Ravallion 1991). Herring and Edwards (1983), looking at Maharashtra's employment guarantee scheme, argue that it was the presence of the latter benefit that enabled the scheme to be passed through the legislative assembly, despite the assembly being populated by large landowners.

The advantage of these schemes, over cash transfers, is also found in their improved targeting mechanisms that make them more likely to reach the poor. This is due to the scheme allowing poor households to self select themselves into the program, thus reducing the need for information which in any case is difficult to collect accurately from rural areas in developing countries (Ravallion 1991). In order to reach the poor effectively, the main job of the administration is to ensure that wage rates are not above the minimum wage (or market wage rate if that is lower), as the requirement for fairly menial unskilled work acts as a disincentive for non-poor households to participate (Ravallion (1991). Teklu and Asefa (1999) found this to be the case in Botswana and Kenya, where the majority of the participants came from the poorest category – particularly in poorer regions where there were few other options for employment. Similarly, in India the employment



guarantee schemes were found to benefit a vast majority of the rural population by guaranteeing them employment (Shah and Mehta 2008, Herring and Edwards 1983 World Bank 1990). However, while the low wage rate acts as a deterrent against leakages, it has the disadvantage of minimizing the effect that the program has on poverty reduction (Chirwa et al 2002). Nonetheless, these employment programs do have the benefit of preventing poor households from falling deeper into poverty. Moreover, the presence of guaranteed employment, even if only for a certain number of days a year, should act as a viable alternative for poor households and should thus place restrictions on the extent to which landlords can extract surpluses from their exchange with the peasants. In fact Gaiha (1997), analysing the impact of Maharashtra's employment guarantee scheme, found that it had a positive impact on agricultural wages by raising the rate by 18%. This was not only due to the increase in demand for labour, all year round, but also due to the increased bargaining power that it gave to peasants as a collective.

Furthermore, if timed properly, these programs have the potential of having a strong stabilizing effect on the income of poor households. In the case of India for example, Subbaro (1997) notes that because these programs coincided with slack seasons, the rural poor were able to rely on them for seeing them through to the next cropping cycle. Ravallion (1991), in his study of rural households in India found that landless households, residing in villages that had rural works schemes, experienced 50% less variation in their income when compared to landless households living in villages without these schemes. The financial benefits to the households came not only in the form of income during slack seasons, but also in terms of search costs saved by not having to go looking for jobs (Teklu and Asefa 1999). This financial boost should also have had the added advantage of reducing the households' need for getting consumption loans to see them through the slow months (Ravallion 1991). However, not all programs were designed to provide employment in slack seasons as Teklu (1994) found in Kenya and Tanzania. There these schemes ran through high labour demand seasons, thus limiting the benefits to rural households. However, before condemning these programs for having limited welfare effects, it is worth considering that their benefits may have

been more indirect as they may have provided poor households with an alternative form of employment that they could have used as a bargaining chip against the local landlord. Unfortunately Teklu does not explore this possibility.

Moreover, despite the potential benefits that these schemes have for the poor, they are not immune to corruption and elite capture. For example, in India, weak accountability enabled records to be distorted to show employment levels higher than they actually were. Farrington et al (2003) noted that, as a result of these false claims of employment, the poor workers got only Rs. 10-15 as wages as opposed to the intended Rs. 60. The rest was appropriated by bureaucrats and politicians. Furthermore, Herring and Edwards (1983) found that the flexibility regarding the placement of projects allowed politicians to ration them out to local patrons, in exchange for their political support. The latter then used it as a tool for strengthening their legitimacy with their clients. Hence, instead of these jobs acting as alternatives to the patron, they became another resource for which the peasants had to depend on their patron.

While this review is far from exhaustive, it is sufficient to highlight the extent to which the success of policies aimed at altering levels of inequality has varied in developing countries. We find that even though some governments have been able to successfully target the poor (e.g. conditional cash transfers in Mexico and rural works programs in India), some have still faced significant barriers which have prevented them from benefitting fully from these strategies (for instance, ill-timed rural works programs, or patrons lobbying to have schemes channelled through them so as to strengthen their patronage network). As a result of these limitations many of these poverty alleviating schemes have not been effective at altering bargaining powers in rural societies. The problems, as the review has highlighted, were two interrelated ones. Firstly, the implementation of these policies, is likely to impose high costs on the land owning elite – either directly in the case of land reforms or indirectly due to the restructuring of relative bargaining powers. Thus they are likely to face resistance from the landed elite. Secondly, some of the policy options create incentives and opportunities for elite capture, resulting in the

benefits flowing to the rich rather than to the resource poor. Either ways, whether due to elite evasion or elite capture, the effects of redistributive policies in many areas have been fairly limited in terms of poverty alleviation, and thus are unlikely to have altered the relative bargaining powers in those rural societies. Therefore, there are grounds for proposing an alternative approach to altering power dynamics in rural societies – one that can improve the welfare of the poor. In this vein the next section calls for a shift in policy focus, at least in the short to medium term, from redistribution to improving connectivity – thus increasing peasants’ ability to walk away from a deal they may deem detrimental to their welfare.

## **5. An Alternative Approach – Connectivity**

This section extends a slightly un-orthodox policy tool to help alter the relative bargaining powers within unequal exchange relationships. Instead of focusing on inequality and resource distribution, this alternative aims to target the environment in which the relationship plays out. As was argued earlier, these exchange relationships, even with their requirement for inequality, in and of themselves need not be detrimental to peasants’ welfare. In fact, in line with Waterbury’s (1977) argument, given the right setting, these relationships can even be seen as second-best solutions in the presence of state and market failures. However, what does make them exploitative is when they are the peasants’ sole means of satisfying their needs; in which case the peasants’ opportunity cost of interacting with the landlord is starvation. As argued in Sections 1 and 2, such conditions only arise when inequality is interacted with isolation. Within such a setting the landlord has considerable scope for surplus extraction, as any deal which offers terms above starvation make the peasants better off. Therefore, I propose analysing policy options that help increase the peasants’ opportunity cost by providing them with access to alternative options. While there are a number of ways in which peasants can be provided with outside options, this thesis explores

the effect of connectivity through road networks,<sup>9</sup> on exchange relationships cultivated in previously isolated rural economies. The main strength of this policy, in my perception, is that aside from creating external opportunities for peasants, it also benefits the local landowners by both increasing the value of their property and by making the external market more accessible for them as well. As Herring and Edwards (1983) found in the case of Maharashtra's employment guarantee scheme, the presence of benefits extended to the landed elite makes it less likely for them to oppose such policies. Moreover, the benefits of this policy are by no means confined to the rural economy, rather they extend to traders, merchants, businessmen etc, as it provides the economy with basic physical infrastructure.

Once implemented, by far the greatest and most direct effect of connectivity would be to increase peasants' access to new labour markets. These can potentially be found at three levels. At the highest level connectivity may make it possible for peasants to participate in the external labour market through migration to urban centres. The extent to which they can exercise this option is, of course, dependent on the number of employment opportunities available in the external economy for unskilled workers (Platteau 1995) and their access to the initial capital needed to migrate. For households that lack the resources to migrate to major urban centres there may also be the option of commuting to nearby towns and cities, thus reducing the costs associated with seeking new employment. Lastly, for peasants who are unable to either migrate or commute to the external market, there is the option of engaging in new employment opportunities created by the increased traffic that now passes to and through the village itself. These are arguably of two types. Peasants can either take advantage of the increased motor traffic by setting up what Epstein (1962) termed as "hotelu" (p. 32) – small shops that service passing traffic – or they can take advantage of the reduced transport costs that come with road improvement (Songco 2002) and begin exporting goods to the outside market. Each of the three options for market participation implies

---

<sup>9</sup> Connectivity could also come about through telephone connections or access to computers and the internet, though this would require levels of literacy and education which are rarely present in many rural societies.

differing levels of independence for the peasant and thus have different welfare implications. However, at the very least, all three should increase the opportunity cost of peasants' labour require a re-evaluation of the terms of exchange as, in its old form, the cost of what the peasants offer in the relationship may now exceed the benefits they receive from the interaction. Furthermore, the availability of alternative options should, to a large extent, reduce the landowner's ability to impose economic sanctions on non-complying peasants, thus resulting in a reduction in his level of control.

The fall in the landlord's ability to impose economic sanctions should also have spill over effects in the social and political spheres. In particular, the landlord may no longer have the ability to threaten to ostracize a non-complying peasant. The absence of strong economic sanctions would make it fairly difficult for the patron to coerce peasants to cut off a fellow villager for an activity which is independent of everyone except the landlord and the defiant peasant (Blok 1974, Wingrod and Morin 1971). Furthermore, an increase in outside options should reduce the level of competition between peasants for the patron's resources, as any need not satisfied through the patron can now potentially be serviced in the external market. While the extent to which this pressure is reduced would depend on the number of opportunities created through connectivity, even in its minimalist form it should still make peasants better off than when they were residing in an isolated village economy dominated by a large patron. This, aside from decreasing the peasants' dependence on the patron, should also help improve their horizontal ties with fellow villagers. The improved cohesiveness of peasants' horizontal networks, as will be discussed in Chapter 5, should make it more possible for peasants to engage in collective action for the purpose of self provision, thus further lowering their dependence on the landlord. Lastly, connectivity should also have a positive impact on the peasants' level of awareness. This should come about, not only through an increase in access to newspapers, but also due to increased contact with outsiders who bring with them news about the external economy. Amongst other things, this increased level of awareness should make it harder for politicians and patrons to ignore the peasants in their public spending

decisions. As will be discussed in Chapter 4, it is well established in the literature that informed citizens are better able to exert pressure on public officials in order to increase their level of responsiveness (see for example Prat and Strömberg 2006, Besley et. al. 2002, Besley and Burgess 2000, Olsen 1982). Therefore, peasants in connected villages should see higher levels of public spending being diverted towards their needs.

The landlord has limited ability to bar villagers from participating in these new opportunities, as it would entail erecting a barrier on the road network to restrict traffic (and external traders) from coming to the village. The costs of doing this would be prohibitively high. Alternatively, resource owners could make use of violence to bar peasants from participating in the newly available market opportunities. However, besides its legal implications, this too would be a costly option as it would lead to a loss of peasant loyalty in an environment where peasants are valuable, at the very least, for their political support (Scott 1972). Therefore, the landlord would be left with no choice but to compete with the peasants' alternative options by altering the terms of the exchange in favour of the peasants so as to maintain the integrity of the relationship. His incentives for doing this could arguably be three-fold. First and foremost, the political services provided by the peasants are important to the patron, as they place him in a position of influence vis-à-vis the local politician.<sup>10</sup> Besides increasing the patron's authority in rural society, this influence enables him to appropriate public resources for his own private benefit (Mason and Joshi 2008, Powell 1970, Keefer 2004, Scott and Kerkvliet 1977). Therefore, the patron would have an incentive to maintain his clientelist following in order to continue enjoying access to public resources. Secondly, if the peasants were to choose to break out of the clientelist relationship, the landlord would lose his supply of guaranteed labour during peak seasons, and would then face the uncertainty of having to frequent the spot labour market. Therefore, when deciding whether to alter the balance of exchange, the

---

<sup>10</sup> The more votes that the patron controls, the more politicians would be inclined to align with him.

patron would need to factor in the benefits of his clients' labour supply, albeit now at market wages. This would have to be weighed against the potential losses that would accrue if he were unable to secure the needed workers at the required time, or the cost of hiring alternative labourers, which would include the added risk of their shirking as these workers would have no ties to the village or the landlord. Lastly, as the patron enjoys a high status in rural society due to the size of his clientelist following. This too would have to factor into his decision of whether or not to alter the balance of exchange.

In fact it can be argued that, in the presence of alternative options, it is now the peasants who can sanction the patron if he behaves in a manner they deem detrimental to their welfare.<sup>11</sup> These sanctions could be economic, by choosing to work in the market rather than for the patron, or political by not agreeing to vote for the candidate supported by the patron (especially one that does not channel public spending towards them), or social by choosing to withdraw from the clientelist network completely. The outcome would then be a change in the relative prices of the goods and services being exchanged within the network. While the value of the clients' time and support should go up in accordance with their increased opportunity cost, the patron's resources, when placed in competition with alternative forms of provision, would lose most of the monopolistic value they enjoyed under isolation (Michie 1981). According to Scott and Kerkvliet (1977) such a change should cause the legitimacy of the patron, and thus the integrity of the patron-client network, to come into question, as the network is only deemed legitimate as long as the inequality of the exchange is maintained, i.e. the value of the goods and services given by the patron exceeds those that the clients offer in return.

Provided the exchange is not exploitative, peasants too have an incentive to maintain their relationship with the patron. This is largely due to the costs

---

<sup>11</sup> Of course, this is dependent on the extent of opportunities available in the external market (Platteau 1995) and the household being willing to take the risk of leaving the patron.

associated with pursuing external options. These could be set-up costs, such as moving costs if the household is migrating, travel costs if the household is commuting, or the costs of establishing new customers if the household is pursuing new options found within the village. There could also be learning costs, as peasants have to acquire new skills and learn how to establish and integrate into a new network without their patron. Finally, there are costs due to uncertainty, as peasants may be venturing into a labour market about which they have little information.

The overall effect of connectivity then, is to give peasants the ability to walk away from an exchange that lowers their overall welfare. When looking at pre-colonial Southeast Asia, Scott (1972) found that the availability of unclaimed land gave peasants the option of leaving the local landlord if the exchange became too exploitative. While this move was not costless, it was still cheaper than a relationship of extreme exploitation. Connectivity, through road networks, should have a similar effect, as it gives peasants the freedom to leave the patron when the costs of interaction exceed the costs of pursuing alternative options. Once connected to the external market, the only way for landlords to sustain the patronage network would be to change the balance of exchange to reflect the change in the relative prices of the goods and services exchanged.

However, before concluding it must be stressed that the extent to which peasants benefit from connectivity depends not only on the level of demand in the urban labour market, but also on the nature of this market. There is a rich literature that documents high levels of exploitation of workers in the cities, through debt bondage. These workers tend to be employed in brick kilns and carpet factories situated in, or around, major cities. So despite being surrounded by road networks, these bonded workers have limited freedom to pursue alternatives (Ercelawn and Nauman 2004). Through a combination of high interest loans, psychological abuse, and physical violence (or the threat thereof), factory owners are able to limit workers exit options and can thus force them into subservience (ILO 2004, Churchill and Guérin 2004). Therefore, employment in urban markets does not



guarantee freedom from exploitation, so for peasants to take advantage of connectivity they would still need to steer clear of options that tie them into relationships of bondage.

In order to test the feasibility of the proposed hypothesis I make use of a natural experiment found in the construction of a motorway in Pakistan. This motorway passes through villages which were previously isolated from the external economy. Moreover, most of these villages also have high levels of inequality whereby most of the village land is often owned by one or two big landlords. As a result, prior to the construction of the motorway, the peasants were highly dependent on monopolistic landlords. However, connectivity has changed this by forcing the landlords to compete with peasants' new options found in the market place. The next chapter explains the motivation for situating this study in Pakistan, along with a brief description of its socio-economic and political structure. The chapter also explains the details of the natural experiment, the case villages chosen and the empirical questions investigated during the field study.

## **2. The Political Economy of Rural Pakistan**

Pakistan is a country plagued by high levels of inequality, particularly in its land distribution. Land distribution in Pakistan was historically determined by the British State and its revenue collecting machinery, and varied by the mandate of the state at the time of allotment. At times this allotment was found to be largely coincidental: for instance, in the early waves of settlement in the Punjab – the largest agricultural region in the country – the British administration was faced with the perplexing problem of no one claiming rights to village land, as some villagers found the burden of revenue payable to the state outweighing the benefits of land rent. Therefore, those who successfully claimed ownership of the land – be it for a portion of the village land or for the entire village – were granted allocation by a willing administration (Nelson 2011; see also Ali 1988, 1994). Although the British left South Asia in 1947, the pattern of land distribution has remained relatively unchanged, with large land holdings continuing to be held by a relatively few big landowners. Since independence the Pakistani state has made multiple attempts at land reforms. However, these have all been in vain as landlords have used their influence to circumvent surrendering their large landholdings. As a result, according to Anwar et al (2004), 68% of the rural population in Pakistan in 2002 was landless. This landlessness, they argue, is a major contributor towards a household being poor, which is evident from their finding that 41% of the landless population lived below the poverty line.

Aside from land reforms, the state has also made attempts to institute various forms of poverty reducing strategies meant to increase the welfare of the poor, but corruption, combined with badly designed mechanisms for identifying and targeting the poor, has resulted in these too having a limited effect. Further, to

make matters worse, the state has largely been unable to provide its citizens – particularly in rural areas – with essential public services, thereby resulting in them suffering from poor social indicators (Chaudry 2003, Easterly 2003). Hence, in the absence of formal mechanisms that help provide for and protect the poor, the latter have had to find alternative sources for satisfying their needs. Often, this has resulted in their creating alliances with the resource rich, thus leading to the establishment of patron-client relationships quite similar to those described in Chapter 1. The resource rich provide services such as employment, housing, credit and social protection, while the poor reciprocate by providing a guaranteed supply of cheap labour, social following and political support. Moreover, as argued in Chapter 1, the terms of the exchange vary considerably depending on the relative bargaining powers of the two parties. Hussain et al (2004), doing research in 8 poor communities across Pakistan, found that the daily wage rate that rural households were paid by the landlord varied considerably depending on the household's economic status. So, while relatively well off households received the market rate, those economically worse off were paid a considerably lower wage for the same services. Their findings illustrate how the households' dependence on the landlord, due to a lack of any alternative options for provision, made them highly vulnerable to exploitation. As will be argued, the limitation of peasants' outside options was not only because of the state being largely absent and them not owning any tangible assets, but also due to the relatively closed and isolated nature of many Pakistani villages, that restrict peasants to the village economy and its resources for satisfying their needs. Isolation in these villages is largely driven by two interconnected factors; high levels of poverty and poor infrastructure. While poverty confines most poor peasants to the village economy, as the cost of the journey to the market is prohibitive, poor infrastructure makes travelling to these villages difficult thereby keeping traders out (Rouse 1988 pg 836). Hence, when peasants are not only landless but also isolated, they have few options other than to approach the resource rich for satisfying their most basic needs. Therefore, given the urgency, and thus inelasticity, of peasants' demands, they have very low bargaining power.

The presence of inequality, combined with the existence of patron-client networks, makes Pakistan a good case study for analysing policies which would alter bargaining powers in the rural economy. What further makes Pakistan a good choice for this study, is a natural experiment found in the construction of a motorway in 1998, connecting Lahore – a major cosmopolitan city – to the country's capital, Islamabad. Along the 365 km of the road there are multiple exits, each of which has a link road connecting the motorway to the nearest city/town. These link roads run past villages which were previously connected only by dirt trails, thus minimizing traffic and restricting peasant mobility. The construction of this motorway enables us to test the viability of the solution proposed in Chapter 1, i.e. to gauge whether, providing peasants with alternative options, results in a change in their bargaining power vis-à-vis the patron to the extent that the relationship ceases to be exploitative, and becomes one which performs a functional role for both patrons and their clients. The aim of this chapter therefore, is to give a brief overview of the inequality that exists in Pakistan, highlighting how state efforts to reduce it have largely failed to have a significant impact, thus creating a need for alternative, and possibly unorthodox, policy measures to help bring about change. In this vein, the chapter explores the possibility of exploiting the natural experiment found in the construction of the motorway, to gauge whether connectivity does in fact change bargaining powers in favour of the rural poor.

The remainder of the chapter is organised as follows. Section 1 gives a brief overview of the level of inequality in rural Pakistan and surveys the relatively scarce literature on rural Pakistan to analyse the coping strategies adopted by poor households. While the section finds that households have multiple informal institutions they can rely on, focus is placed on the role of patron-client networks. The section illustrates the extreme disadvantage that poor households face at the hands of the local landlord due to their having no alternative, aside from him, for satisfying their needs. Amongst other things, the section also illustrates that the most vulnerable households in these villages are those that are most dependent on the landlord, and thus have the lowest bargaining power in the village economy.

Section 2 highlights the policies adopted by the state to try and mitigate inequality and help improve the economic welfare of the poor. However, as will be shown, the combination of corruption and bad policy design has resulted in the persistence of inequality in rural Pakistan. Section 3, therefore, argues for the need to implement alternative policy measures that can possibly change the relative bargaining powers in rural societies in favour of the poor. One such policy is to increase connectivity as was suggested in Chapter 1. Pakistan presents a rare opportunity to test the feasibility of this unorthodox policy recommendation due to the availability of the abovementioned natural experiment. The section describes this natural experiment and gives a general overview of the research site in order to acquaint the reader with the area. The Chapter ends by laying out three testable hypotheses which go on to constitute three succeeding chapters in this thesis.

## **1. Inequality and Patronage Networks in Pakistan**

Inequality, and thus poverty, is found to be extremely high in Pakistan, particularly so in rural areas where 68% of the population resides (GoP 2000, See also for example World Bank 2002, Anwar and Qureshi 2003, Cheema 2005, Anwar et. al. 2004, Cheema, Khalid and Putnam 2008). According to Anwar et al (2004), one of the driving forces of this poverty is extreme inequality in the distribution of land, resulting in a vast majority not having control over their livelihood. Cheema, Khalid and Putnum (2008) reaffirm this with their findings that the landless population almost always falls in the lowest expenditure quartile. Furthermore Anwar et al (2004), using data from the Pakistan Integrated Household Survey (PHIS 2002), find that within Pakistan, the highest levels of inequality are found in the Punjab where 74% of the population is landless. Also, they document that while the average land holding in Punjab is 8.2 acres, the maximum landholdings of a single individual is over a 100 times the mean. However, as argued by Gazdar (2005), the problem of land inequality has historically been mitigated to some extent by the landless having access to land

through leasing agreements, both in the form of share tenancy and fixed rent contracts. Such arrangements enable the poor to ensure themselves a steady food supply, even in times of adverse shocks, thus reducing some of the insecurity in their environment. However the problem, as identified by Cheema (2008) and also acknowledged by Gazdar (2005), is that in the last two decades there has been a substantial fall in sharecropping, which has not been accompanied by an increase in tenancy farming. Instead, owners have taken control of their fields in order to operate them as large scale capital-intensive farms, thus forcing the landless to find alternative means for earning a livelihood.

The plight of the poor is further worsened by the presence of a relatively non-responsive government, which has been unable to provide its citizens with basic social services that could help mitigate some of the symptoms of poverty. As Easterly (2003) described it, Pakistan is a country that achieved ‘growth without development’. His basis for calling it that lies in the finding that, for its level of growth rates, Pakistan has very low social indicators<sup>1</sup>. This is particularly the case in rural areas where the bulk of the population suffers from low levels of literacy, particularly of females but also of males, high population growth rates which put pressure on already precarious resources, poor health and sanitation facilities, and poor or non-existent physical infrastructure (Chaudhry 2003). As a result the rural poor lack the skill set, the assets and the institutional support needed to, not only pull them out of poverty, but also to provide for many of their basic needs.

Thus in the absence of formal institutions which could provide the poor with safety nets, they are forced to seek out informal mechanisms to satisfy their socio-economic needs. According to Bari et al (2005) these informal institutions can be classified into three main categories; private charity, biradery (kinship) linkages, and patronage networks. Private charity, given through philanthropic

---

<sup>1</sup> These low social indicators are largely due to a high priority given to defence in the national budget.

organisations and by private individuals as part of their religious obligations<sup>2</sup>, makes a significant contribution to the economy of those poor households that receive it (Sayeed 2004). However, the problem with this source is that it is purely voluntary and is thus bound to fluctuate considerably. Moreover, who receives this assistance is completely arbitrary and it may not be extended to those households who are socially excluded for one reason or another. In addition to these charities, rural households have also been documented to rely on biradery linkages to help remove some of the uncertainty in their environment. These networks act as a form of informal insurance and provide peasants with protection against idiosyncratic shocks. Such networks are by no means peculiar to rural Pakistan. Dasgupta (1993, see particularly Chapter 8) documents that it is quite common for rural households, in developing countries, to rely on informal insurance provided by members of the community to help see them through any disruption in their day to day environment. These networks perform a vital function in peasants' lives and an inability to tap into them can be a major handicap which could result in a household falling prey to extreme destitution. However, it must be pointed out that, the extent of services that these networks can provide varies according to the social status of the biradery. As documented by Ahmad (1977), different biraderies have different social status in the rural economy, and thus have differing levels of resources and influence (discussed later). Therefore, while a lower class biradery may be able to do little more than provide moral support to their fellow kin, those belonging to an upper class biradery may have the ability to see its members through a wide variety of crises.

Lastly, poor households in rural Pakistan augment the above mentioned sources by approaching individuals of higher status, both economically and socially, in an effort to gain access to their resources. In exchange, these households provide the resource rich with guaranteed labour, often at below market rates, social following and political support by voting for the candidate supported by the resource holder (Hasnain 2008, Kabeer et al 2010). In the presence of high inequality these

---

<sup>2</sup> According to Islamic tradition Muslim households are obligated to give 2.5% of their income as charity.

exchange relationships are found to be the proto-typical patron-client relationships described in Chapter 1. The resource rich patron caters for his poor clients' survival needs and, at the very least, ensures their physical protection and that their subsistence needs are met. The clients, in return, reciprocate with the above mentioned intangible services. As argued by Bari et al (2005) and Nelson (2011), in the presence of an ineffective state and high levels of corruption, these networks can act as a conduit for poor households to gain privileged access to state resources.

However, as was highlighted in Chapter 1, the extent of benefits that peasant households receive from being members of a patronage network varies considerably depending on their relative bargaining powers. By definition the patron, of course, has a higher bargaining power in this relationship. Pakistani patrons are no exception as they are often large landowners in the rural economy (Ahmed 1977, Rouse 1988, Hussain et al 2004). However, the extent to which their bargaining power is higher depends on the assets and skill set of the clients, their number in the rural economy<sup>3</sup>, and the availability of outside options. Clients in rural Pakistan range from landless unskilled workers, found both in the agricultural and non-agricultural sectors, to small landholding households possessing some amount of skills. While the former rely on their patron for most of their survival needs, the later look towards the network to improve their well-being, but are able to survive without the services of the landlord (Hussain et al 2004). Therefore, the former are more likely to have very low bargaining power and thus are fairly vulnerable to exploitation. On the other hand, peasants who have the ability to pursue alternative avenues of provision, either in the form of other patrons or in options found outside the village economy, are found to be in a stronger bargaining position, as the terms of the exchange have to, at least, match their opportunity cost in order for them to engage in the network. In contrast to this, when peasants reside in villages where the patron has monopolistic control,

---

<sup>3</sup> The more clients a patron has the greater will be the competition for his resources.



both due to inequality and isolation that limits peasants' options, the clients are in a weaker bargaining position.

The patron's superior bargaining power stems largely from his asset holding that allows him to have influence in multiple aspects of the villagers' lives. By virtue of being the owner of most of the village land, he is found to be not only the main source of employment for many peasants but also is often a major, and possibly even only source of credit for poor rural households. The importance of these services, particularly credit, is highlighted by Hussain et al (2004), who found that poor households in rural Pakistan were unable to meet their basic needs through their own resources and, unless they were able to borrow from external sources, faced the possibility of starvation. However, as mentioned in Chapter 1, in the absence of tangible assets they are unable to access the formal credit market, and so their only recourse is to approach the local landlord who can make use of their labour services in exchange for credit facilities. Table 1 below reproduces Hussain et al's findings on the extent to which rural households in their sample borrowed from the local landlord, stratified by the households' economic status.<sup>4</sup> From the table we find that, by far, the largest percentage of households borrowing from the landlord were the extremely poor; 50.8% of these households claimed to have taken a loan from the local landlord to finance their consumption needs. While the average explicit interest rate documented for these loans was 0.06%, the actual interest rate paid by the household was much higher. This was because access to credit facilities was found to come with an obligation to work for free for the landlord, which 57.4% of the extremely poor households did. Moreover, amongst the households which were paid for their labour services, the wage rate was found to vary substantially depending on the economic status of the household. While the non-poor received a daily wage equal to the market rate, the poor and extremely poor received a much lower rate for the same services. Therefore the

---

<sup>4</sup> It is worth mentioning that the non-poor category referred to in this table is a relative category. As Hussain et al (2004) explain, these households are by no means affluent, but are simply better off when compared to the other two categories, as they own a certain amount of land that allows them to be self-sufficient regarding their basic needs. Despite this they still interact in the patronage network as it enables them to improve their overall well-being.

table highlights how the vulnerability that poor and extremely poor households faced due to their material deprivation enabled the landlord to extract considerable surplus from his interaction with them. And, lacking any alternative options, these households usually found themselves in no position to reject the landlord's offer, even when it was against their long term interest.

Table 1 Household borrowing

	Extremely Poor	Poor	Non- poor	Total
Loan from Landlord (%)	50.8	29.4	11.7	34.4
Work for Landlord Against Wages (%)	14.0	24.3	5.1	16.9
Daily Wages (Rupees)	28.0	43.6	60.0	40.0
Work for Landlord Without Wages (%)	57.4	38.5	25.4	43.5

*Source:* NHDR/PIDE Survey 2001.

Source Hussain et al (2004)

Apart from credit, the patron may also be the owner of several villagers' homestead land where they reside in a rent-free arrangement. While the incidence of this was extremely high prior to land reforms in 1972 now, though still prevalent, such arrangements are not as widespread (Gazdar and Mullah 2011). Where these arrangements still persist it is found that, although they place no direct financial burden on peasant households, they come with the implicit obligation of them providing some services to the patron – possibly cheap labour or an agreement to vote in line with the patron's wishes. Moreover, ownership of the peasant's house also acts as a mechanism of control for the landlord over peasant household, as the latter faces the threat of eviction if it falls on the wrong side of the patron's grace<sup>5</sup>. Rouse (1988, pg 834), in her study of a village in Sahiwal Pakistan, found that peasants were obligated to do odd jobs for the landlord and his manager in exchange for the right to live on his lands. A refusal to do so could result in immediate eviction. Interestingly, from my own experience doing field work in rural Punjab, I found that most households did not

<sup>5</sup> Due to weak judicial and policing services, and the informal nature of these arrangements, this eviction can occur without any prior notice.

own their homestead land but, at the same time, were also unaware as to who the owner was. Patrons at times took advantage of this ignorance to use eviction as a sanction against non-complying peasants. During the course of my field work many households recounted stories about villagers being thrown out of their homes overnight, following a major disagreement with the local landlord.

The influence of the patron is also found to extend to the social sphere as land ownership in Pakistan provides the holder with social authority, making the owner fairly active in peasants' social lives. In particular, the patron is sought to act as an arbitrator in peasants' disputes, as judicial and policing services in Pakistan are plagued by rampant corruption due to which the poor are unable and unwilling to rely on them. Mohmand and Gazdar (2007), from their study of 7 villages across Pakistan, found that peasants often preferred to approach panchayats (informal courts headed by village influentials) rather than police stations or courts for settling their disputes. Their reasons for avoiding the authorities lay both in the high costs associated with formal dispute resolution, and the threat of harassment by the police. Hussain et al (2004) have similar findings from their sample villages where they document that, even though poor households are more vulnerable to crime, ranging from petty thefts to life threatening feuds, they are least likely to register a case with the police. Instead, peasants seek alliances with village influentials, not only to gain protection against any possible attack, but also to ensure that if a dispute does arise they can rely on their patron to side with them in the resolution process. Of the few poor households that did approach formal institutions, an overwhelming majority of them had cases decided against them. This is in line with the findings of my own field research, both for this thesis and for an earlier study on the interaction of patronage networks and the local government system. I found that the vast majority of households avoided approaching the police and, instead, settled their disputes either through their biradery network (if it was a small issue), or through the local patron. Those who did register a case tried to get their patron to accompany them so as to increase the chances of their case being given some importance. As argued by Nelson (2011),

irrespective of the regime in power in Pakistan it, along with its policing and judicial machinery, tends to be biased in favour of the rural elite.

Lastly, the patron performs an important political function for his clients as often he is well connected with the local politician. Cheema and Mohmand (2004), while studying public provision in rural Faisalabad, Pakistan, found that simply voting for the incumbent politician did not result in increased provision for peasant households. Rather, provision depended on the household being aligned with a patronage network that could negotiate increased provision for them as they found that public provision, instead of flowing from the politician to his constituents, was channelled through such networks. Nelson (2011) and Mohmand and Gazdar (2007) too have similar findings in their respective studies of villages across Pakistan. As Hasnain (2008) notes, politicians in Pakistan are more concerned with distributing public resources for patronage than with providing for the general masses. Their incentive for such targeted provision lies in the guaranteed votes that local patrons can provide to them, which are far in excess of what can be procured through political campaigning (see generally Keefer 2004). The ability of the patron to make this guarantee comes from his control over multiple votes – which he can offer by virtue of the reciprocal agreement he has with his clients. Once promised, peasants are unable to renege on this commitment, not only because ballot casting is not always secret in rural Pakistan, but also because the sanctions that would follow disobedient behaviour could be extremely high. In all my research trips in rural Punjab, Pakistan, I have often heard accounts of the openness of the ballot casting process – particularly where women were concerned. During my interviews some women recounted how, during elections, they filled out their ballot and sent it to the polling station with one of their children, because their conservative household did not allow them to physically go to the polling station.

Control over multiple votes places the patron in a fairly strong bargaining position vis-à-vis the local politician. This high bargaining power is then used by him to extract public resources, both for his own private benefit and for public goods

provision to some selected clients (Nelson 2011). The power and importance of these networks, in the distribution of public funds, is highlighted by Cheema and Mohmand's (2004) findings that, in spite of the fact that one of the patronage networks in their sample villages, voted against the incumbent politician in the previous election, the patron and his clients still received higher public goods provision when compared to villagers who had voted for the politician but were not part of a patronage network. Their explanation for the network receiving public funds was the incumbent mayor making an effort to try and lobby the support of this patron in the coming election.

The influence that un-elected patrons have in the decision regarding the distribution of public resources, is well documented in the relatively scarce literature available on the political economy of Pakistani villages (see for example Ahmad 1977, Rouse 1988, Wilder 1999, Hasnain 2008, Cheema and Mohmand 2004, Cheema et al 2005). In 2001, the Musharaf Government tried to bring these un-elected patrons into the political process by instituting an additional tier to the government machinery – one that would reside at the local level (Cheema and Mohmand 2004). These local government reforms were aimed at bringing democracy closer to the masses and increasing citizen participation in the political process. The hope was to either make the local patron more accountable to the citizens by having him run for public office, or to provide him with electoral competition by having an elected official close to the villagers. Moreover, efforts were made to increase citizen involvement by making provisions for three types of participatory bodies; those accommodating citizen oversight on the politicians' activities (School Councils), those providing citizens with funds to self-provide for their needs (Citizen Community Boards) and those including citizens in the budgetary process (Village Neighbourhood Councils).

However, up until now these reforms seem to have fallen short of these aims for two reasons. Firstly, the above mentioned bodies have yet to be instituted on an acceptable scale. Also, peasants are often unware of the possibility that they can play a direct role in the decision of funds allocation (Cheema and Mohmand 2004,

Takashi 2007). In line with Hall's (1974) argument, patrons have an incentive to block information regarding such bodies as they could act as catalysts for social change. Given that it was the responsibility of the lowest tier of government (the union council) to facilitate the creation and functioning of these bodies the patron, in conjunction with the politician, also had the ability to control the trickling down of such information. Secondly, the effect of bringing the politician closer to the masses has meant that he is also now closer to the patron, thereby making political contracting much easier<sup>6</sup>. Hence, we see a continuation of the practice of public provision being channelled through a patron, rather than directly to the voting citizens, thus highlighting how elaborate decentralization reforms, without well instituted mechanisms to disburse information and ensure transparency regarding public spending, have failed to alter the political economy of service provision in rural Pakistan.<sup>7</sup>

## **2. Policy Efforts to Alter Relative Bargaining Power**

Apart from trying to increase the unelected patrons' political competition, the government of Pakistan has also made several other attempts at reducing poverty with the intention of altering the incentive structure in rural economies. Amongst these the most extensive, albeit least effective, have been land reforms. Since independence in 1947, the Pakistani government has made three attempts at land redistribution through the imposition of land ceilings in 1959, 1972 and 1977, but all three have had limited impact on the levels of inequality. For instance, while the reforms in 1959 were able to confiscate 2.5 million acres of land (4% of total cultivated land), 0.93 million acres of these (37.2 %) were non-cultivable (Qayyum 1980). Similar outcomes were observed in the 1972 and 1977 reforms, where high levels of corruption enabled landlords to either circumvent land ceilings without the imposition of sanctions or, to use loopholes in the law to

---

<sup>6</sup> This contracting between the patron and the politician is discussed in much more detail in Chapter 4 which deals with public goods provision.

<sup>7</sup> The persistence of patronage politics, even after the decentralisation of government, is evident from Cheema and Mohmand's (2004) study which was conducted after power was devolved.

preserve their landholdings (see for example Zaidi 1999, Nelson 2011, Hussain 1989, Arif and Ahmed 2001, Rashid 1985). In fact, as was documented by Rouse (1983), Lyon (2002) and Nelson (2011), in some ways the effects of these reforms were actually welfare reducing for local peasants, as they incentivised landlords to evict their tenants through explicit and/or implicit harassment, and engage in capital-intensive farming so as to maintain their land ownership. Rouse (1988) in particular, delves quite deeply into the impact that land reforms had on rural peasants, especially since these reforms coincided with the green revolution in Pakistan. She finds that prior to 1959, despite the village land being almost exclusively owned by two major landholding families, peasants had access to land through tenancy arrangements. Moreover, since the landholders were absentee landlords, the peasants had considerable discretion regarding crop choices and the cultivation methods applied.<sup>8</sup> This flexibility enabled peasant households to grow crops that also catered to their subsistence needs and thus protected them against starvation in times of bad harvests. However, the implementation of land reforms, with its encouragement of large mechanised farms<sup>9</sup>, Rouse argues, changed this significantly. In an effort to preserve their land holdings, the landlord started to take over control of his fields so as to cultivate them as capital-intensive farms. As a result, a considerable number of tenants were either evicted, or harassed into leaving, thus forcing them to find alternative means for securing a livelihood. This not only had an adverse effect on the evicted households, but also infringed on the welfare of casual agricultural workers, as they now had to compete with this new group of unemployed households for jobs which were historically theirs by virtue of their social class<sup>10</sup>. As for peasant households' who were able to hold on to their rented land, not only were they moved to less fertile pieces of land<sup>11</sup>, but also found the landlord to be much more active in the production process, essentially telling them what to produce and how to go about doing it. Moreover, the landlord's focus on cash crops, so as to increase his profits for sustaining his

---

<sup>8</sup> Although they were supervised by the landlords' managers, they still did enjoy a certain degree of freedom on the fields that they rented.

<sup>9</sup> This, she documents, was on the advice of the World Bank and the Harvard Advisory Board.

<sup>10</sup> The role of class in the rural society is described in detail later on.

<sup>11</sup> The more fertile tracts of land were taken over by the landlords for self-cultivation.

lavish lifestyles, meant that tenants were no longer allowed to grow crops that catered to their subsistence needs. Therefore, for those agricultural households that did not receive any redistributed land, the reforms actually worked to increase their level of insecurity.

Moreover, while tenancy reforms have been enacted at various points in Pakistan's history, their implementation has been fairly limited, thus resulting in continued tenant insecurity (Naqvi et al. 1989). In fact, as mentioned earlier, in recent years there has been a considerable fall in landless households' access to land for cultivation under sharecropping arrangements, as landlords have taken over control of their lands for the purpose of large scale mechanised farming (Cheema 2008). This has forced the poor to either work as agricultural labourers or pursue other avenues for earning a living. The last attempt made by members of parliament to implement land reforms was in October 2010, with a proposal that closed several of the loopholes in previous reforms. However, this proposal was shot down by a major religious political party (Jamiat Ulema-e- Pakistan – JUP) on the contention that land reforms were un-Islamic and thus against Sharia Law (The Express Tribune Oct. 13, 2010)<sup>12</sup>. Therefore, in the current political (and religious) climate in Pakistan, it will be difficult for political parties to revive the issue of land reforms.

Other measures for reducing inequality have also had limited success. Here too ineffective targeting, combined with corruption, has meant that these schemes have failed to reach the target group and thus have had a limited impact on the income gap (See Bari et al. 2005 for an overview of these projects. See also Arif 2006, Heltberg 2004, Malik 2003). These measures included cash transfers, microcredit schemes, food subsidization and labour welfare programs. The cash transfer program was enacted on the recognition that households, which were extremely poor, were unable to meet their consumption needs with their own resources. Thus, in order to assist them with their basic needs, the program aimed

---

<sup>12</sup> <http://tribune.com.pk/story/62096/mqms-land-reforms-bill-un-islamic-jup/>



at giving them a small stipend every month. Cash transfers were made through two separate schemes; the Zakat Fund and the Bait ul Maal Scheme. While the first was financed through a religious charity tax applied to the bank accounts of Muslims<sup>13</sup>, the latter was funded through government funds ear-marked for poverty reduction. However, the total amount transferred in 2000 was only 0.27% of GDP and thus reached only 2.9 million people<sup>14</sup> (Bari et al 2005). Hussain et al (2004), in their, survey found that these cash transfers funded only 0.12%<sup>15</sup> of the extremely poor households' consumption needs.

Limitation of funds, combined with poor targeting and corruption, meant that only 35% of those receiving money transfers under these schemes, actually resided below the poverty line (Heltberg 2004). This leakage occurred largely due to the obscure nature of the selection process, which allowed for patronage and bribes to play a significant role in determining who received state support (Kabeer et al 2010). In the case of the Zakat Fund, the beneficiaries had to be Muslims and were selected by a committee established in the local mosque. While a selection criterion was established –based on the criterion established for zakat in 7<sup>th</sup> Century Arabia (Gazdar 2011) – there was significant variation in the characteristics of the households selected across Pakistan. Interestingly, Arif (2006) finds that of those households that did receive cash transfers from the government, less than 60% were nominated by the selection committees. The rest had been recommended by local influentials (landlords, religious leaders, family members of people on the committee and so forth). Therefore, he argues that the Zakat Fund is used more as a political tool to disburse patronage than to help mitigate poverty. Kabeer et al (2010) too, find a strong correlation between households being aligned with a strong patron and their chances of receiving transfers from the Zakat Fund. The Bait ul Maal Scheme, the other main cash transfer program, was meant for all citizens, irrespective of religion, who were

---

<sup>13</sup> As argued by Gazdar (2011) in a country where close to 97% of the population is Muslim the exclusionary element of this clause is fairly limited.

<sup>14</sup> The population of Pakistan according to the 1998 censuses was close to 137 million people (GoP 1998). The CIA Factbook's estimations for 2011 are 187 million.

<sup>15</sup> This figure also includes transfers made through private charity.

identified as being poor by a district level committee. Here too, the basis for selection was fairly vague and thus left significant room for rent-seeking and patronage. As a result, it was often found that a household's acceptance into a program depended on its connections rather than its need.

In 2007 the Government of Pakistan, in a report on social protection, acknowledged that the cash transfer program was not sufficient to meet the needs of the poor and that there was a need to increase the amounts allocated to these types of schemes (Gazdar 2011). In this vein in 2008/09, the newly elected government enacted a new cash transfer scheme called the Benazir Income Support Program aimed at targeting poor women. These transfers were made through the parliament, with each member of the national assembly (MNA) being provided with selection criterion to help pick 8000 eligible households from amongst his/her constituents. However, as in the case of the other cash transfer programs, this too fell prey to patronage and rent seeking. Gazdar (2011), while surveying five villages, found that the scheme was absent in one of the villages because its inhabitants were the constituents of the political rival of the incumbent MNA. Even in the other villages he found that, while the money was given to poor households, some of the poorest had been excluded due to their weak political connections. Gazdar notes how the government, due to criticism from the World Bank, acknowledged that the parliamentary based allocation was prone to capture and thus devised a poverty score on the bases of which to allocate future funds. The success of this new targeting mechanism is still to be seen.

Another attempt to assist poor farmers was made through microcredit facilities provided by government sponsored banks. However, this scheme also failed to benefit the extremely poor segment of the population. This failure was due to lack of effective mechanisms to identify the poor, combined with a policy of excluding people who showed limited ability to repay loans (Toor and Nasar 2003). According to findings by Anwar et al (2004), in 2001-02 only 6% of the 8.3 million households living below the poverty line actually received microcredit loans. Having said that, Khan (2004, cited in Arif 2006) stipulates that while the

benefits of microcredit may not have reached the extreme poor, these schemes are found to be beneficial for rural households who are poor, but not below the poverty line. For households that are denied access to formal credit institutions, the only option is to approach informal sources of credit (local moneylenders, landlord, friends, relatives etc) (Bari et al 2005, Chaudhry 2003). As mentioned earlier, although these loans charge low or zero explicit interest rates, they have at times been found to be fairly exploitative, charging implicit interest rates as high as 200% (Aleem 1990).

Efforts to reduce poverty have also been made by instituting labour welfare schemes that have dealt mostly with pensions, education and social security provision. However, coverage of these programs has been fairly limited, as they are restricted to workers in the formal sector only. Even then, it was found that they have benefitted only 4% of the non-agricultural workforce (Bari et al 2005). The government also implemented a food subsidisation program, giving price subsidies for wheat and bread. While this was the largest safety net offered to the poor, it was an untargeted program that was largely confined to the urban areas (DFID 2006). The untargeted nature of these schemes makes it difficult to evaluate the extent of its benefits. However, according to the DFID report, the Government of Pakistan has indicated that these subsidies are by no means meant as long term support.

### **3. The Empirical Study**

The limited impact of government programs due to budget constraints, poor targeting, or to elite capture and patronage politics, has meant that a vast majority of the poor are unable to benefit from them, and thus continue to rely on the resource rich for satisfying their needs. Hence, as an alternative, I propose looking at policy options that alter the environment in which the patrons interact with their clients, rather than those that change the distribution of assets. One such policy is to increase peasants' access to the external market through road networks, as was described at the end of Chapter 1. The benefit of connectivity, as highlighted in

the previous chapter, is to provide peasants with alternative options so as to increase their opportunity cost of interacting with the resource rich. Rouse (1988), in her study of a village in central Punjab, Pakistan, looked at the impact a road, along with other changes in the village society, had on the socio-economic setup of the village. However, the road in her village was built by the landlords, in an effort to make it easier for them to access the market, and thus gave them some discretion regarding how it was used. One restriction they placed was to bar animals from coming onto the road. This meant that peasants were unable to use their donkey carts to access the external economy, and thus mostly used it for human traffic. Therefore, she found that accessing the external market entailed some costs for the peasants. As a result, she argues that rural markets remained imperfect and unregulated. Nonetheless, at a time when landlords were evicting tenants in order to prevent the state from confiscating their land under land reforms (see Section 2 above), the accessibility of the market, albeit at a certain cost, allowed peasants occupational mobility and thus reduced their dependence on the landlord. Alongside connectivity, she also documents the emergence of new landowners, either by allotments through land reforms or by certain peasants (such as the goldsmith) buying up village land whenever the landlords sold any of their property. These new land owners also provided peasants with alternative options for satisfying their needs. Interestingly, she finds that amongst the group of latter landlords, one was particularly aggressive at mobilising peasants' support, to the extent that he guaranteed peasants economic security if they defied the landlord on the political front (pg 84). However, it is worth highlighting that in Rouse's study connectivity was not the only change taking place in the rural economy, as it also experienced two rounds of land reforms, mechanisation, a change in the political structure with a move away from party based elections for Local Government and the general monetization of the rural economy. Still, she stipulates that connectivity played an important role in reducing peasants' dependence on their local landlord, by providing them with an alternative avenue for satisfying their economic needs.

Drawing on Rouse's (1988) results, and on the findings in the wider literature that isolation plays a critical role in providing the landlord with extracting powers, this thesis argues that connectivity should be advocated as a policy tool for reducing the authority enjoyed by large landlords in rural societies. In order to test the feasibility of such an option, I make use of a natural experiment found in the construction of a motorway in Pakistan which came into operation in 1998, connecting Lahore (a major cosmopolitan city and the provincial capital of Punjab) to Islamabad (the capital of the country). Along the 365 km of the road there are multiple exits, each of which has a link road connecting the motorway to the nearest city/town.<sup>16</sup> These link roads run past villages which were previously connected only by dirt trails, making it difficult and expensive for peasants to travel outside the village and cumbersome for outsiders to venture over, thus leaving them highly dependent on the village economy and its resources for fulfilling their needs. Unlike the road in Rouse's (1988) village, the motorway, along with its link roads, was constructed by the federal government, and therefore, landlords are unable to place any restrictions on how it is to be used.

The decision regarding the placement of the road was made by the federal government, based on considerations completely unrelated to village level characteristics. These were broadly geography, connectivity and defence (Republic Engineering Corporation Limited 1988).<sup>17</sup> Firstly, efforts were made to ensure that the road ran through as few geographical hazards as possible so as to minimise the risk of road accidents.<sup>18</sup> Secondly, the federal government wanted to connect these two major cities with a motorway that was not very close to the old highway, and one which passed through as many towns and villages as possible

---

<sup>16</sup> When talking about villages being close to the road, reference is made to their distance from a link road. The motorway itself is a fenced off road and presents no benefit to villages close to it.

<sup>17</sup> Mr. Chaudry Muhammad Altaf, Chairman National Highway Authority, interview, 15 April 2008.

<sup>18</sup> Particular attention was paid to a salt range situated between Lahore and Islamabad, as passing through the salt range required the construction of winding roads which, it was believed, would increase the chances of motor accidents. Therefore the government wanted to minimise the stretch that ran through this area.

without hampering the economic benefits to traders.<sup>19</sup> Lastly, the Air Force has a bombing range situated between Lahore and Islamabad which made some of the suggested routes unusable. None of these factors are systematically related to specific village characteristics.

There were rumours however, that the placement of the road was changed from the original plan so as to allow it to run past the lands of large landlords. While I was unable to find evidence to confirm this, I identified areas where the motorway was not altered from the original plan in any way. Among these was Hafizabad, Punjab. In the area selected for this study the landlords, while commanding considerable authority in their own villages, would be considered part of the lower middle class in urban settings. This was quite evident from the houses they lived in, the cars they drove, the schools they sent their children to and their own levels of education. Therefore, they lacked the influence needed to alter the federal government's decision regarding the placement of a national highway, making it an exogenous shock to the rural economy.

The motorway passes through district Hafizabad with two exits connecting it to the cities of Hafizabad and Pindi Bhattian. Hafizabad district is also a good choice for this study because of its being an average Pakistani district in terms of its human development indicators. According to Hussain et al's (2004) calculations, Hafizabad district's Human Development Index (HDI), when compared to Pakistan as a whole, is ranked number 46 amongst the 91 districts of the country. Furthermore, in terms of land tenure systems, the district has been described as a typical Punjabi society with a few large landlords dominating economic and political activities in the area (Kurosaki 2005, Alavi 1983). Hence we should expect to find poor peasants engaging in exchange relationships similar to patron-client networks in the area.

---

<sup>19</sup> The benefits of connecting additional towns and villages had to be weighed against the costs of the route, between the two main cities, being stretched to facilitate increased access.

Ideally the study would have been conducted with time series data so as to compare outcomes before and after the construction of the motorway. Unfortunately, such data do not exist as data collection in rural Punjab has been fairly limited. The two organisations that have collected data in Hafizabad district were the Punjab Agricultural Census Department (a government department) and the Punjab Rural Support Programme (a government sponsored NGO). However, when examining their data for the villages included in this study, it contradicted outcomes I myself had observed, despite the fact that it had been collected a few months prior to my own data collection.<sup>20</sup> Therefore, I chose not to use it. Instead I have tried to overcome this disadvantage through my research design, which compares outcomes in villages dominated by large landlords (landlord based villages) close to the road to similarly tenured villages situated far away. Moreover, the study makes use of villages with relatively egalitarian distribution of land (peasant based villages) as a control group based on Banerjee and Iyer's (2004) finding that villages with disbursed land holdings are significantly better off when compared with villages dominated by large landlords. By using peasant based villages as a control group I am, therefore, able to evaluate whether outcomes in landlord dominated villages close to the road are converging towards those found in their peasant based counter-parts. For this reason too, Hafizabad district was a good choice for this study as the district has considerable variation in its land distribution, thus allowing me to find villages with both types of land tenure systems. Hence in this study a village is considered to be dominated by a large landlord when the landholding of one household is greater than 100 acres. In my sample landlord dominated villages land holdings of the patrons varied from 100 acres to 300 acres. However, despite there being two landlords in some of the landlord dominated villages, the extent to which peasants can defect to other patrons is questionable when we consider Platteau's (1995) argument that landlords in South Asia may abide by time honoured traditions of not accepting other patrons' run-away peasants. Therefore peasants are unable to use the threat of defection to another patron as a means of increasing their bargaining power.

---

<sup>20</sup> These primarily dealt with the provision of public goods such as drains and paved streets, where the level of provision was grossly overestimated.

Before proceeding further it is worth mentioning that, even in peasant based villages, the incidence of landlessness is just as high as in landlord dominated villages. The difference is that while no single landowner is powerful enough to wield control in peasant based villages, the main landowner in landlord dominated villages is large enough to be, for most peasants, the main source of employment, both in the fields and for domestic work, the owner of their homestead land and, most of the time, the main source of credit.

Within the district, eight villages located at varying distances from the motorway were chosen. In order to evaluate the differential impact of connectivity on these two types of villages, four of the eight selected villages are dominated by large landlords while four are peasant based villages. Moreover, for each group, two villages are found to have the motorway run through them, while two are situated far away. Distant villages were situated between eight and eleven kilometres from the road.

Apart from connectivity, the descriptive statistics in Table 2 show that the eight villages are relatively very similar. Also, wherever data is available, the table compares the villages to the district average for rural areas to illustrate the representativeness of these villages. However, it needs to be pointed out that the district level averages were obtained from the census data which was conducted in 1998, while my data was collected in 2008. As mentioned before, the absence of data collection in the region means that I was unable to find district averages from a later period. Starting with household occupation, we can see that 46% of households close to the road and 48% of those that are far away, derive their primary source of income from agriculture, working as self-cultivators, sharecroppers or tenant farmers. The district average was 42.5% households engaging in agriculture. Amongst cultivating households, my sample shows that only 44% and 48% of households that own less than 5 acres of land rent land in villages close and far from the motorway, respectively. By far the majority of these contracts, in all the villages, are tenancy arrangements with the tenant paying a fixed rent to the landlord. Furthermore, most cultivating households



belong to the socially upper class biradery in the villages. Apart from cultivation, the second largest occupation is also related to agriculture, with 22% households in all 8 villages being employed as agricultural workers. These workers generally tend to come from the lower class biraderies in the village and most often do not possess any skills and/or tangible assets. As a result, these households tend to be highly dependent on the village and its resources for securing their livelihood, and thus have relative weak bargaining power within the patronage network. This is partially evident from the fact that, in isolated villages, only 18% were paid a wage rate for their services. The remainder were paid various combinations of wages and in-kind payments. The corresponding figure close to the road was 26%. Moreover, despite the fact that close to 70% of villagers in the area draw their livelihood from land, 51% of households close to the road and 54% of those situated far away do not own land themselves. The 30% of households which are not engaged in agriculture, derive their livelihood either as shopkeepers or by providing various goods and services around the village. These include professions such as those of a barber, milkman, school teacher, domestic help etc. A few households also work as day labourers on construction sites or any other projects that come along. It is worth mentioning that every household in my sample reported having at least one source of income.

The extent of benefits that the motorway extends to rural households intuitively should vary considerably depending on their occupation. For instance, while we should expect households working as agricultural labourers to be more flexible and thus better able to pursue outside options, households engaged in tenancy arrangements are more likely to be tied to the village economy and should, therefore, be less able to walk away from the tenancy contract when a better opportunity presents itself. While there is strength in this argument, its applicability is questioned for two reasons. Firstly, it is interesting to find that amongst those agricultural households that rent land, the majority belong to the upper class biradery (68%). As will be explained later, these households tend to enjoy a higher social status in rural society and thus have a stronger bargaining position relative to other households. Secondly, a household may choose to take

advantage of the connectivity by employing a second person from the house in the external market, while still honouring its tenancy contract. Given that labour in developing countries agrarian sector tend to be underemployed (Lanjouw and Lanjouw 2001, Newbery and Stern 1987), this should not affect total productivity. Furthermore, Hussain et al (2004) argue that a major criterion for a household being able to pull itself out of poverty is its ability to secure a second source of income. Of course, the ability of a household to attain an additional source of income outside the village economy is not only a function of connectivity but also depends on the state of the urban labour market. According to the 1998 census data, a total of 4.6% of the population was unemployed in Hafizabad district. Of these 3.4% claimed to be unemployed due to the unavailability of jobs (GoP 2000).

Amongst households that did try their luck in the urban labour market, jobs available to them ranged from construction jobs to working in local shops, restaurants and hotels, to working on gas stations to working as domestic staff.<sup>21</sup> As mentioned in Chapter 1, for those households that do not manage to venture outside the village, connectivity should still have a beneficial impact by creating new employment within the village, much like the ones described by Epstein (1962). These opportunities were highly visible during my visits to these villages as, not only did I find a wide variety of stores lining both sides of the road, but also it was quite common to have people approach passers-by to sell them small handmade products, or to offer to clean their car while they waited in the village for one reason or the other. While the benefit to the household in terms of its bargaining power vis-à-vis the local patron would vary depending on the type of options that open up to the household, even in its lowest form the effect should be positive, albeit relatively marginal.

---

<sup>21</sup>Landlord 1, interview, connected landlord dominated village 1, 15 April, 2011.

Table 2: Descriptive statistics

	Hafizabad District <sup>a</sup>	Close to the Motorway <sup>c</sup>	Far from the Motorway <sup>c</sup>
Percentage households engaged in agriculture	42.5%	46.3%	47.7%
Percentage of agricultural households renting land when their own holding is less than 5 acres		44.0%	48.7%
Percentage households working as agricultural day labourers		22.1%	22.3%
Percentage of agricultural workers paid a wage		26.0%	18.0%
Percentage of households that are landless		51.0%	54.0%
Average monthly household spending		\$109	\$101
Percentage of households having three meals a day		80.0%	74.0%
Average number of rooms in the house	2.2 <sup>b</sup>	3.0	3.2
Average number of people in the house	7.1 <sup>b</sup>	8.3	8.3
Percentage of households residing in a brick house	58.5%	50.0%	41.5%
Percentage of households with an indoor bathroom	14.7%	11.0%	12.4%
Percentage of households headed by an illiterate person		50.0%	48.0%
Percentage of households sending their children to school		78.0%	75.0%
Percentage of households which own a TV	47.0%	53.2%	59.6%
Percentage of households which own a radio	29.1%	24.7%	25.9%

a. Census of Pakistan 1998, only rural households.

b. Rural and urban households.

c. Author's own calculations.

Poverty levels within the villages were found to be relatively high, with the average monthly spending being \$109 and \$101 for those situated close and far from the motorway, respectively.<sup>22</sup> As this was meant to sustain, on average, a family of eight people living in a three room house, it enabled only 80% of households in connected villages and 74% in far away villages to consume three meals a day. The houses that villagers resided in were evenly split between brick structures and mud houses, with the vast majority in these villages, and the district at large, not having an indoor bathroom. Toilet facilities for the household ranged from shared outside toilets, for the relatively better off households, to the open fields for the poorer members of the village community. The limited impact of the motorway on households' income levels is not surprising when we consider that the road only became operational 10 years prior to the survey. Therefore this may not have been a long enough time period for households to take advantage of the economic benefits brought about by connectivity.

Furthermore, most households in these villages are headed by an illiterate person – 50% households in connected villages and 48% in isolated ones. The education level of the household head is important as often he or she is the main decision maker for the entire household. Still, despite 50% of household heads being illiterate, 75% households in villages far from the road sent their children to school, illustrating the importance placed by them on education. The corresponding figure for villages in proximity to the motorway was 78%. The households that failed to send their children to school cited reasons such as the school being too expensive, education being un-Islamic, or the need for the child to work to supplement the family income.

Given the relative similarities between the villages it is, therefore, safe to make the counterfactual that, prior to the construction of the motorway, the outcomes in villages close to the road would have been largely similar to those found in isolated ones. Therefore, this allows us to use the spatial variable (close and far)

---

<sup>22</sup> Most households claimed to spend everything they earned.

as a proxy for time (before and after) with respect to the road, thus overcoming the disadvantage faced by the absence of any data collected in the region prior to my fieldwork.

Within the villages data was collected from two main sources; household level surveys and key respondent interviews. The household level surveys were conducted by a team of 14 surveyors, supervised by myself, over a period of three months. The surveying process involved mapping the villages,<sup>23</sup> identifying the biradery (kinship group) of each household and surveying the selected households. The surveys were collected from a stratified random sample of 20% households. Stratification was done along biradery lines as literature on South Asia documents this as being a good proxy for social status and relative bargaining power (see for example Alavi 1972, Ahmad 1977, 1970 Cheema and Mohmand 2007, Gazdar 2007). While initially I set out to stratify by income, as I thought that would be a good proxy for the households' dependence on village resources and thus their relative bargaining power, interviews with key respondents and the abovementioned literature on rural Pakistan revealed that the social status of a household is determined by its biradery and not by its income level. This holds to the extent that a well off household, belonging to a lower class biradery, is considered to be socially lower than a household which is poor but belongs to an upper class biradery. When talking to the villagers, I observed that households always referred to their biradery when discussing their placing in the village's society. This came out most strongly when talking to households who were poor but belonged to the upper class biradery, as they made it a point to stress that they belonged to a superior biradery and thus had a higher position in society when compared to other households.

Furthermore, the biradery of the household plays an important role in determining the opportunities that it has available to it. For instance, Gazdar (2005) notes that the lower class artisan biraderies of Punjab are seldom ever offered tenancy

---

<sup>23</sup> There are no official or unofficial maps of these villages. My maps are the first record of the layout of these villages, at least since 1947.

arrangements and thus are only able to work in agriculture as casual labourers. Moreover, Mohmand and Gazdar (2007) found that biradery, apart from determining the household's social status, also govern social interaction in rural society and thus determined the political connections that it would have. Therefore, by stratifying by biradery, I was able to ensure that my sample was representative of all social classes in the village and that the results were not biased by over or under sampling of any particular social group.

Stratifying by biradery also allows me to analyse the impact connectivity has had on the different social groups in the village. Bailey (1957), based on his findings from an Indian village, argued that connecting villages to the wider national economy and the administration should, among other things, break down the patron-client structure and considerably change the role and status of various casts in the village economy. This, he found, was not only due to an increase in employment opportunities outside the agrarian sector, thus enabling the lower castes to accumulate some amount of wealth, but also due to the creation of a market for land, so that the old patrons were able to/forced to sell some of their land. The outcome was then old patrons losing their monopoly over land and wealth and, therefore, no longer being able to maintain their clients. As a result agricultural labourers in the village were free to contract with any landowner they chose. Moreover, these were purely economic contracts which did not tie the labourers into any other obligation. Furthermore, he found that lower caste households were more likely to align themselves with the state and invoke their rights as citizens of India, rather than merely identifying themselves as members of the village. Their ability to do so, he stipulated, was due to their newly acquired wealth, while their incentive to do so, came from the village society's refusal to allow them to improve their social status in line with their (now higher) economic status. Therefore, they chose to look outside the village economy to improve their standing.

Bailey's (1957) findings are based on fieldwork conducted almost 100 years after the opening of the village. During this time there was extensive migration to the

village economy, changes in government economic policy – particularly regarding liquor trading – and general changes in the political environment of India – not least of which was decolonization<sup>24</sup>. Given that data for this study was collected 10 years after the motorway came into operation, the impact is bound to be much more muted than what Bailey found. However, it is worth mentioning that even after 100 years Bailey found that the change in the economy – in terms of the flow of goods – was fairly limited. The more substantial change, he found, came in the socio-political set-up of the village. As the chapters that follow will show, the same is true in the case of the impact of the motorway.

Before moving on, it is worth mentioning that the survey does not ask any direct questions about the households' earnings. This was due to a concern raised by other researchers working in Pakistan that since the survey asked questions about public goods provision and voting behaviour, inquiring about a household's income may make villagers suspect that my surveyors and I were sent by the government – particularly the tax authorities. It was feared that this may either bias the results or cause the household to refuse to be interviewed. Therefore, the survey omitted the question regarding the household's income. Nonetheless, in an effort to get an idea of the households' economic condition, the survey asked about their average monthly spending. Given that most households claimed to have very few savings, these spending levels can be seen as a proxy, albeit an imperfect one, for income and wealth levels of the households.

Within each village I found households to belong to a wide multitude of biraderies. Of these the 4 most dominant<sup>25</sup> were the Bhattis, Kharral, Ansari and the Muslim Sheikhs. The Bhattis and the Kharrals make up the upper class biraderies in the villages and were historically the land owning classes. Households belonging to this biradery enjoy a high status, even if they themselves do not own land. Their elevated status stems from the fact that, as these

---

<sup>24</sup> Though this last point should have had limited impact on this mountain based village, which is also evident from the fact that Bailey makes limited reference to India's independence.

<sup>25</sup> Dominant here simply means the biraderies that most households belong to.

households share their biradery with the landlord this creates an additional effective relationship with the patron. As argued by Scott (1972), such additional ties between the patron and his clients make the relationship more likely to be based on traditional affiliations and less on material self interest. As a result, they are not only more likely to have their needs catered for, but should also have more privileged access to the patron's resources in comparison to other households in the village economy. The Ansaris and Muslim Sheikhs, on the other hand, belong to the lower class biraderies and were historically not allowed to own land. Interestingly, while there are now no legal restrictions against these two biraderies owning land, the vast majority are still found to be landless. Amongst the two, the Muslim Sheikhs are found to have the lowest status due to this biradery being responsible for doing menial tasks within the village which most other households find demeaning (e.g. cleaning the sewers).

The biradery of the household also gives a rough indication of its occupation. While households are no longer tied to their traditional roles, and there no longer exists an 'occupation of the biradery', there does tend to be some correlation between biradery and occupation. Table 3 gives a breakdown of households' occupations, split by biradery. As can be seen, while the Kharrals and the Bhattis are predominantly cultivators, either on their own fields or on rented land, the Muslim Sheikhs and Ansaris have a higher tendency to be labourers, either on agricultural lands or on odd jobs around the village. Therefore, going back to the earlier discussion about the link between a household's occupational mobility and its bargaining power, there is no doubt that tenant farmers are more likely to be tied to the landlord and thus are unlikely to be able to use the threat of exercising outside options against him during negotiations. However, these households, due to their higher social status, are in a better bargaining position and thus are less likely to be exploited by the landlord. The lower class biraderies, on the other hand, who are vulnerable in rural society, are also more occupationally mobile as a large majority of them work as casual labourers. This occupational mobility was particularly evident amongst the Muslim Sheikh households when I split the landlord dominated villages by levels of isolation. The data revealed that, while in



isolated landlord dominated villages the majority of households worked as casual labourers (73%), in similar tenured villages close to the road only 47.6% households were found to do the same. Moreover, while in connected villages 24% of households took advantage of the increased traffic facilities to earn a living by selling small items, only 6.7% households in isolated villages reported doing this. When talking to the landlord from one of the unequal but connected village, I was told that Muslim Sheikhs in his village had been most active to take advantage of these new opportunities. He informed me how they had opened up shops, and set up business so as to improve their economic wellbeing. This change of occupation, he stated, affected him acutely as it made it harder for him to find labourers to work on his fields<sup>26</sup>.

Table 3: Occupation by biradery

		Close to the Motorway	Far from the Motorway
Kharral	Cultivators	87.5%	82.9%
Bhatti	Cultivators	75%	69.4%
	Monthly laboureres	10%	8.3%
Ansari	Agricultural workers	35.7%	43.8%
	Monthly Labourers	14.3%	0
	Sellers	28.6%	37.5%
Muslim Sheikh	Agricultural workers	52.2%	57.2%
	Monthly Labourers	9%	14.3%
	Sellers	18.2%	11.4%

Author's own calculations.

The survey used was broadly divided into four sections; public goods provision, politics, socio-political needs and household profile. It asked questions regarding five markets; employment, credit, housing, dispute resolution and voting patterns. For each market the household was asked who the supplier was and if they had any other relationship with him. Moreover, questions were also asked regarding

<sup>26</sup> Landlord 1, interview, connected landlord dominated village 1, 15 April 2011.

the terms of the exchange. The data collected from these surveys was then coded to create a quantitative data set which was used to carry out regression analysis in the chapters that follow.

The second main source of information in the villages was key respondent interviews. Key respondents were individuals who enjoyed a special place in village society, such as headmasters, school teachers, maulvis (the Muslim priest), the household holding the title of revenue collector under British rule,<sup>27</sup> the editor of the local newspaper or the local patron. These interviews were open ended and provided rich qualitative information about social interactions in their respective villages. The combination of the two types of data allows me to make use of the Q2 approach so as to take advantage of the benefits of both methods. While the quantitative methods enable me to establish the level, type and direction of change, qualitative interviews provided a deeper understanding of the nature of the change. In particular, as will be seen in the chapters that follow, while the quantitative data documents the improvement in welfare outcomes for peasants residing in connected villages dominated by large landlords, the qualitative interviews illustrate how connectivity has resulted in a change in the nature of the clientelist relationship – from one focused on exploitation to one which performs a functional role. Thus the two methods are used as complements to obtain a more holistic picture of the change brought about by connectivity.

### **3.1 The Villages**

As you get on the link road for the motorway exit to Hafizabad City you enter a village called Kot Serwar. Passing through you are struck by the hustle and bustle around the main road, which does not taper off as you pass other villages en-route to Hafizabad City. People are found either mingling in the various shops and cafes, or waiting for the bus to take them outside the village, or trying to hitch-hike to their desired destinations. And then there are those who just loiter around

---

<sup>27</sup> Introduced during British rule, this was the office of the numberdar. Even though the office of the numberdar has been abolished, the family that held the title still enjoys a certain elevated status in the village.

the road as that is now the centre of the village where all the activity takes place. As our bus passes by, little attention is paid to me and my surveyors, as ours is but one of the many vehicles that stream past in any given minute. Traffic and mobility is not something foreign or unaffordable for these villages, with peasants often travelling outside the village – either for work or to run errands or simply to take their children for a day out in town. But this was not always the case. I was told that prior to the construction of the motorway, travelling to the nearby town was quite an expedition, requiring peasants to leave at sunrise and return before sunset, as the dark and deserted road at night made them sitting ducks for thieves and robbers. And given that the journey itself took an hour each way, work in the city had to be rushed. Now, it takes twenty minutes to Hafizabad City and with the constant traffic peasants have the luxury of leaving at around nine in the morning, and are able to stay for dinner, and return safely late at night by bus, wagon or a hitch-hiked ride.<sup>28</sup>

As I take a turn off the motorway and drive to the ‘isolated’ villages, the scene changes considerably. Very quickly the comfortable metal road is replaced by a bumpy dirt trail, requiring us to slow down considerably, as the road is infested with potholes. Traffic thins out the further you go along, and often ten to fifteen minutes pass before another mode of transport, private or commercial, is seen. In fact, it is more common to see people walking or sitting on donkey carts than to see cars, buses or rickshaws. The closest isolated village we visited is situated only eight kilometres from the link road, yet travelling there took around forty minutes. And that was on dry days; on a rainy day the journey would have taken even longer. As the ‘road’ – or rather the trail – reaches the village, the scene we are greeted by is starkly different. There is no one around to be seen, no people waiting for rides, no cafes and no loiterers. Moreover, the path leading into the village is very narrow so we carry on by foot. The centre is found deep inside the village, but unlike the villages on the road there is only one general store there, which also functions as the village tea shop. The few other stores are run from

---

<sup>28</sup> Key Respondent 1, Interview, connected landlord dominated village 1, 30 April 2008.

private houses and are thus scattered around the village. Socialising, I found, was done within houses rather than in public areas.

As I made my field trips to other isolated villages, the landscape turned out to be very similar. For all these villages bad road networks meant that few outsiders came visiting, leaving the village economy relatively closed. For the peasants there, the journey to Hafizabad City was typically around an hour. But it was not so much the distance that villagers found to be a hurdle; rather it was the lack of transport facilities. The peasants spoke of having to often wait up to an hour and a half to get a ride into town, and once there they were faced with the problem of trying to find a way to make the journey back home. Therefore unless they had their own mode of transport, leaving the village was something they tried to avoid.<sup>29</sup>

Besides impacting peasants' mobility, these differences also have far reaching implications on their dependence on the village and its resources for fulfilling their basic needs. As can be seen from Table 4, far more peasants situated on the road felt they could rely on the external market for satisfying their needs than those in isolated villages. This can be attributed to the increase in traffic, as it exposes peasants to new opportunities not only outside the village economy, but also within it. One of the ways households took advantage of these new opportunities was to sell small products to passers-by, which was something my surveyors and I experienced as we were constantly approached by someone or the other trying to sell us goods varying from slippers to food to little crowns made out of flowers and branches. In the isolated villages, on the other hand, limited interaction with the external economy meant that most peasants felt confined to the village economy and the agricultural sector within it. Thus the only ones approaching us were little children curious about the 'outsiders' from the city.

---

<sup>29</sup> Key Respondent 2, interview, isolated landlord dominated village 1, 13 May 2008; Household interviews, isolated landlord dominated village 1, 16 May 2008; Household interviews, isolated landlord dominated village 2, 24 May 2008.

Table 4: Employment opportunities

	Villages connected to the road	Villages far from the road
Percentage of households that feel confined to the village labour market	37%	49%
Percentage of households that feel confined to the agricultural sector	49%	63%
Percentage of households that feel they can generate an income from passing-by traffic	65%	39%
Percentage of farming households that have experienced an increase in their market size over the last 10 years	84%	58%
Percentage of farming households that have been approached by a factory to buy their produce	11%	2%
Number of households	190	193

Author's own calculations.

## Section 4: The Research Questions

The chapters that follow make use of household level data, combined with key respondent interviews, to analyse three types of changes in villagers' lives associated with connectivity. Chapter 3 starts the analysis by looking at market structures in rural Punjab. It finds that, in all four types of villages, most households have their markets interlinked so that equilibrium, in any single market, is jointly determined with other markets. However, the difference in these villages lies in the nature and incentives for the interlinked relationship. While in isolated landlord dominated villages markets were interlinked so as to maximise the landlords' surplus extraction, in peasant based villages and connected landlord dominated ones, the data reveals that these interlinkages were largely meant to reduce transaction costs. The chapter also finds that the effect of connectivity on

landlord dominated villages has been, not only to reduce the overall level of interlinkages, but also to move away from exploitative interlinkages towards those more functional in nature. Chapter 4 goes on to look at political outcomes in the four types of villages, analysing the extent to which the patron diverts public resources, derived to him from the local politician, towards his clients. The chapter finds that public goods provision, in landlord dominated villages far from the road, is significantly lower when compared to all other villages. Moreover, the chapter highlights that connectivity, and the resultant increase in peasants' bargaining power, have resulted in increased public provision in landlord dominated villages - so much so that the data finds convergence in outcomes amongst the different tenured villages.

Nonetheless, despite increased public goods provision in villages close to the road, it is still not universal. Therefore, Chapter 5 looks at the level of collective action for the purpose of self-provision amongst the different types of villages. The chapter argues that, while collective action would be fairly limited under a strong patron, due to the patron finding such activities threatening to his authority and thus blocking them, in villages where peasants have higher bargaining power the level of collective action should be considerably higher. Complementing the household surveys with field interviews, the empirical findings reveal that, while patrons in isolated landlord dominated villages do indeed block their clients from engaging in collective action, they lose the ability to influence their clients' independent activities once the village is connected to the motorway. In fact, it is found that in an effort to maintain their respective clientelist following, large landlords have actually gone as far as to assist their clients in their collective endeavours. As a result of this assistance, peasants in connected landlord dominated villages have been able to undertake a wide variety of projects, and have been relatively successful in providing themselves with the public good that they had set out to provide. Thus the effect of connectivity has been to alter the nature of the patron-client network so as to enable peasants to tap into this hierarchical network to facilitate their collective activities.

These three chapters, thus, set out to examine the effects of connectivity on three different avenues through which the landlord, when possible, tries to exercise control over the villagers' lives. Chapter 3 looks at control over economic markets, through a study of market interlinkages and the extent of surplus the landlord can extract. Chapter 4 goes on to look at control in the political sphere, illustrating how connectivity, and the resultant increase in bargaining power, has enabled the peasants, to some extent, to convert their votes into public provision. Lastly, Chapter 5 illustrates the control landlords are able to exercise over peasants' independent social decisions. The chapter highlights how the monopolistic landlord is able to restrict peasants from engaging with fellow villagers in activities which are mutually beneficial to them. Once again the data reveals that, when peasants are presented with outside options, the landlord loses the ability to control peasants' independent activities. Overall, the three chapters highlight that, while there are considerable differences between landlord dominated villages and peasant based ones when isolated from the external economy, the outcomes in the different tenured villages tend to converge once connected, thereby making inequality less constraining for the peasants.

### **3. The Impact of Connectivity on Market Interlinkages**

In an article reviewing the literature on interlinked markets, Bardhan (1980) starts by stating “It is being increasingly appreciated in the literature on agrarian development that many of the key issues cannot be analyzed without an understanding of the nature of interlinkage of factor markets (particularly those of land, labour and credit) in the specific institutional context of a poor agrarian economy” (pg. 82). This statement was made in reference to a number of studies conducted in the late 1960s and 1970s that emphasised the shortcomings of standard economic theory by illustrating, both empirically and theoretically, that transactions in rural economies were not made at arm’s length, but rather markets were interlinked, with the outcome in a single market being jointly determined with those of other markets (see for example Bardhan and Rudra 1978, Griffin 1974, Srinivasan 1979, Bhaduri 1977, Long 1968). The use of this theory for studying agrarian societies continued to grow over the 1980s and the early 1990s, with a plethora of studies analysing their effect on rural development (see for example Basu 1983, Basu 1986, Bardhan 1984, Aleem 1990, Siamwalla et al. 1990, Udry 1990, Swaminathan 1991, Bell and Srinivasan 1989, Bell 1988). As highlighted in Chapter 1 this literature was appreciative of the fact that, besides distorting equilibria, this type of market structure had the potential for being highly exploitative of the rural poor particularly, as shown by Basu (1983, 1986), when peasants found themselves confined to the village economy with no one but the landlord to rely on for fulfilling their survival needs.

However, around the end of the 1990s academic interest in interlinked markets started to lessen. This change was partly due to a general shift in academic interest



from market structures to the study of institutions and how they impacted developing economies, and partly due to theoretical advances in the theory of market interlinkages having reached a climax. An unintended consequence of this shift in interest was that the theory of interlinkages ceased to be a part of mainstream agrarian development literature. As a result, the last decade has seen very little reference made to market interlinkages when explaining outcomes in rural economies.<sup>1</sup> The aim of this chapter is to use data from rural Hafizabad to show that rural markets continue to be interlinked, highlighting the importance of this literature in explaining economic, social and political outcomes in agrarian economies. Moreover, the chapter also illustrates the exploitative potential this market structure can have towards peasants' welfare. However, by comparing outcomes amongst villages with different land tenure systems and varying levels of connectivity, the chapter highlights that this potential exists only when inequality is interacted with isolation, as the combination of the two results in high "transfer costs or exogenous barriers to entry" (Basu 1983, pg 272). Therefore it is argued that, one possible mechanism for curtailing the exploitative potential of interlinked markets is to connect isolated villages to the external economy, thus providing peasants with an opportunity to walk away from the landlord's offer if they deem it to be detrimental to their welfare. The effect of connectivity, as will be shown, is not to break interlinkages completely – as they do have the functional effect of lowering transaction costs – but to minimise the exploitative potential of this relationship by increasing peasants' opportunity cost of interacting with the landlord.

The remainder of the chapter is organised as follows: Section 1 makes use of game theory to illustrate the exploitative powers that an all-controlling landlord can have over peasants' welfare, and the change that occurs in the power dynamics when peasants are exposed to outside options. Section 2 makes use of the empirical data to highlight the continued existence of interlinked markets in rural economies and the effect connectivity has on this relationship. The analysis

---

<sup>1</sup> The few exceptions I could find were Swain (1999) and Gill (2006).

shows how the terms of the exchange vary, not only based on the availability of outside options, but also on the households' status in the rural society. It is found that while the road has welfare enhancing effects on rural society at large, the group benefitting the most from market exposure is the historically neglected class – the Muslim Sheikhs. Section 3 concludes the chapter.

## **2. The Game**

Interlinked markets have been modelled either as a dyadic relationship (Bell 1988, Basu 1983, Bliss and Stern 1982) or as a triadic one (Akerlof 1976, Basu 1986, Hatlebakk 2002, Naqvi and Wemhoner's 1995). A dyad consists of two individuals interacting in one or more transactions, while a triad involves interaction between three individuals in multiple transactions. The difference between the two types of relationships lies largely in the extent of power the resource holder has, his ability to extract surplus from the relationship and the effect it has on a third, uninvolved party.

In a dyadic model, surplus extraction is limited to a player's threshold value<sup>2</sup> (Basu 1983), as anything below this yields a negative payoff thus disincentivizing the agent from playing the game. Given that the interaction is limited to the two individuals, and does not extend to agents' independent relationships, the disadvantaged player has the option of walking away without incurring additional costs.<sup>3</sup> The only way to get an unwilling player to participate in an exploitative exchange is to change the nature of the game – for instance by threatening to use brute force, in which case the benefit of participation becomes his physical well-being<sup>4</sup> (Naqvi and Wemhoner 1995).

---

<sup>2</sup> The threshold value is that level below which the player incurs losses.

<sup>3</sup> This is a voluntary exchange as the players have the option and the ability to return to the state of no-interaction (Basu 1986).

<sup>4</sup> As argued by Basu (1986) this is no longer a voluntary exchange, as once the player has interacted in the game he does not have the option of returning to the old equilibrium of no-interaction.

Triads, on the other hand, enable a player to make others participate for values below their threshold level without having to resort to violence. Basu's (1986) triadic interaction model, studying the relationship between a landlord, a merchant and a peasant, illustrates the ability of the landlord to coerce the peasant into accepting an offer below his threshold value by threatening to interrupt the peasant's trading with the merchant if he does not comply. The merchant abides by the wishes of the landlord, as not doing so carries the consequences of the landlord ceasing all trading relations with him.<sup>5</sup> Hence the peasant incurs an additional cost, imposed by the merchant, if he rejects the landlord's offer. Furthermore, the peasant's decision to reject the landlord's offer, adversely affects the merchant, (as he has to ostracize the peasant which reduces his trading revenue), even though he plays no role in the labour market.

The cost that the landlord levies indirectly, through the merchant, effectively changes the peasant's exercisable options, as returning to the no-interaction state is no longer a possibility. He now has to choose between accepting a contract that offers returns below his threshold level or a situation where he is completely isolated in the rural economy. Interestingly, the ability of the landlord to impose these costs is largely dependent on the merchant abiding by his wishes and punishing the defector. As argued by Havel (1978), as long as a third party is willing to impose sanctions on the defector, the aggressor can achieve the desired outcome without having to impose any sanctions himself. Alternatively, if the two agents were to collude against the landlord and refuse to punish a non-complying player, e.g. the merchant continues to trade with the non-complying peasant, this exploitative state would break down and a new equilibrium would have to be negotiated.<sup>6</sup> However, the problem with collusion is that it requires someone to make the first move in an environment that extends strong first mover disadvantages (Havel 1978). Hence, even though the collective benefit from defection is higher than the collective cost, the prohibitive cost to the individual

---

<sup>5</sup> The value of trading with the landlord is assumed to exceed that of trading with the peasant.

<sup>6</sup> In the absence of indirect sanctions, the landlord may not be able to impose sanctions high enough to get agents to participate in an exploitative exchange.

prevents collusion from occurring, enabling the landlord to continue enjoying control over all agents in the economy (Basu 1986, Sen 1985, Havel 1978).

Looking at the quantitative and qualitative data from the field, it becomes clear that triadic interaction games are only possible when inequality is interacted with isolation. It is the combination of these two that results in peasants being highly dependent on the landlord, thus enabling him to make demands that deal with peasants' independent relationships. The control enjoyed by the landlord in these villages was fairly obvious when talking to the villagers, particularly those belonging to the lower classes. These households found the idea of defying the landlord unthinkable, even when his demands were detrimental to their welfare. While peasants' reluctance to disobey the landlord was clear throughout the interview, it came out most strongly when I inquired whether the household had ever attempted to engage in collective action in order to provide themselves with public goods that the state and the landlord had failed to do so.<sup>7</sup> By far the majority of households claimed not to have engaged in such activities as I was informed that the landlord greatly "frowned" upon villagers trying to self-provide for their needs.<sup>8</sup> When I probed deeper into the reasons for the household obeying the landlord's wishes regarding an activity that was completely independent of him, the respondents informed me that such an activity could result in the landlord cutting them off, in which case they would be unable to meet their subsistence needs.<sup>9</sup> Talking to these households I realised that a falling out with the landlord would not only limit their access to his resources but also came with the risk of making the household a pariah in the village economy. This trepidation was felt most acutely by the lower class landless households, as they were least likely to be able to meet their needs without the assistance of the landlord and their informal biradery networks. Therefore they found it cheaper, and in their interest,

---

<sup>7</sup> Collective action is discussed in much more detail in Chapter 5.

<sup>8</sup> Key Respondent 3, interview, isolated landlord dominated village 1, 13 May, 2008.

Household ID 45, interview, isolated landlord dominated village 1, 16 May, 2008.

Key Respondent 9, interview, isolated landlord dominated village 2, 21 May, 2008.

<sup>9</sup> Household ID 45, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 42, interview, isolated landlord dominated village 1, 16 May, 2008.

Key Respondent 10, interview, isolated landlord dominated village 2, 21 May, 2008

not to defy the landlord even when his demands dealt with activities that were independent of him.

Such control was neither evident, nor possible, in villages connected to the external economy, even in the presence of high inequality. The extractive powers of landlords in these villages were fairly constrained due to peasants having access to outside options. As illustrated in Table 4 in Chapter 2, connectivity meant that most peasants did not feel confined to the village and its resources, rather they felt they had the ability to approach the external market if they so desired. This increase in options was felt by all members of the village economy, irrespective of their initial endowments. For instance, Table 3 in Chapter 2 highlighted that, amongst the Muslim Sheikh and Ansari households, a larger percentage worked as casual agricultural labourers in isolated villages when compared to those living in connected villages. Moreover, Table 4 in Chapter 2 revealed that the vast majority of farming households felt an increase in the size of the market where they sold their produce, with some even being approached by a factory for buying their produce. As a result of these outside options the landlord was no longer able to use the threat of economic sanction to influence peasants' activities. Therefore, market interlinkages in connected villages were found to exist through dyadic relationships.

The following subsection makes use of game theory to illustrate the level of control enjoyed by the landlord under triadic interaction games. It highlights how, in line with Basu's (1986) and Bhaduri's (1977) argument, isolation and inequality make the landlord a defacto monopolist/monopsonist, enabling him to appropriate large surpluses from the peasants. The sub-section also explores the change in the power dynamics and the resultant pay-offs when an external element, outside the control and influence of the landlord, is brought into the game. The game is set up in three parts; the first looks at an isolated economy with few options outside of the landlord. The second part analyses the change in the interaction between the landlord and the merchant when the merchant gains

access to the external market. Lastly, the third part examines the change in the nature of the game when all three actors are exposed to the external economy.

## 2.1. The Model<sup>10</sup>

Consider a village society with three players: a landlord, a peasant and a merchant. The landlord hires the peasant to work on his farm for a certain wage and buys commodities from the merchant. The peasant is assumed to be landless with his only asset being his labour, which he sells to the landlord. The peasant also buys commodities<sup>11</sup> from the merchant. The merchant trades with both the peasant and the landlord. They are his only two customers. The value of trade with the landlord far exceeds the value of trade with the peasant. The utility functions of the peasant ( $U_p$ ), merchant ( $U_M$ ) and landlord ( $U_L$ ) in this economy are as follows:

$$\begin{aligned} U_p &= Y_p + [wl - \psi(l)] + [\tau(x_p) - Px_p] \\ U_M &= Y_M + Px_p + Px_L \quad \text{where } x_L > x_p \\ U_L &= Y_L + [\pi - wl] + [\lambda(x_L) - Px_L] - \phi(d_M) \end{aligned}$$

Utilities are calculated in the appendix.

Starting with the peasant's utility function;  $w$  is the wage paid to the peasant per hour of labour worked ( $l$ ).  $\psi$  captures the disutility to the worker of every hour of effort put in.  $\tau$  is the utility from consuming  $x_p$  goods bought from the merchant at a price of  $P$ . If the labourer (peasant) neither works for the landlord nor trades he gets a disutility of -20 ( $Y_p$ ) as, in the absence of outside options, he has to be self-sufficient. Given that the peasant has no assets, the only way he can do this is by relying on others to ensure survival which may require him to beg from his fellow villagers. This should entail high disutility.<sup>12</sup>

<sup>10</sup> The model draws extensively on the models by Hatlebakk (2002) and Naqvi and Wemhoner's (1995).

<sup>11</sup> These commodities are assumed to be handmade from supplies found within the village. They do not require the merchant to import anything.

<sup>12</sup> During field work it was found that peasants who could not find work would go around the village begging for food and clothing. Besides the uncertainty involved in securing the needed goods this was also humiliating for the peasant and made him or her an outcast in society.

The merchant's payoff includes utilities from selling  $x_p$  to the peasant and  $x_L$  to the landlord. It is assumed that he charges both parties the same price. As  $x_L$  is greater than  $x_p$ , the merchant values trade with the landlord more than with the peasant. If he does not trade with either his payoffs are -10 ( $Y_M$ ). Similar to the peasant, in the absence of trade the merchant needs to be self-sufficient which depletes his resources. However, it is assumed that the merchant is better endowed than the peasant and so his disutility is lower.

The landlord makes a profit of  $[\pi - wl]$  if the peasant works on his fields and gets utility equal to  $\lambda$  for every good bought from the merchant ( $x_L$ ), paying a price of  $P$  for it. The disutility faced by the landlord from the merchant trading with a non-complying peasant is  $\phi(d_M)$ . If the peasant rejects the landlord's offer and the landlord does not trade with the merchant he gets a payoff of 0 ( $Y_L$ ). It is assumed that the landlord has outside options but exercising them incurs certain costs due to which his payoff is 0.<sup>13</sup>

When setting up this model it is important to question the ability of the landlord to coerce the merchant and the peasant. Hatlebakk (2002) criticizes Naqvi and Wemhoner's (1995) formalisation of Basu's (1986) model on the grounds that the landlord does not share any of the surplus appropriated from the peasant with the merchant, thus questioning whether the merchant has any incentive to cut off the peasant as per the landlord's wishes. However, in an isolated economy where the landlord wields complete control, not just of economic activities but also of social and political activities, there is no need for him to share the surplus with the merchant, as the lack of outside options weakens the merchant's bargaining position to the extent that he has no option but to comply with the wishes of the landlord.

---

<sup>13</sup> These outside options include hiring external, seasonal, labour to work in the fields. However, the problem with these workers is that their availability is not confirmed. Moreover, given that they are outsiders and have few, if any, other ties with the landlord, they present a serious moral hazard problem. As for trading, the landlord has the ability to travel to the nearby town to pick up the supplies he needs. However, this entails costs in the form of time, effort and money.

The sequence of the game is as follows. The landlord makes an offer to the peasant which he either accepts (A) or rejects (R). The merchant then decides whether to trade (t) with the peasant or not (n). Based on the outcome of the above two transactions, the landlord decides whether to trade (T) with the merchant or not (N). The payoffs and equilibrium depend considerably on the offer made by the landlord.

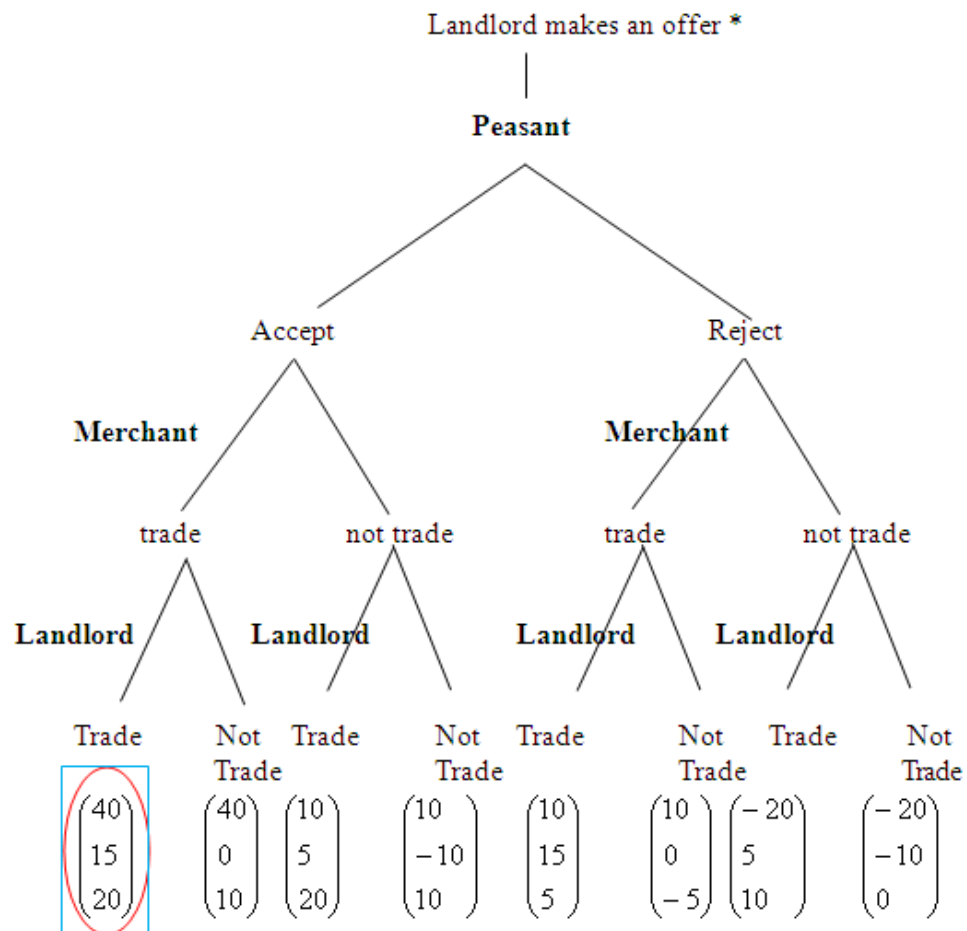
In the first variant it is assumed that the landlord offers the peasant at least his reservation value. The payoffs in this case are as follows. The peasant gets  $30 (wl - \psi l)$  if he works for the landlord (A) and  $30 (\tau x_p - Px_p)$  if he trades with the merchant (t). If he neither trades nor accepts the landlord's offer he gets  $-20 (Y_p)$ . The merchant gets  $10 (Px_p)$  from trading with the peasant and  $15 (Px_L)$  from trading with the landlord. If he does not trade with either he gets  $-10(Y_M)$ . The landlord gets  $10 [\pi - wl]$  if the peasant agrees to work for him and  $10 [\lambda(x_L) - Px_L]$  if he trades with the merchant. However, if the merchant trades with the peasant after he rejects the landlord's offer, he gets a disutility of  $-5 (\phi d_M)$ . The game is drawn in Figure 1.<sup>14</sup> In a single interaction game the Nash equilibrium is (A, t, T), i.e. the peasant accepts the offer made by the landlord, the merchant trades with the peasant and the landlord trades with the merchant. No one can do any better by deviating, making it a stable equilibrium. The equilibrium remains unchanged in a repeated interaction game.

---

<sup>14</sup> The peasant has the highest utility because of his low starting point. In the case of the merchant and the landlord, on the other hand, their higher starting point means that diminishing marginal returns set in fairly early.



Figure 1: No exploitation



\* Details of the payoff calculations are given in Appendix 1.  
 The payoffs are (peasant, merchant, landlord).  
 ○ Single interaction Nash equilibrium.  
 □ Repeated interaction Nash equilibrium.

Now assume the exploitation case where the landlord offers the peasant a return of -5, which is clearly below his threshold value. This gives the landlord a payoff of 30 (as opposed to 10). The rest of the payoffs are unchanged. The game is shown in Figure 2.

The sequence of the game is the same as before. The equilibrium in a single interaction game is now (R, t, T). This follows from Naqvi's and Wemhoner's (1995) argument that, in a single interaction game, the landlord has little incentive to punish a disobedient merchant as it gives him no benefit. Therefore he will always trade with the merchant. Knowing this the merchant will always trade with

the peasant as that maximises his payoffs. Given full information and assuming that all agents are rational, the peasant will always reject the landlord's offer.<sup>15</sup>

The equilibrium under a repeated interaction game, however, is considerably different as the landlord now has an incentive to punish the merchant for trading with a defecting peasant. This is achieved through an in-built trigger strategy which is to play N for K periods if the merchant trades with a non-complying peasant and T otherwise. The value of K will depend on the payoffs, on how patient the landlord is, and the extent of losses the merchant faces when the landlord does not trade with him. K is assumed to be long enough to ensure that the discounted cash flows from non-compliant behaviour are less than those from cooperation, thus creating a strong incentive for the merchant to cease trading with a non-complying peasant. Given this scenario, the peasant's choice essentially becomes to either accept the landlord's offer and get an overall utility of 5, or to reject it, not trade with the merchant and get an overall (dis)utility of -20. In this situation the peasant will always accept the landlord's offer.

---

<sup>15</sup> This game assumes common knowledge.

[illegible]

This equilibrium is sustainable mainly because the peasant and the merchant have no outside options and are unlikely to collude against the landlord.<sup>16</sup> This allows the landowner to exploit isolation and inequality to his advantage. The question then arises is: what happens to this relationship when one player has outside options available? Arguably, with partial access to the market, Naqvi and Wemhoner's (1995) model breaks down as the landlord loses the ability to impose sanctions. The presence of alternative options means that, in order to play the

99

exploitation game, the landlord now has to collude with one party against the other, by offering to share the extracted surplus.<sup>17</sup>

Assume that there are still three people in the village economy, but the merchant now has access to alternative trading opportunities. This allows the merchant to trade in the external market if he is unable to engage with the landlord. However, trading outside the village is assumed to entail some costs, making them less profitable than dealing with the landlord. A simplifying assumption is that at any one time the merchant must choose whether to trade with the landlord or his outside option.<sup>18</sup> The presence of alternative trading options means that the landlord is no longer able to impose economic sanctions on a merchant who trades with a defecting peasant. Hence, the only way to stop the merchant from trading with a non-complying peasant is to collude with him by offering part of the surplus extracted. The peasant is still assumed to be confined to the rural economy.<sup>19</sup> The utility functions are as follows:

$$\begin{aligned} U_p &= Y_p + [wl - \psi(l)] + [\tau(x_p) - Px_p] \\ U_M &= Y_M + [Px_p + Px_L + Px_O] + (1 - \alpha)[\pi - wl] \text{ where } x_L > x_p, x_O < x_L \text{ and } 0 \leq \alpha \leq 1 \\ U_L &= Y_L + [\pi - wl] + [\lambda(x_L) - Px_L] - \phi(d_M) - \phi(d_o) \end{aligned}$$

Utilities are calculated in the appendix.

The utility function of the peasant is unchanged. The merchant now has an additional trading option  $x_O$  in the equation. Moreover, the equation also includes a proportion of the landlord's profit  $(1 - \alpha)$ , meant to incentivise the merchant to punish a defecting peasant. The landlord now gets only  $\alpha$  of the profit extracted from the peasant as the remainder is offered to the merchant.<sup>20</sup> Lastly, if the merchant trades outside the village the landlord receives an additional disutility of  $\phi(d_o)$ , as it signals a loss of control on his part.

<sup>17</sup> The model that follows is a variation of the Hatlebakk (2002) model.

<sup>18</sup> Limited resources of the merchant make this a realistic assumption.

<sup>19</sup> High levels of poverty in rural areas restrict peasant mobility, making this a realistic assumption.

<sup>20</sup> also factors in the disutility the landlord faces due to the loss of control.

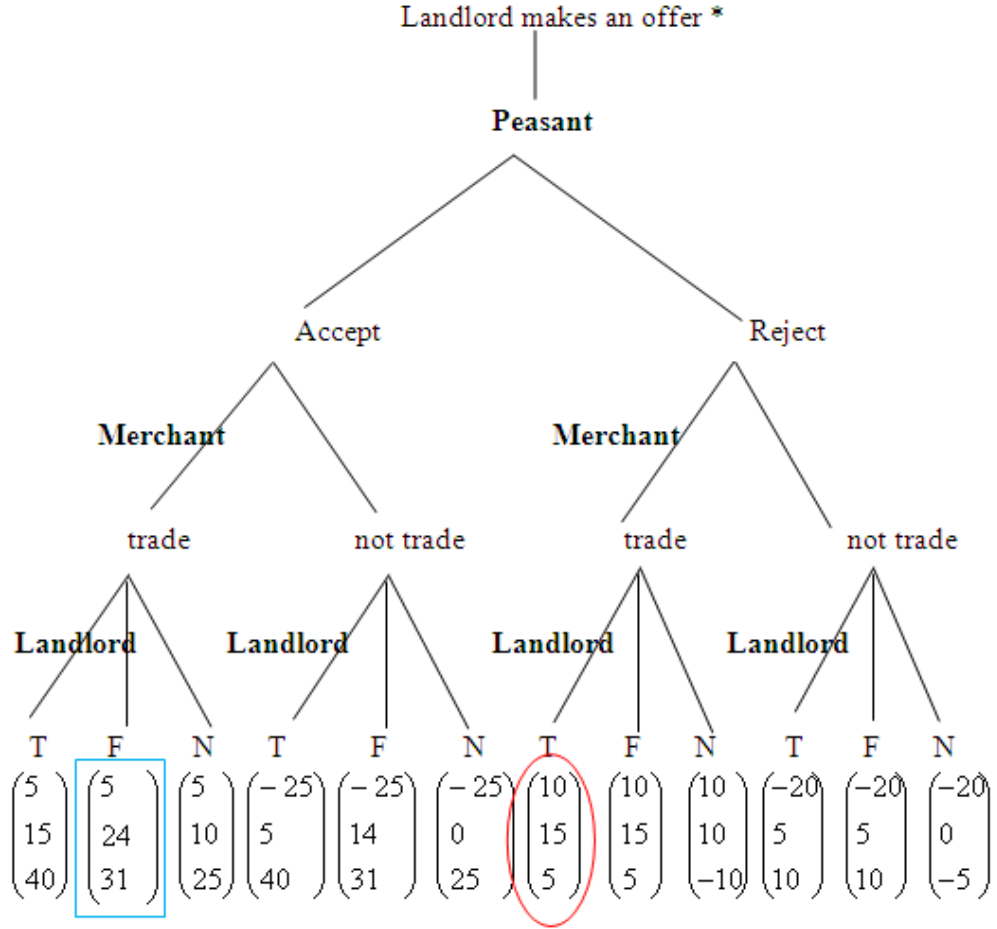
The payoffs of the game are as follows. The merchant can get 10 from trading outside the village (N) and 15 from trading with the landlord on normal terms (T). If the landlord shares his surplus with the merchant (F) then the merchant gets 24 (this assumes that  $\alpha$  takes the value of 0.7).<sup>21</sup> The landlord, on the other hand, gets 40 if the peasant agrees to work for him and the merchant trades with him on normal terms. If he trades on favourable terms with the merchant he gets only 31. If the merchant refuses to cooperate with the landlord and trades outside the village, then he experiences additional disutility giving him an overall payoff of -5. The rest of the payoffs are unchanged. This game is depicted in Figure 3.

This game, played over a single period, results in the same equilibrium as in the case of no collusion, i.e. (R, t, T). What has changed is the nature of the repeated interaction game. The landlord is no longer able to punish the merchant by playing N as the merchant is better off trading with the peasant and his outside options (10) than trading only with the landlord (5). Hence, in order to sustain his desired long run equilibrium, the landlord has to offer the merchant part of the surplus, making the repeated interaction equilibrium (A, t, F). This new equilibrium signals a significant shift in the power dynamics between the landlord and the merchant. The presence of the external market has eroded the landlord's ability to impose economic sanctions on the merchant and forces him to collude with the merchant to get the desired outcome. Hence the landlord must treat the merchant as an equal and not as someone he can coerce into submission. For the merchant, access to the market not only gives him a higher payoff, but also has the benefit of removing the uncertainty stemming from the landlord's ability to impose sanctions. Unfortunately, for the peasant nothing has changed. The only difference is that now, instead of only the landlord benefitting from his misfortune, the merchant is also doing so.

---

<sup>21</sup> is assumed to be 0.7 for simplicity's sake. The actual value will depend on their relative bargaining powers and the value of the merchant's trade with the outside market.

Figure 3: Merchant has outside options



\* Details of the payoff calculations are given in Appendix 1.  
 The payoffs are (peasant, merchant, landlord).  
 Single interaction Nash equilibrium.  
 Repeated interaction Nash equilibrium.

However, if the peasant also gained access to alternative options, the exploitation game would break down completely, as it would no longer be possible for the landlord and the merchant to impose sanctions on the peasant. Moreover, the presence of alternative options, it is argued, converts the triad into a dyadic relationship as the landlord loses the ability to influence the peasant's trading relationships. This then changes the utility functions as follows:

$$U_P = Y_P + [wl - \psi(l)] + [\tau(x_P) - Px_P] + [w'l - \psi'(l)]$$

$$U_M = Y_M + [Px_P + Px_L + Px_O] \quad \text{where } x_L > x_P, \quad x_O \leq x_L \quad \text{and } 0 \leq \alpha \leq 1$$

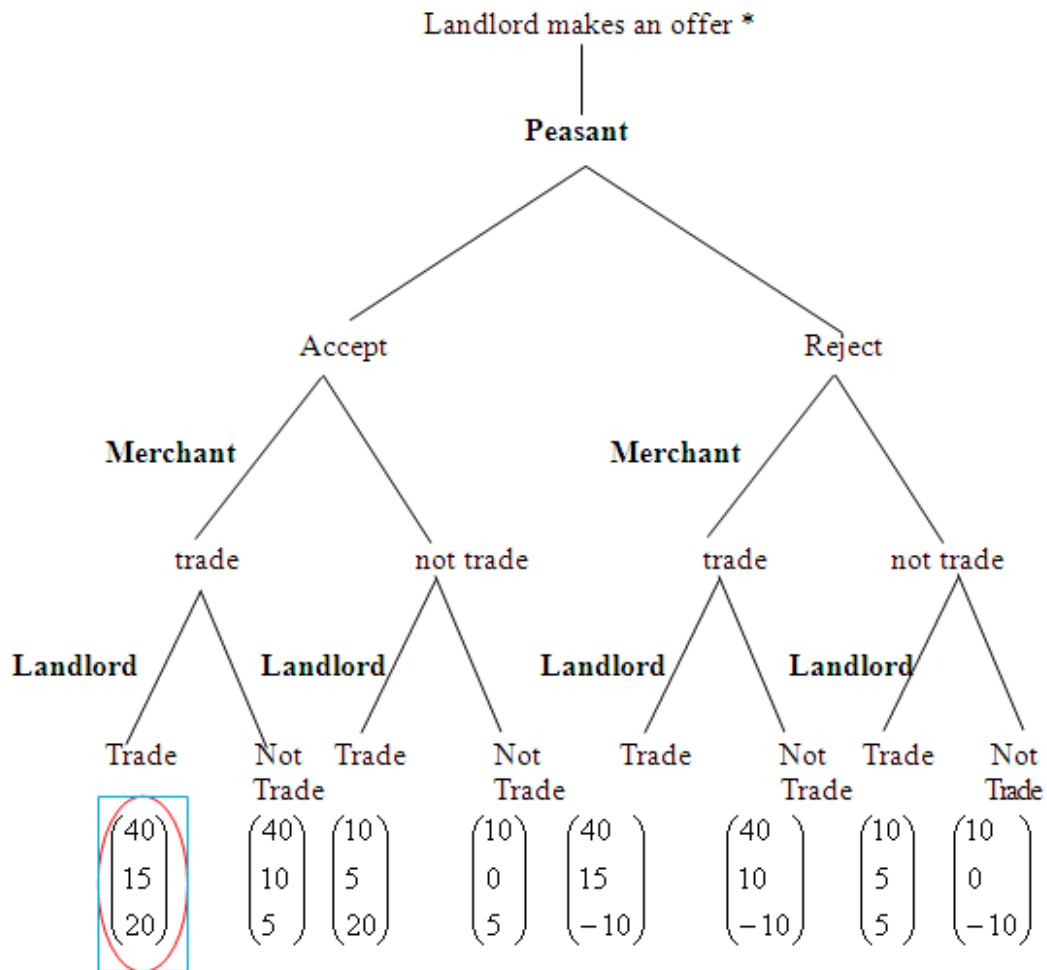
$$U_L = Y_L + \alpha[\pi - wl] + [\lambda(x_L) - Px_L] - \phi(d_M) - \phi(d_O)$$

The availability of outside options enables the peasant to get  $[w'l - \psi'(l)]$  from his alternative options if he rejects the landlord's offer. Therefore in order to enlist the

peasant's services the landlord has to offer him his reservation value, otherwise the peasant will always reject the offer. The merchant's utility function remains unchanged. As for the landlord's utility function,  $\phi(d_o)$  now represents the disutility if either the merchant or the peasant or both engage with their outside options. The payoffs of the game are as follows. The peasant gets 30 whether he accepts the landlord's offer (A) or rejects it (R) as he will get the same utility from his outside options. The peasant also gets 30 from trading with the merchant. The merchant's payoffs are as before, 10 from trading with the peasant (t), 10 from trading with his outside options (N) and 15 from trading with the landlord (T). Lastly, the landlord gets 20 if the peasant agrees to work for him and the merchant trades with him. If the merchant and peasant refuse to cooperate with the landlord and trade outside the village he experiences additional disutility giving him an overall payoff of -5. Also if the merchant trades with a non-complying peasant he experiences a disutility of -5. This game is depicted in Figure 4.

The merchant now has a dominant strategy to always trade with the peasant, irrespective of whether the peasant accepts or rejects the landlord's offer. Knowing this the landlord will always trade with the merchant as he lacks the ability to influence the merchant's actions in any way. Also since the peasant is offered his reservation value he will accept the landlord's offer. Thus the single interaction Nash equilibrium is (A,t,T), i.e. the peasant accepts the landlord's offer, the merchant trades with the peasant and the landlord chooses to trade with the merchant. No one in this game can do any better by changing strategies and so the equilibrium remains unchanged under repeated interaction.

Figure 4: Merchant and peasant have outside options



\* Details of the payoff calculations are given in Appendix 1.

The payoffs are (peasant, merchant, landlord).

○ Single interaction Nash equilibrium.

□ Repeated interaction Nash equilibrium.

The outcomes of these games allow us to formulate two hypotheses, one at the village level and the other at the individual level:

1. *Market intervention should expose villagers to alternative avenues of provision, thus reducing and/or breaking market interlinkages and the exploitative hold of the resource rich.*
  - a. *The beneficial effects of the market should be felt more strongly by peasants residing in*



*villages with asymmetric distribution of resources.*

- 2. Within the village the benefits of market exposure should be felt most by peasants who are landless and/or have low social status, making them highly vulnerable to exploitation. These peasants would have the greatest incentive to break out of this relationship.*

Infiltration of the market, and the alternative options that come with it, are thus hypothesised to be one viable way of reducing the exploitative powers of the landlord as he is unable to control or collude with them. The next section, making use of data collected in Hafizabad district, Pakistan finds that while interlinkages continue to exist even in close proximity to a major highway, their nature is considerably less exploitative when compared to those found in isolated villages.

### **3. Empirical Analysis**

The analysis looks at five markets to see whether the household is in an interlined relationship; employment, credit, housing, dispute resolution and voting patterns. A household is defined to be in an interlinked relationship if it has two or more markets supplied by the same person. For example, if members of the household are employed as agricultural labourers and they live in a house provided by the landlord then the household is considered to have its markets interlinked. The same is true if the household takes a loan from the same person who owns their house and solves their disputes. Furthermore, for the purpose of this analysis interlinkages are split into two types; labour-tying and non-labour based interlinkages. Labour-tying interlinkages arise when the household's labour market is tied to other markets, e.g. if members from the household are employed as agricultural workers, take loans from their employer and live in a household owned by their employer. Non-labour based interlinkages, on the other hand, are

those where markets other than employment are interlinked e.g. if the household takes a loan from the same person who solves their disputes and owns their house.

The rationale for splitting interlinkages into these categories is the perceived variation in the power relations. In labour-tying interlinkages peasants have relatively low bargaining power as their livelihood, and thus their survival, is dependent on them agreeing to the resource holder's terms in other markets. This low bargaining power enables the resource rich to play the exploitation game as peasants are not in a strong enough position to reject his offer. Thus in line with Srinivasan's (1991) model, these types of interlinkages are highly undesirable to the peasant and therefore, whenever possible they try and keep their labour market independent. However, in the case of non-labour based interlinkages, peasants are believed to have some level of leverage as it can be claimed that, even without access to several markets, their survival is still ensured due to the independence of the labour market,<sup>22</sup> arguably limiting the sanctioning powers of the resource holder. Moreover, given its low potential for exploitation, I conjecture that these interlinkages are driven more by a desire for efficiency than for surplus extraction.

### **3.2. Basic Model**

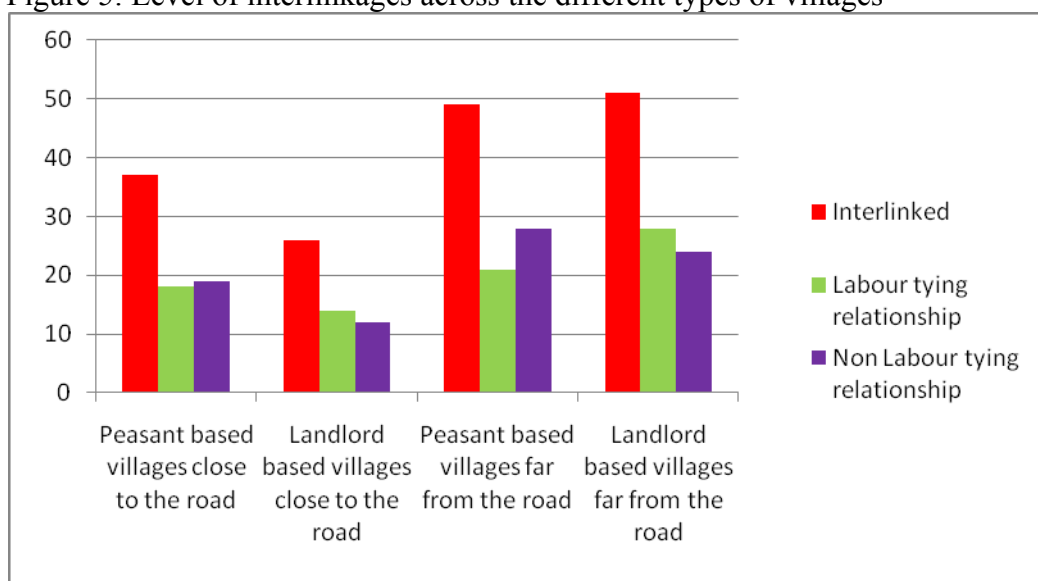
Figure 5 illustrates the extent of interlinkages found across the different types of villages, highlighting the greater percentage of households found to be in an interlinked relationship when situated in an isolated village. We can see from the graph that in all four types of villages labour-tying and non-labour tying interlinkages co-exist, pointing towards the inability of the resource rich to control the entire village. Moreover, a larger percentage of households have their markets interlinked in isolated villages than those connected by a highway, significant at the 1% level. Also, in isolated villages the land tenure system has no significant effect on the overall level of interlinkages, but it does appear to impact the distribution between the two types of interlinkages. In landlord based villages a

---

<sup>22</sup> This is on the assumption that an independent labour market would enable the peasant to buy the goods needed for basic survival.

larger percentage of households are in a labour-tying relationship while in peasant based villages there is a greater tendency towards non-labour tying relationships. The evidence suggests that the motorway has helped reduce both types of interlinkages, significant at the 10% and 5% level respectively.

Figure 5: Level of interlinkages across the different types of villages



Lastly, the impact of connectivity appears to be stronger in landlord dominated villages than in peasant based ones. This could be explained by the difference in the nature of the interlinked relationship and the peasants' attitude towards the service provider in the two types of villages. In peasant based villages, dispersed land ownership has created a large number of suppliers in the market, limiting the ability of the resource holder to exploit the peasant.<sup>23</sup> Markets in these villages were interlinked largely in an effort to increase efficiency, as high transaction costs make it costly to engage with peasants in only one market.<sup>24</sup> Thus it is mostly a functional relationship and reduces the incentive of the peasants to break out of it, even when connected by the motorway. However, in the case of landlord based villages high inequality restricts the options available to villagers, thus giving the landlord the ability to establish triadic relationships with the peasants.

<sup>23</sup> While landowners may be able to exploit, to some extent, the extremely poor members of society, the level is still much lower than that in landlord dominated villages.

<sup>24</sup> Large information costs expose service providers to potential risks (Basu 1983).

The high potential for exploitation in these types of interlinkages, as illustrated in the previous section, should incentivize peasants to break out of this relationship when presented with external options. Hence the only way for landlords to interlink markets in connected villages is to play the non-exploitative dyadic interaction game. In an interview with the landlord from one of the unequal connected village, I asked if he faced difficulty in finding workers to work on his fields. His response was:

*“Since the construction of the motorway it has been much harder to find agricultural workers. Previously all I had to do was say the word and peasants used to come running to the fields. Now it is different. Households that previously worked as agrarian labourers much prefer to pursue the new alternatives. So much so that I am now considering increasing the use of machinery so as to cut down the number of workers I need.”*<sup>25</sup>

With regards to the households in landlord dominated villages it was interesting to hear the difference in their attitude towards the landlord depending on their level of seclusion. In isolated landlord dominated villages peasants found the question of defying the landlord absurd and unthinkable. Their response to such a query would often be *“Where would we go if we defied him?”*<sup>26</sup> or *“How would we feed our children if he cuts us off?”*<sup>27</sup> This fear of the landlord was not shared by villagers close to the road. When asked why the household aligned with the landlord the responses were usually: *“He provides for our needs”*<sup>28</sup>, or *“Because he helps get us drains and paved streets.”*<sup>29</sup>, or *“He listens to us and does good work around the village.”*<sup>30</sup> Moreover, these households were very clear that, if

---

<sup>25</sup> Landlord 1, interview, connected landlord dominated village 1, 15 April, 2011.

<sup>26</sup> Household ID 45, interview, isolated landlord dominated village 1, 16 May, 2008.

<sup>27</sup> Household ID 286, interview, isolated landlord dominated village 2, 24 May, 2008.

<sup>28</sup> Household ID 249, interview, connected landlord dominated village 1, 3 May, 2008.

<sup>29</sup> Household ID 284 and 247, connected landlord dominated village 1, 3 May, 2008.

<sup>30</sup> Household ID 396, 393 and 407, interview, connected landlord dominated village 2, 23 May, 2008.

the exchange with the landlord became unfair or exploitative, they would not hesitate to look for other service providers in the market.<sup>31</sup>

### 3.3. Extended Model

The tables that follow run more rigorous tests to see if the results found through the descriptive statistics hold after controlling for household specific characteristics. Moreover, the tables also analyse whether household characteristics impact its chances of being in an interlinked relationship. The following logit regression model is run to test for this:

$$Y = \alpha + \beta_1 MW + \beta_2 LL + \beta_3 Edu + \beta_4 Exp + \beta_5 Bh + \beta_6 Kh + \beta_7 An + \beta_8 MS + \xi$$

(1)

$$Y = \alpha + \beta_1 MW + \beta_2 LL + \beta_3 MW*LL + \beta_4 Edu + \beta_5 Exp + \beta_6 Bh + \beta_7 Kh + \beta_8 An + \beta_9 MS + \xi$$

(2)

Where Y= Household has its markets interlinked.

MW= Household is situated in an isolated village.

LL= Household resides in a village dominated by a large landlord.

Edu = Education level of the household head.

Exp = Average household expenditure per month.

Bh= Household belongs to the Bhatti biradery.

Kh = Household belongs to the Kharral biradery

An= Household belongs to the Ansari biradery

Ms= Household belongs to the Muslim Sheikh biradery.

Y is a binary variable capturing whether the household is in an interlinked relationship or not. It takes the value of 1 if the household has two or more markets supplied by the same person, 0 otherwise. Moreover, when analysing the effect of the road on labour-tying relationship Y takes the value of 1 only if the household's labour market is tied to another market. If the household is in a non-labour tying interlinked relationship than Y is 0. The opposite holds when looking

---

<sup>31</sup> This was particularly true when talking to the younger generation in the household. Household ID 258 and 266, interview, connected landlord dominated village 1, 3 May, 2008. Household ID 381, interview, connected landlord dominated village 2, 23 May, 2008.

at non-labour tying relationships. Distance from the road, MW, takes the value of 1 if the household resides in an isolated village and 0 otherwise. Distance is analysed as a binary variable and not as a continuous one due to the research design which chose to look at villages which were polar opposite, i.e. while half are situated on the motorway the other half are far enough to be classified as being isolated. Within this setup modest changes in distance are irrelevant.<sup>32</sup> LL is a dummy variable for whether the household resides in a village dominated by a large landlord. Edu captures the number of years of schooling of the household head, included on the assumption that he or she is the main decision maker in the house.<sup>33</sup> This variable is included on the assumption that education, due to the awareness that comes with it, reduces the households' chances of engaging in an exploitative relationship. Exp measures the total monthly expenditure for running the household, incorporated as an indicator for the household's economic standing.<sup>34</sup> This helps evaluate whether economically better off households are less likely to be in an interlinked relationship. The variable MW\*LL in equation 2 is an interaction term meant to capture the effect of belonging to a landlord dominated village far from the motorway. In Equation 2, due to the presence of the interaction term, MW now captures the effect of the road on peasant based villages only; i.e. it assumes LL is taking the value of 0. Similarly LL captures the effect of land tenure systems on villages close to the road only; i.e. when MW is 0.<sup>35</sup>

The last four variables are dummies for the major biraderies found in the villages, meant to control for the social status of the household.<sup>36</sup> Bh and Kh represent the upper class biraderies of Bhattis and Kharrals. Their elevated social status places

---

<sup>32</sup> This research design was, amongst other things, driven by practical considerations, as trying to find the distance from the road after which villagers considered themselves isolated would have been extremely expensive and would have required looking at a large number of villages.

<sup>33</sup> Household interviews revealed this to be the case.

<sup>34</sup> This figure is verified by asking the household questions about their consumption patterns and then checking if the consumption matched the stated level of spending. Moreover, most households claimed to have no savings.

<sup>35</sup> The effect of that variable cannot be read off the table directly. It requires further computation.

<sup>36</sup> For a detailed discussion on social stratification and biradery status in a Punjabi village see Ahmad (1977).

them in a slightly better position vis-à-vis the landlord when compared to the lower classes, making them synonymous to the merchant in our previous model. However, as we saw from the model, when isolated they too are vulnerable to exploitation. An takes the value of 1 if the household belongs to the Ansari biradery. These households were historically not allowed to own land which lowered their social status considerably. Lastly, MS is 1 if the household is a Muslim Sheikh. They too, like the Ansaris, were previously not allowed to own land and belong to the lowest strata of society. The low economic and social status of these two biraderies makes them similar to the landless peasants from our model, who were found to be extremely vulnerable to exploitation.<sup>37</sup> The reference category is the small middle class biraderies.

Table 1 presents the results for Equations 1 and 2 enquiring whether the household is in any kind of interlinked relationship. Starting with Column 1 we find that, in line with Figure 5, households situated in isolated villages are 23% more likely to be in an interlinked relationship when compared to those residing in connected villages. This result is significant at the 1% level. Moreover, Column 1 finds that being situated in a landlord dominated village reduces the households' chances of being in an interlinked relationship by 13% (significant at the 1% level). However, as can be seen from Column 2, this result is largely driven by the low levels of interlinkages found in landlord dominated villages close to the motorway. The education level of the household head lowers the probability of a household having its markets interlinked by 2% for every year of schooling attended.<sup>38</sup> This result is also significant at the 1% level. Household expenditure, on the other hand, has a significant but not very substantial effect on the household's chances of being in an interlinked relationship.

---

<sup>37</sup> While there are now no legal restrictions against these two biraderies owning land, most of them were found to be landless.

<sup>38</sup> It must be pointed out that the effect of education on interlinkages is most likely not linear. The effect is probably stronger in the first few years and then tapers off with additional years of schooling.

Table 1: Is the household in an interlinked relationship?

	Basic Model	
	(1)	(2)
Household is situated in an isolated village	0.23*** (0.00)	0.2*** (0.00)
Household belongs to a landlord dominated village	-0.13*** (0.01)	-0.17** (0.02)
Household resides in an isolated landlord dominated village		0.08 (0.55)
Education level of the household head	-0.02*** (0.01)	-0.019*** (0.01)
Expenses (per Rs. 1000)	-0.005** (0.04)	-0.005* (0.06)
Bhatti	-0.21*** (0.00)	-0.19*** (0.00)
Kharal	-0.045 (0.11)	-0.06 (0.24)
Ansari	-0.13** (0.02)	-0.13*** (0.01)
Muslim Sheikh	0.22*** (0.00)	0.22*** (0.00)
N	356	356
R <sup>2</sup>	0.1192	0.1200

Robust standard errors calculated; p-values in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

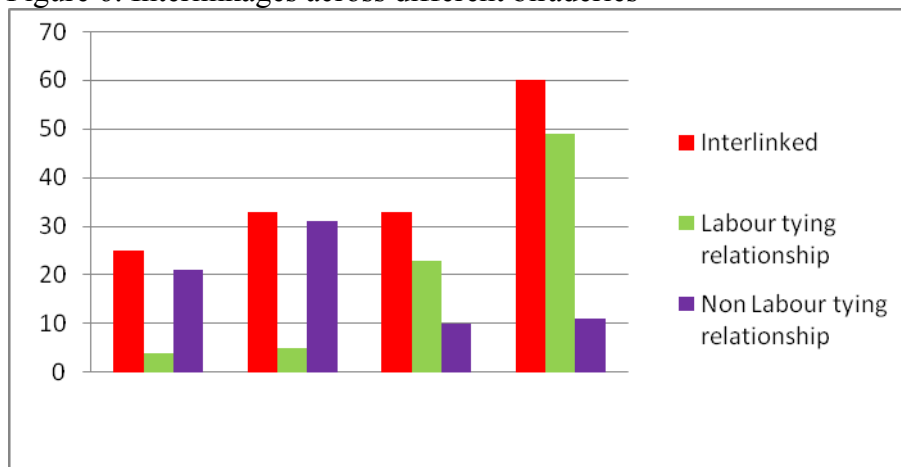
Including the interaction term in Column 2 does not take away the significant effect of connectivity, highlighting the positive effect connectivity has had on peasant based villages. Furthermore, in landlord dominated villages situated on the motorway, a household's chances of having the same provider for multiple markets is significantly reduced. However the interaction term itself is not found to be significant, supporting the findings in Figure 5 that in isolated villages, land tenure systems have no impact on the households' chances of having their markets interlinked. This is not a surprising result as isolation leads to a reduction in the options available to peasants and an increase in transaction costs, both of which were cited as contributing factors for market interlinkages in Section 1.

The table also highlights the significant impact that the households' biradery has in determining its chances of being in an interlinked relationship. Muslim Sheikhs, the most disadvantaged in village society, are 22% more likely to have



their markets interlinked while the Bhattis, who make up the upper class of rural society, are 19% less likely, than any other biradery, to be in an interlinked relationship. These results are in line with our expectations. However, a curious result is the lower chances of Ansari households of having their markets interlinked. In order to analyse this further Figure 6 splits the data by biradery to see the level and type of interlinkages that households from different social groups find themselves in.

Figure 6: Interlinkages across different biraderies



The Muslim Sheikhs are by far the worst off with 60% of households having their markets interlinked in one form or another and 49% being in a labour-tying relationship. The Ansaris, on the other hand, due to their slightly more elevated status are better off with only 33% having their markets interlinked. This is similar to the level of interlinkages amongst the upper class Kharral households. However, where they differ from the Kharrals is in the type of interlinkages they find themselves in. Whereas most Ansaris have their labour market tied to other markets, Kharrals are more likely to enjoy a relatively independent labour market. The same holds true for Bhatti households; by far the majority have an independent labour market. The high status enjoyed by the Bhattis and Kharrals makes it highly unlikely that they will find themselves in an exploitative labour-tying relationship.

Table 2 goes on to analyse the impact of connectivity, land tenure system and household status on the chances of a household engaging in a labour-tying relationship. Starting with the basic model we find that households situated far from the motorway are 8% more likely to have their labour market tied to other markets. This result is significant at the 5% level. Land tenure system, on the other hand, has no significant impact on households' chances of having an interlinked labour market. Moreover, including the interaction term in Column 2 takes away the significant effect of the road and the interaction term itself is not significant either.

The more interesting story emerges when we analyse the impact of household specific characteristics. Starting with education we find that, once again, the education level of the household head has a significant impact on reducing the chances of the household having their labour market interlinked with others (significant at the 1% level). Also, as before, the impact of household expenditure is significant but not substantial. Turning next to the role of household biradery it can be seen that, in line with Figure 6, Bhatti and Kharral households are 11% and 16% respectively less likely to have their labour market interlinked with another market. Muslim Sheikh households, on the other hand, are 15% more likely to be in a labour-tying relationship. This result is significant at the 1% level.

Table 2: Is the household in a labour-tying relationship?

	Basic Model		Close to The Motorway	Far From The Motorway
	(1)	(2)	(3)	(4)
Household is situated in an isolated village	0.08** (0.05)	0.04 (0.19)		
Household belongs to a landlord dominated village	0.01 (0.77)	-0.04 (0.33)	-0.12 (0.31)	0.11 (0.30)
Household resides in an isolated landlord dominated village		0.12 (0.31)		
Education level of the household head	-0.015*** (0.00)	-0.01*** (0.00)	-0.06*** (0.00)	-0.01*** (0.01)
Expenses (per Rs. 1000)	-0.006** (0.05)	-0.06** (0.05)	-0.02** (0.05)	-0.0058 (0.18)
Bhatti	-0.12*** (0.00)	-0.11*** (0.00)		-0.15*** (0.00)
Kharral	-0.15*** (0.00)	-0.16*** (0.00)		-0.18*** (0.00)
Ansari	-0.0001 (1.00)	-0.003 (0.93)	-0.13** (0.05)	0.08 (0.35)
Muslim Sheikh	0.15*** (0.01)	0.16*** (0.01)	0.13 (0.12)	0.31*** (0.01)
N	356	356	90	182
R <sup>2</sup>	0.2673	0.2735	0.2566	0.1941

Robust standard errors calculated; p-values in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Columns 3 and 4 split the data by distance to the motorway to see if connectivity impacts the role of households' status on their chances of being in a labour-tying relationship. It can be seen that Muslim Sheikhs, situated in isolated villages, are 31% more likely than any other biradery to be in a labour-tying relationship, significant at the 1% level. These households are some of the poorest in rural society and have always been considered part of the lowest stratum in the village<sup>39</sup> (Ahmad 1977). Moreover, almost all of them are landless which, combined with their low social status, limits their options, thus making them highly prone to exploitation. Hence, when presented with alternative options, they appear to be breaking away from this exploitative relationship, as Column 3 finds that, in

<sup>39</sup> Most villagers do not like even associating with the Muslim Sheikhs. While collecting data I was often told by other households not to bother interviewing the Muslim Sheikhs as "*They are unimportant and their opinion is not worth anything.*" (Key respondent 9).

villages close to the motorway, belonging to the Muslim Sheikh biradery no longer presents a disadvantage in terms of being in a labour-tying relationship. As mentioned in Chapter 2, these households, according to the landlord, were most active in engaging with the external market. In fact, as the landlord himself complained in his interview, their shift in occupation meant a fall in the number of households available to work on the fields. Results for the Ansari households show those situated in connected villages are 13% less likely to engage in a labour-tying relationship, significant at the 5% level. Hence it seems that, as per Hypothesis 2, the road is taking away the age old disadvantage of belonging to the lower classes (Ahmad 1977, Rouse 1988). However, this is not to say that connectivity is not impacting the upper class of society. In villages connected to the external economy there are no Bhatti or Kharal households engaged in labour-tying relationships.

Table 3, inquiring into households engaged in non-labour based interlinkages, finds that those in isolated villages are 13% more likely to be engaged in such types of interlinkages than those situated close to the motorway, significant at the 1% level. However, from Column 2 we can see that it is peasant based villages, rather than landlord dominated ones, that favour these relationships. Households in isolated landlord based villages are 8% less likely to be in a non-labour based relationship, significant at the 5% level. In fact, when we split the data by distance from the road, we find that households in isolated landlord based villages are 23% less likely to engage in a non-labour based relationship when compared to similarly isolated peasant based villages (significant at the 1% level). This is not entirely unexpected when we consider that this is a relationship born more out of the desire for efficiency and has low exploitative powers. Therefore, a landlord wanting to maximise surplus extraction, and able to do so because of isolation, would be more inclined to tie-in the labour market.

Turning to the effect of household level characteristics on non-labour based relationships, we find that the education level of the household head and the households' average spending levels have no impact on the probability of the

household being in a non-labour tying relationship. Furthermore, we can see that belonging to the Muslim Sheikh biradery also has no significant impact on households' chances of being in a non-labour tying relationship. This can largely be attributed to high levels of poverty amongst Muslim Sheikh households, making it difficult for them to keep their labour market independent. This is true in both isolated and connected villages. Kharral households, on the other hand, have a 15% higher probability of engaging in a non-labour tying relationship. This result is significant at the 1% level. This effect is even stronger when looking at the Kharrals in isolated villages.

Table 3: Is the household in a non-labour tying relationship?

	Basic Model		Close to The Motorway	Far From The Motorway
	(1)	(2)	(3)	(4)
Household is situated in an isolated village	0.13*** (0.00)	0.17*** (0.00)		
Household belongs to a landlord dominated village	-0.12*** (0.00)	-0.07* (0.06)	-0.06 (0.18)	-0.23*** (0.00)
Household resides in an isolated landlord dominated village far from the motorway		-0.08** (0.03)		
Education level of the household head	0.0007 (0.83)	-0.00008 (0.98)	0.00012 (0.95)	-0.00043 (0.95)
Expenses (per Rs. 1000)	-0.0005 (0.8)	-0.0007 (0.66)	0.0013 (0.65)	-0.003* (0.07)
Bhatti	-0.02 (0.56)	-0.03* (0.07)	-0.047 (0.3)	-0.05 (0.27)
Kharral	0.15*** (0.00)	0.17*** (0.00)	0.15*** (0.00)	0.24*** (0.00)
Ansari	-0.13* (0.07)	-0.13* (0.07)	-0.03 (0.83)	-0.20** (0.03)
Muslim Sheikh	-0.07 (0.39)	-0.07 (0.37)	0.02 (0.87)	-0.14 (0.11)
N	356	356	174	182
R <sup>2</sup>	0.0752	0.0773	0.0727	0.0720

Robust standard errors calculated; p-values in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Given the disadvantage Muslim Sheikh households face, it is worth investigating what is driving this, i.e. is it due to their landlessness, and the resultant poverty forcing them to approach the landlord, or their low social status, making it difficult for them to break out of exploitative relationships? We can try and tease

this out by observing if all landless households suffer from higher chances of having their markets interlinked or if it is specific to Muslim Sheikhs. Table 4 makes use of a restricted sample to analyse the effect of connectivity and land tenure systems on the chances of a landless household being in a labour-tying relationship. From the table we can see that distance from the road increases households' chances of being in any type of interlinked relationship by 16%, significant at the 10% level. However, including the interaction term takes away the significance of the motorway variable and the interaction term too is not significant. As before, the household head's education level lowers their chances of interlinking their labour market, significant at the 5% level. Interestingly, from Columns 3 and 4 we can see that the positive effects of education are confined to connected villages, as these are where peasants actually have the option to break out of exploitative relationships.

Moreover, looking at the impact of biradery we find that even amongst the landless, Muslim Sheikhs are significantly more likely to have their labour market interlinked when compared to other biraderies. Furthermore, landless Bhatti and Kharral households are 22% and 28% less likely to be in a labour-tying relationship. These results too are significant at the 1% level. This gives weight to the argument that Muslim Sheikh households are disadvantaged, not so much because of poverty, as these are all landless households, but more so because of their low social status. However, connectivity is helping to reduce this disadvantage, as from Columns 3 and 4 we find that, while Muslim Sheikh households in isolated villages are 25% more likely than any other biradery to have their labour market interlinked, significant at the 1% level, in villages connected to the motorway belonging to this biradery has no significant effect.

Table 4: Is the household in a labour-tying relationship?  
(*Landless households only*)

	Basic Model		Close to The Motorway (3)	Far From The Motorway (4)
	(1)	(2)		
Household is situated in an isolated village	0.16* (0.07)	0.1 (0.19)		
Household belongs to a landlord dominated village	-0.04 (0.65)	-0.10 (0.28)	-0.13 (0.33)	0.08 (0.57)
Household resides in an isolated landlord dominated village		0.14 (0.43)		
Education level of the household head	-0.03** (0.03)	-0.03** (0.03)	-0.06*** (0.01)	-0.01 (0.54)
Expenses (per Rs. 1000)	-0.01 (0.25)	-0.01 (0.24)	-0.025* (0.08)	0.01 (0.89)
Bhatti	-0.22*** (0.00)	-0.20*** (0.00)		-0.18*** (0.00)
Kharra	-0.28*** (0.00)	-0.28*** (0.00)		-0.29*** (0.00)
Ansari	-0.06 (0.34)	-0.06 (0.41)	-0.16** (0.02)	-0.006 (0.95)
Muslim Sheikh	0.19*** (0.00)	0.19*** (0.00)	0.14 (0.12)	0.25*** (0.00)
N	198	198	81	105
R <sup>2</sup>	0.1429	0.1462	0.2242	0.0995

Robust standard errors calculated; p-values in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Overall the results paint an interesting picture of how social and spatial characteristics interact to determine market interlinkages. First and foremost, we find that markets continue to be interlinked in rural Punjab, both in villages dominated by a large landlord as well as peasant based ones. However, the nature of the relationship varies considerably in the different types of villages and amongst households of different social standing. In peasant based villages the multiplicity of service providers restricts the ability of the resource holder to exploit the peasant, even when engaged in a labour-tying relationship. It has been argued that interlinkages in these villages are created more for the service provider to protect himself from potential losses than for him to extract surplus. In isolated landlord dominated villages, on the other hand, the evidence is consistent with the findings of the game theoretic model which argued that the landlord is

able to use inequality and seclusion to his advantage so as to establish triadic relationships with the possibility of forcing peasants to engage in transactions that lower their utility.

Secondly, the tables highlight that the most disadvantaged group in these villages are the Muslim Sheikh households, not just because of their extreme poverty, but also due to their low social status. These households are seen to play a role similar to the landless peasants from the game theoretic model in Section 2, who have relatively little, if any, access to the external market thus making them highly vulnerable to exploitation. The Kharrals and the Bhattis, on the other hand, play the role of the merchant trading social interaction. In isolated villages they too have restricted options, though they are better off than the Muslim Sheikhs due to their higher social status and the fact that some of these households own land. The question then is; if a Muslim Sheikh peasant was to reject the landlord's offer would the Bhattis and Kharrals comply with the landlord's wishes and ostracise him, or would they defy the landlord and continue to interact with the defector? In isolated villages the landlord provides Bhatti and Kharral households with social (dispute resolution and social insurance) and political (public goods provision and access to the local politician) goods which they otherwise do not have access to. The Muslim Sheikhs, on the other hand, can only offer their labour<sup>40</sup> and their support in case the upper class households decided to engage in collective action. Thus, in an isolated economy, the upper class has more to gain from interacting with the landlord than with the Muslim Sheikhs, and so they are more likely to comply with the wishes of the landlord. Being aware of this the Muslim Sheikhs are unlikely to reject the landlord's offer, even if it lowers their utility.<sup>41</sup> This can be seen by the high percentage of Muslim Sheikh households found in a labour-tying relationship. However, as the tables show, this disadvantage is limited to isolated villages. For Muslim Sheikh households residing in villages close to the motorway, their social status has no significant impact on their chances of being

---

<sup>40</sup> These are mostly unskilled households that can only perform odd jobs around the village.

<sup>41</sup> This was evident from their response to the question of defying the landlord. They thought such a question was ridiculous, as defying the landlord could mean starvation.



in an interlinked relationship. Connectivity, similar to peasant based villages, leads to peasants having access to multiple service providers, thus limiting the landlord's ability to exploit them.

#### **4. Conclusion**

Market interlinkages provide development researchers with two problems. Firstly, they have the potential for being exploitative, particularly when found in isolated villages with high inequality (Basu 1983, Bell 1988). Secondly, they make standard economic theory incapable of conducting equilibria analysis, as transactions are no longer at arm's length (Bardhan 1980). However, in the last decade, literature on agrarian economies has not focused on the theory of interlinked markets and their implications for today's rural poor. This chapter has argued for the need to bring the theoretical framework of market interlinkages back into mainstream agrarian development literature by establishing, through empirical data, that rural markets continue to be interlinked. The chapter has also illustrated the dire welfare implications that this market structure has had in isolated villages with high inequality, particularly for the social underclass.

The empirical section found that while markets in rural Punjab were interlinked, irrespective of the level of inequality, there was a difference in the nature of, and incentive for, the interlinking of markets. In egalitarian villages the multiplicity of service providers forces the resource holders to engage in a dyadic relationship with the peasants, thus enabling the latter to walk away from the interaction if they deem it to be exploitative. This is seen through the higher incidence of non-labour tying relationships in peasant based villages, and the relatively equal percentage of households engaged in a labour-tying relationship in peasant based villages connected to the external market and those situated far away. Hence the multiplicity of service providers in these villages has meant that, the only way for the resource rich to increase their benefits is by lowering their costs of interaction, as surplus extraction is no longer an available option. In isolated landlord

dominated villages, on the other hand, interlinkages have at times been used as a mechanism for exploitation, as peasants lack any alternative to the landlord for satisfying their needs. This could be seen through the peasants' obvious fear of the landlord, their inability to envisage defying him in any way and the low percentage of households found to be in a labour-tying relationship in connected landlord based villages.

Moreover, the data has highlighted the role a household's social status plays in determining its chances of being in an interlinked relationship. We saw that, by far, the most disadvantaged group in isolated landlord dominated villages was the lower class Muslim Sheikhs. This group has the highest probability of being in a labour-tying relationship, even when compared to other landless households. Their low social status, combined with poverty, has placed them in the lowest stratum of society resulting in the upper class biraderies placing little value on interacting with them. This makes it rather likely for them to sever ties with a non-complying Muslim Sheikh household. Knowing this, Muslim Sheikh households are unlikely to reject the landlord's offer even when it is exploitative.

However, this disadvantage was not evident in villages connected to the highway. Households in such villages had a significantly lower probability of finding themselves in an interlinked relationship. Moreover, the tables find that a household's biradery extends no significant disadvantage on its chances of having its markets interlinked when situated close to the road. This can be explained by the increase in external options that connectivity provides to lower class peasants, thus taking away the landlord's ability to impose sanctions on them. Hence, as long as the household is connected to the wider national economy, the land tenure system of a village seems to be unimportant, as outcomes in villages with large landlords are found to be relatively similar to those in villages with dispersed land ownership.

The results from this chapter, therefore, highlight that inequality and isolation by themselves are not detrimental to peasants' welfare as far as market interlinkages

are concerned. Rather, it is the interaction of the two that creates a monopolistic/monopsonistic landlord who is able to extract the maximum surplus possible from the peasants.

## **4. The Impact of Market Exposure on Public Goods Provision**

The literature on economic development places considerable emphasis on public goods<sup>1</sup> provision as a means of enhancing the welfare of the poor and reducing inequality. However, despite this concern, researchers have found that public investment in many developing countries is skewed in favour of wealthier ‘elites’ (see for example Banerjee and Somanathan 2007, Bardhan and Mookherjee 2002, Gazdar 2000, Charlton, et al. 2003). Pakistan is no exception where elite capture has meant that public funds, which are ear-marked in the budget for alleviating poverty, are being appropriated for the benefit of the resource rich (Gazdar 2000). This failure on the part of the state to provide for its citizens has meant that the poor have had to find alternative avenues for fulfilling their needs. Often this has involved approaching someone who has command over resources, both financial and social, and is willing to act as a patron (Scott 1972, Powell 1970). However, as stipulated in Chapters 1 and 2, aligning with a patron does not guarantee provision of public goods. Depending on the patron’s bargaining power vis-à-vis citizens, clients might find themselves in a situation where the patron contracts with the local politician to secure public resources for his own private benefit in exchange for his clients’ votes (Powell 1970, Keefer 2004, Scott and Kerkvliet 1977), leading to their exclusion from public spending decisions.

Thus the vulnerable groups in society, who are most in need of state resources, are most likely to get caught in a low-provision equilibrium. This chapter explores the impact connectivity has on peasants’ bargaining power, and whether the change in the relationship is large enough to enable them to negotiate higher levels of public goods provision for themselves. However, before exploring the effects of policies

---

<sup>1</sup> Public goods are defined not as pure public goods, rather as all goods provided by the state (Banerjee and Somanathan 2007).

that could change relative bargaining powers, it is important to take a step back and first analyse what enables the un-elected patron to influence public spending decisions. In this vein Section 1 argues that by guaranteeing the politician a certain number of votes the patron is able to ensure that public spending, instead of being spent directly on rural citizens' welfare, is channelled through him. These resources are then used by the patron to strengthen his own patron-client network as he decides who enjoys the benefits of public spending. Hence, a household's status in the patronage network and its relative bargaining power, have a direct impact on the amount of public goods that it would receive. Based on this, Section 2 goes on to analyse the extent to which the motorway has been able to alter bargaining powers, and whether the change is enough for households to negotiate increased public goods provision for themselves. Aside from looking at whether the overall level of provision in the village has increased, the section also explores who within the villages is benefitting from increased connectivity. As in the case of market interlinkages, it is found that the benefits of connectivity, in terms of public goods provision, are experienced most strongly by the Muslim Sheikh households who belong to the lowest end of the social strata and thus were most vulnerable under isolation.

## **1. The Deals Politicians Make**

Despite the well documented link between public goods provision and poverty alleviation, Pakistan is found to suffer from very low levels of public goods provision, particularly in its rural areas (Hasnain 2008). One of the problems regarding public spending in rural Pakistan is the presence of patronage politics, which results in public resources being channelled through the local patron, rather than being spent directly on citizens' welfare. As a result, public spending decisions are made by patrons in the rural economy and not by elected politicians (Cheema et al 2005, Gazdar 2000). These decisions deal not only with what goods and services are to be provided, but also towards whom public spending is to be diverted. Therefore as argued in Chapter 2, those peasants who have a stronger

position in the patronage network, either due to their initial endowments or due to their having additional ties with the landlord, are most likely to see public funds used for their welfare. In contrast poor villagers, who are most in need of public assistance, are least likely to receive it as they are unlikely to be able to negotiate increased provision in exchange for their services to the patron.

The politicians' incentive for dealing with their constituents through a patron rather than directly are arguably two-fold. Firstly, as stipulated by Keefer (2007), in young democracies politicians are severely constrained in their ability to make credible pre-election commitments to their constituents as they have limited precedence to draw on. This certainly holds true in the case of Pakistan given that, in its 63 years of existence, it has only had 8 general elections (PILDAT 2008). The inability to make credible promises makes campaigning very expensive and ineffective for politicians and, therefore, forces them to create alliances with someone who has credibility with the voters. In the presence of clientelist networks, patrons can perform this function as their face-to-face contact with peasants makes them fairly credible (Scott and Kerkvliet 1977, Powell 1970). Thus politicians, who want to secure votes, are found to approach local patrons and campaign through them rather than attempting to do so independently.

Secondly, dealing with a patron comes with a guarantee of a certain number of votes. The patron is able to deliver these votes as one of the services peasants provide to their patron is to agree to vote in accordance with his political preferences (Powell 1970, Scott 1972, Mason 1986). As mentioned in Chapter 2 once promised, the client is unable to renege as voting in rural Pakistan is not always secret. This is particularly true for women voters whose conservative households may not permit them to go to the polling station. Instead, as reported by some of these women, they have been sending their filled ballots to the voting booth through their children.<sup>2</sup> Moreover, as stipulated by Strokes (2005), the close knit nature of small towns and villages makes it unlikely for people's voting

---

<sup>2</sup>Household ID 81, interview, isolated peasant based village 1, 2 May, 2008.  
Household ID 120, interview, connected peasant based village 1, 2 May, 2008.

decisions to remain hidden as patrons (and party officials) can rely on their operatives, based in the village, to report non-compliant behaviour to them.<sup>3</sup> Therefore she argues that, in developing countries that are new democracies, the poor are unlikely to renege on their promises, as they would not expect their voting decisions to remain private.<sup>4</sup> The same is true in Pakistan, as peasants in my sample villages never considered the voting process to be private or confidential. Rather, they considered it to be a communal activity that was to be carried out based on consultations with fellow peasants and under the direction of the patron.<sup>5</sup> Interestingly, the peasants' lack of faith in the secrecy of the balloting process was in spite of the Pakistani Government's assurances to its citizens that their votes would remain anonymous. However, peasants had no reason to believe these formal assurances as, in line with the argument by Mason and Joshi (2008), they had no precedence of secret balloting. Hence the outcome is that the patron, in effect, 'controls' a few hundred (if not more) votes which he then trades with politicians.

Politicians reciprocate in this relationship by providing patrons with a combination of private and public goods.<sup>6</sup> While private goods entail the payment of money, housing or land, public provision involves making public resources available to the patron to distribute as he sees fit. These public resources are then used by the patron to both improve his own well-being and to strengthen his patronage network by offering 'rewards' to those clients who have relatively stronger bargaining power within the network. The extent of public funds that

---

<sup>3</sup> Strokes (2005) looks specifically at how party operatives can ensure that paying citizens for their votes results in them actually voting as promised. This can be adapted for the analysis of voting under patronage networks to help explain how the patron ensures that the clients vote according to his preferences.

<sup>4</sup> Strokes (2005) lists a number of examples from countries such as India, Argentina and Russia to illustrate the various tactics used by party officials to intimidate the voters and ensure that they vote in accordance with their promises.

<sup>5</sup> Household ID 386, interview, connected landlord dominated village 2, 23 May, 2008.

During the interview with this household I asked the head of the household as to why he did not vote independently based on his own preferences? His response was to inform me that, since I was from the city I didn't know how things were done. While in the city we might do things independently, that is not how it worked in the village, as here decisions were made jointly so as to cater for the overall welfare of the village.

<sup>6</sup> Corruption, coupled with low levels of accountability, enable politicians in Pakistan to expropriate resources without having to face the consequences.

patron receives, in exchange for the votes they offer, would also be determined though a bargaining game. How strong each party is vis-à-vis the other would depend on factors such as the number of votes the patron is offering, the strength of the politicians' position in the upcoming election and the relative social status of the two. So, while a politician, who himself is a large landlord with a substantial clientelist following may be in a stronger position vis-à-vis the local patron, a small time politician who relies on other landlords for political support would have to offer considerable rewards, in the form of public resources, to the patron in order to secure his support. Nevertheless, public spending in rural Pakistan is mostly found to be directed through the patron and not directly to the voting citizen. Therefore, villagers who are not aligned to a patron run the risk of having limited access to public resources. Cheema and Mohmand (2004) highlight this fact through their finding that villagers in their sample, who supported the incumbent politician but were not aligned with a patronage network, were less likely to receive public goods as public resources were used by the incumbent mayor to gain the support of the local landlord.

Contracting with patrons is 'cheaper' for the politician than providing public goods to the masses as, in the presence of patronage politics, the number of people that the politician needs to satisfy shrinks from a winning majority of constituents to a winning majority of patrons (Mason and Joshi 2008). Moreover, contracting with a patron guarantees results as defection on the part of the patron is easily detectable due to the large number of votes he controls.<sup>7</sup> This is contrasted with contracting with citizens who, by virtue of constituting a minute fraction of the voting body, have a higher chance of reneging (mostly by choosing not to vote) without detection (Keefer 2004).<sup>8</sup> Contracting with the patron solves this problem and thus takes away the probabilistic nature of success in democracies.

---

<sup>7</sup> The large number of votes the patron controls may make defection so detectable that the politician may not have to invest in monitoring technologies.

<sup>8</sup> Monitoring citizens' voting decisions, by the politician, is either not possible when balloting is secret, or prohibitively expensive when it is not as there are too many citizens.



This is an ideal situation for both politicians and patrons. Provided politicians can contract with enough patrons, they can guarantee victory in an election, something they could never achieve in the absence of clientelist politics. For patrons this is yet another avenue through which to expropriate resources, either for their own benefit or for strengthening their patronage networks. The only losers are the rural clients as the decision regarding public goods provision in their village is made by the un-elected patron (Mason and Joshi 2008, Keefer 2007), rather than the politician who, as a result of this contracting, is bound to feel disengaged from the masses (See also Strokes 2005, Karlan 1994, Strokes 1994, Kochin 1998 for an overview of the effects of vote buying). As a result, those peasants who enjoy high bargaining power vis-à-vis the patron are most likely to see public spending diverted towards them, while peasants with low bargaining power are bound to receive few, if any, public goods provision. The next section makes use of empirical data to analyse the extent to which a monopolistic landlord, situated in isolated villages, is able to appropriate public resources for his own benefit. Moreover, the section goes on to study the effect that connectivity has on peasants' bargaining power and thus their ability to negotiate increased provision for themselves. The data reveals that while in isolation public spending is significantly lower in villages dominated by large landlords when compared to relatively egalitarian villages, once connected to the external economy, outcomes in the different tenured villages tend to converge.

## **2. Empirical Analysis**

This section makes use of the data to evaluate the impact connectivity has had on public goods provision. The analysis is restricted to two public goods: paved streets and drainage systems. The decision regarding the provision of these goods officially lies with the Tehsil Mayor (the second tier of the Local Government System), who receives funding from the federal government. However, these decisions are meant to be made in consultation with Union-level Mayors (the lowest tier of local government). These Union Mayors, aside from having better

information regarding villagers' needs, also form the electoral college for the election of the Tehsil Mayor and thus have considerable leverage to acquire development funds for their own political constituents<sup>9</sup>. The reason for selecting these two public goods lies in the nature of these goods and the way in which they are provided in Pakistan. Paved streets and drains in Pakistan are not 'pure' public goods.<sup>10</sup> While they are non-rival, others can be excluded from their usage. This holds true even within a neighbourhood, where one would intuitively expect goods like paved streets and drainage systems to be non-excludable in order to be effective. However, upon observation I found that this is not necessarily the case. The politician and the patron can exclude a single household from the provision of these goods, even if the houses next door are being provided with them. Walking around the villages I would at times find paved drains stopping in front of a single house, and starting again next to its neighbour's house. Upon inquiry I learnt that the excluded house belonged to a peasant who was not aligned with the local patron, thus resulting in his not receiving public goods provision.<sup>11</sup> This excludability makes these goods well suited for the purpose of this study.

Schooling and health care, the other main public goods, are not being considered for two interconnected reasons. Firstly, these goods are universal public goods, which once provided, are usually available for everyone to use.<sup>12</sup> Secondly, these goods, as provided in rural Pakistan, are meant to service not only the village in which they are situated, but also other villages in its proximity. This means that restricting peasants' access would entail barring them from the usage of public goods found in other villages. This is difficult for the patron to ensure as his

---

<sup>9</sup> The only directly elected officials are those who make up the Union Council. The higher tier officials are then elected by all the union council members within the District (See Cheema et al for details regarding the Local Government Spending). Interestingly, Cheema and Mohmand (2004) highlight that the structure of the Local Government System encourages bargaining between the various tiers over decisions regarding the spending of development funds.

<sup>10</sup> Pure public goods are non-rival – one person's use does not diminish the quantity available for another person – and are non-excludable – it is not possible to bar others from using it.

<sup>11</sup> Clearly the functionality of the drains and pavements were not taken into consideration. As long as a household was able to get the waste water out of its house and away from its front door, its occupants were happy.

<sup>12</sup> Barring some peasants may require constant monitoring, which may be too costly and not worth the effort.

jurisdiction usually does not extend to other villages.<sup>13</sup> Thus it is reasonable to assume that the patron and the politician do not enjoy the same level of control over these goods. The basic logistic regression models estimated are:

$$Y = \alpha + \beta_1 MW + \beta_2 LL + \beta_3 Land + \beta_4 Bh + \beta_5 Kh + \beta_6 An + \beta_7 MS + \xi \quad (1)$$

$$Y = \alpha + \beta_1 MW + \beta_2 LL + \beta_3 MW * LL + \beta_4 Land + \beta_5 Bh + \beta_6 Kh + \beta_7 An + \beta_8 MS + \xi \quad (2)$$

Where Y= Household has been provided with a public good.

MW= Household is situated in an isolated village.

LL= Household resides in a village dominated by a large landlord.

Land = Amount of land owned by the household.

Bh= Household belongs to the Bhatti biradery.

Kh = Household belongs to the Kharral biradery

An= Household belongs to the Ansari biradery

MS= Household belongs to the Muslim Sheikh biradery.

Y is a binary variable taking the value of 1 if the household has a public good provided to it, 0 otherwise. Distance from the road, MW, takes the value of 1 if the household resides in an isolated village and 0 otherwise. Distance is analysed as a binary variable and not as a continuous one as the research design was to look at villages which were polar opposite, i.e. while half are situated close to the motorway the other half are far enough to be classified as being isolated. Within this setup modest changes in distance are irrelevant.<sup>14</sup> LL is 1 if the household resides in a village dominated by a large landlord, 0 if it is in a peasant based village. Land is a continuous variable, measured in acres, capturing the amount of land owned by peasant households. This variable is included based on the argument that land owning households have higher bargaining power vis-à-vis the landlord as they are less dependent on him when compared to landless households (Scott 1976). Hence controlling for household land ownership allows us to test whether these households have greater access to public resources. The last four

<sup>13</sup> While these patrons are big men in their own villages, in urban terms they belong to the lower class or lower middle class at best. Thus their influence, outside their own villages, is fairly limited.

<sup>14</sup> This research design was, amongst other things, driven by practical considerations, as trying to find the distance from the road after which villagers consider themselves isolated would have been extremely expensive and would have required looking at a large number of villages.

variables are dummies for the major biraderies found in the villages included as a control for the social status of the household (Ahmad 1977, Cheema and Mohmand 2006). The reference category is the small middle class biraderies. The variable MW\*LL in Equation 2 is an interaction term which captures the effect of belonging to a landlord dominated village far from the motorway.<sup>15</sup>

Connectivity is also expected to have a spillover effect on a household's level of awareness. It could be argued then, that the impact of the motorway on public goods provision, is not a direct one through an increase in peasants' bargaining power brought about by increased options, but rather an indirect effect channelled through increased awareness. This follows from the argument that an informed citizen is able to demand higher levels of public investment and should be able to put considerable pressure on politicians (see for example Prat and Strömberg 2002, Besley et. al. 2002, Besley and Burgess 2002, Olsen 1982). Hence it is possible that Equations 1 and 2 suffer from an omitted variable bias and are over-estimating the effect of the road. Therefore the basic model is adjusted to include controls for levels of awareness:

$$Y = \alpha + \beta_1 MW + \beta_2 LL + \beta_3 Land + \beta_4 N + \beta_5 H + \beta_6 Bh + \beta_7 Kh + \beta_8 An + \beta_9 MS + \xi \quad (3)$$

Where N = Access to a newspaper.

H = Household has heard of local government participatory bodies.

Awareness is measured through two proxies; whether the household has access to a newspaper<sup>16</sup> (N) and whether the household has heard about local government participatory bodies (H).<sup>17</sup> The local government ordinance in Pakistan has made provision for a number of participatory bodies which are meant to facilitate

---

<sup>15</sup> The inclusion of the interaction term in Equation 2 means that MW now captures the effect of the road on peasant based villages only; i.e. it assumes LL is taking the value of 0. Similarly LL captures the effect of land tenure systems on villages close to the road only; i.e. when MW is 0. The effect of that variable cannot be read off the table directly, as it requires further computation.

<sup>16</sup> Access simply means they are able to get information from a newspaper, irrespective of whether they subscribe to it themselves, are reading it at a nearby shop or friend's house, or are having a friend read it to them (making it unnecessary for them to be literate).

<sup>17</sup> The correlation between distance from the motorway and having heard about participatory bodies is -0.07 while the correlation between distance to the motorway and access to a newspaper is 0.03. Thus there is little fear of multicollinearity biasing the results.

participatory development.<sup>18</sup> The aim of these bodies is to try to mobilize civil society. However, their functionality has been fairly limited, ironically due to citizens being unaware of their existence (Kurosaki 2007).

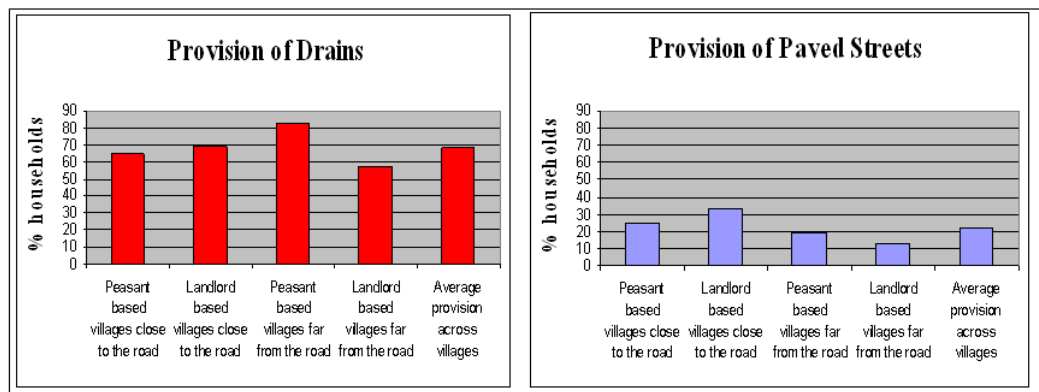
## **2.1. Empirical Results**

Figure 1 illustrates the level of provision of drains and paved streets across the different types of villages. First off, we find that households situated in isolated landlord dominated villages have the lowest levels of provision, both for paved streets and drainage systems. Moreover the figure indicates that the effect of the road is stronger on provision in landlord dominated villages than peasant based ones. Dispersed land ownership in peasant based villages has meant that, even when isolated, peasants have alternative options in the form of other patrons and so no single patron is powerful enough to withhold public resources from his clients. In the case of landlord based villages close to the road, the availability of outside options has a similar effect, as it considerably weakens the influence of the landlord, which also restricts his ability to appropriate public funds. Thus the figure highlights that isolation and inequality alone do not adversely impact the level of public goods provision made to the peasants. Rather it is the interaction between the two that creates a monopolistic/monopsonistic patron able to exclude peasants in his contract with the local politician.

---

<sup>18</sup> The ordinance makes provision for four such committees aimed at increasing citizen participation, both for the purpose of public goods provision and to increase accountability of the politician.

Figure 1: Public goods provision



The graphs also illustrate public spending, in all villages, being skewed towards the provision of drains rather than paved streets. The result seemed confusing at first, as villagers showed no preference for one over the other.<sup>19</sup> There are two possible explanations for this. One could lie in the relative costs of the two goods. Drains in rural Punjab are almost never underground and at best may have been cemented to ensure that the waste does not flow onto the streets and goes straight to the main drain.<sup>20</sup> This makes them easy and relatively cheap to construct. Paving streets, however, requires both materials and a certain level of skill. Given the limitation of funds, a politician wanting to reach the maximum number of constituents, may be more inclined to build drains than to pave streets. This seems to be the case in peasant based villages far from the road.

A second possible explanation lies in the interaction of drains with the streets. In the absence of a functioning drainage system, household waste flows directly onto the street outside their main door. Irrespective of whether the street is paved or not, this creates a mess and, besides spreading diseases, makes it difficult for people to move around. Mud (non-paved) streets, on the other hand, are not so much of a problem for mobility, provided they are not covered in dirty water and household waste.<sup>21</sup> Therefore, providing paved streets in areas without drains may

<sup>19</sup> Households were asked what their three main needs were. When looking at the data for households without paved streets and drains, it was found that the number of households listing these two as their needs were relatively equal.

<sup>20</sup> The main drain, in all villages visited, is a big pond on one side of the village.

<sup>21</sup> I would like to thank Hadia Majid for bringing this point to my attention.

not have the desired impact. The data show that of all the households provided with paved streets, only 23% lack drains.

Before continuing to the regression analysis, it is worth commenting on the substantiveness of the increase in provision in landlord dominated villages close to the road when compared to similarly tenured isolated villages. From the graph we can see that, while 12% households had paved streets in isolation, 33% did so in unequal but connected villages. Moreover, while 58% received drains in isolated villages, 70% households did so when connected to the external economy. These results need to be evaluated keeping two factors in mind. Firstly, it must be remembered that this data relates to provision levels 10 years after the motorway came into operation. Therefore, it is not surprising that the difference is not very large. Secondly, when evaluating the results, it is important to look at both goods together as that highlights the overall spending decisions made by patrons. So, while in isolation large patrons diverted fewer funds towards their clients, in connected villages the patron used public resources to try and satisfy peasants' public goods needs. So much so that, in unequal connected villages, we find that public spending levels are converging towards those found in relatively egalitarian villages. Therefore, there is clearly a shift in public spending in the right direction. The change in the clientelist network was something the landlord himself was also aware of, as in an interview the large landlord from one of the connected villages told me that even though the street outside his house was broken, he could not get it fixed till other villagers had received paved streets. When I questioned him as to why that was necessary, he replied:

*"If I get my own street fixed, villagers will come and shout at me and will accuse me of using their votes for my own personal benefits. Then I will never be able to get their political support again."*<sup>22</sup>

---

<sup>22</sup> Landlord 1, interview, connected landlord dominated village 1, 15 April, 2011.

The large landlords in isolated villages had no such qualms, as the streets and drains outside their houses were in perfect condition, while most of the other neighbourhoods stood in disrepair.

The tables that follow test whether the effect of connectivity and land tenure systems on the households' chances of having public goods provided to them holds after controlling for household-specific characteristics. Table 1, in an effort to get an overall idea of the impact of connectivity and land tenure systems, inquires whether the household has had any public good provided to it. Column 1 presents the results using data pertaining to provision made before the construction of the motorway. This regression is run to test for endogeneity with respect to the motorway. The result is found to be negative, allowing us to rule out the possibility that there are some systematic differences between these eight villages in terms of public goods provision. Interestingly, from Column 1 we can see that the households' land ownership had a positive impact on its chances of receiving public goods prior to 1998.<sup>23</sup> Each additional acre of land increases a household's chances of provision by 0.3%. This result is significant at the 1% level. The small percentage effect per acre implies that the beneficial impact of land ownership accrues mostly to the medium and large landholders. This is not surprising when we consider that landed households have higher bargaining power vis-à-vis the patron when compared to the landless, as the patron is unable to impose economic sanctions on them. This implies that they can demand a higher level of public goods in exchange for their political support of the patron and the political candidate he aligns with.

---

<sup>23</sup> In one of the background regressions I replaced land owned with land held (land owned + land rented in). The aim was to see if sharecroppers and tenant farmers were benefitting from provision due to their access to land. It had no significant impact.



Table 1: Does the household have any public good provided to it?

	<b>Pre-Motorway (1)</b>	<b>Post-Motorway (2)</b>	<b>Post-Motorway (3)</b>	<b>Post-Motorway (4)</b>
Household is situated in an isolated village	-0.028 (0.35)	-0.037 (0.488)	0.089 (0.277)	0.093 (0.252)
Household belongs to a landlord dominated village	0.0134 (0.63)	-0.113** (0.02)	0.005 (0.844)	0.004 (0.874)
Household resides in an isolated landlord dominated village			-0.234*** (0.002)	-0.24*** (0.002)
Amount of land owned by the household (acres)	0.0034*** (0.003)	0.00014 (0.903)	-0.0002 (0.826)	-0.0002 (0.813)
Household has heard of participatory bodies				0.027 (0.682)
Household has access to a newspaper				0.005 (0.941)
Bhatti	0.0065 (0.943)	-0.0096 (0.92)	-0.059 (0.544)	-0.065 (0.438)
Kharral	0.128* (0.051)	-0.066* (0.096)	-0.013 (0.656)	-0.017 (0.653)
Ansari	0.153 (0.161)	-0.08 (0.317)	-0.077 (0.331)	-0.079 (0.411)
Muslim Sheikh	-0.094 (0.024)	-0.15 (0.158)	-0.132 (0.215)	-0.059 (0.51)
N	383	383	383	383
R <sup>2</sup>	0.0329	0.0228	0.034	0.0314

Robust standard errors calculated. P-values in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Columns 2 to 4 look at provision made after the construction of the motorway. Starting with Column 2, we find that while the variable measuring isolation is insignificant, households residing in landlord dominated villages are 13% less likely to have access to public provision when compared to those residing in peasant based villages. This result is significant at the 5% level. Introducing the interaction term in Column 3 reveals that it is actually households situated in landlord dominated villages far from the motorway who are most disadvantaged. These households are 23% less likely (significant at the 1% level) to have any

public goods provided to them when compared to households in both peasant based villages and landlord based villages close to the motorway.

Isolation, combined with inequality, creates a monopolist/monopsonist landlord who is able to maintain a large clientelist following without having to broker political goods for them (Michie 1981). The same does not hold for villages connected to the motorway. The insignificance of the land tenure system variable in Column 3 illustrates that, when connected to the external market, the type of village that peasants reside in becomes unimportant for the purpose of public goods provision. These effects hold even after controlling for levels of awareness. Lastly, when looking at provision made after the construction of the motorway, land owning households are no longer targeted for public goods provision as households' land holdings is found to be insignificant. The insignificance of this variable highlights the beneficial impact connectivity has had on landless households by reducing their disadvantage with regards to public spending decisions.

The table highlights the importance of land tenure system for public investment, as argued by Banerjee and Iyer (2005), but only as long as the villages are isolated. Once connected to the external economy, with all the options and opportunities that come with it, patrons are no longer able to ignore peasants in their contracts with politicians. Hence we find no evident disadvantage, regarding overall public goods provision, of living in a village dominated by a large landlord once connected to the road. However, given the differences between the provision of paved streets and drains, as illustrated in Figure 1, it is worth investigating the impact connectivity has had on these two goods separately. Moreover, following from the theoretical argument that households' economic and social disadvantages lower their bargaining power vis-à-vis the patron, thus negatively impacting their chances of provision, the tables that follow disaggregate the data by land tenure systems and distance from the motorway to evaluate who within the village is benefitting from connectivity.

As with overall provision, Table 2 first runs a test of endogeneity to check if there are any systematic differences based on geography, driving the differences in drainage provision. The result, as shown in Column 1, is found to be negative. However, what is significant is the households' land ownership, at the 1% level, on their chances of having drains provided to them prior to 1998.

Column 2 looks at provision made after the construction of the road, finding that it is land tenure systems and not distance from the motorway that significantly affects the probability of a household having drains provided. However, including the interaction term in Column 3 discloses that it is actually households residing in secluded landlord dominated villages who are most disadvantaged. These households have a 45% lower chance of having access to drainage systems when compared to both peasant based villages and landlord based villages situated on the road. This result is significant at the 1% level. Thus it seems that the monopoly/monopsony power enjoyed by the patron in isolated landlord based villages is enabling him to direct public resources away from the peasants and towards himself. While walking around these villages it was found that the area around the landlords' houses had perfectly paved streets and well functioning drains. However, as you moved away from his neighbourhood the quality of public goods provision tended to fall considerably.

Table 2: Does the household have drains?

	<b>Pre- Motorway (1)</b>	<b>Post- Motorway (2)</b>	<b>Post- Motorway (3)</b>	<b>Post- Motorway (4)</b>
Household is situated far from the motorway	-0.003 (0.946)	-0.077 (0.427)	0.326*** (0.006)	0.32*** (0.006)
Household belongs to a landlord dominated village	0.025 (0.517)	-0.23** (0.012)	0.005 (0.953)	0.013 (0.884)
Household belongs to a landlord dominated village far from the motorway			-0.45*** (0.00)	-0.44*** (0.00)
Amount of land owned by the household (acres)	0.003*** (0.002)	0.005 (0.341)	0.003 (0.412)	0.004 (0.367)
Household has access to a newspaper				-0.005 (0.114)
Household has heard of participatory bodies				0.096 (0.268)
Bhatti	0.029 (0.766)	0.0365 (0.75)	-0.096 (0.359)	-0.108 (0.315)
Kharra	0.172 (0.037)	-0.0383 (0.759)	0.15 (0.103)	0.130 (0.154)
Ansari	0.186 (0.132)	-0.0829 (0.653)	0.053 (0.783)	0.059 (0.763)
Muslim Sheikh	-0.092 (0.153)	-0.142 (0.41)	-0.12 (0.495)	-0.113 (0.529)
N	383	227	227	227
R <sup>2</sup>	0.0435	0.0666	0.0984	0.1046

Robust standard errors calculated. P-values in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Furthermore, the significance of the isolation variable in Columns 3 and 4 reveals that the impact of the motorway is reversed on peasant based villages as far as drainage provision is concerned. Households residing in isolated peasant based villages have a higher probability of having drains provided to them (significant at the 1% level). Patrons in these villages have been very active in securing drains for their clients,<sup>24</sup> while those in connected peasant based villages chose to split

<sup>24</sup> This can be seen from Figure 1.

public investment between the provision of drains and paved streets.<sup>25</sup> These results hold even after controlling for households' level of awareness. While these results are interesting, it is curious that household specific characteristics are found to be insignificant. This could be due to the impact of these variables being averaged out in the aggregate data. Therefore, the effect of connectivity within the different villages may be more evident if we disaggregate the data. Table 3 does this by splitting the data four ways; by distance to the road and land tenure systems.

Starting with villages at varying distances from the road, we find that land tenure system matters for provision of drains, but only as long as the villages are isolated. Households living in isolated landlord dominated villages are 45% less likely, significant at the 1% level, to have drains provided when compared to equally secluded peasant based villages. However, once connected to the road, the type of village the household resides in has no significant impact on its chances of provision. Secondly, while land ownership continues to matter for drainage provision in isolated villages, once connected by the road, landed households do not seem to enjoy the same advantage. Therefore, the evidence suggests that the increase in outside options has the same effect as land ownership, i.e. it provides households with alternative options for earning a livelihood, thus limiting the patrons' ability to impose sanctions. Lastly, the adverse effect of belonging to a socially lower class biradery is seen only in isolated villages. Muslim Sheikh households living far from the motorway are 50% less likely, significant at the 1% level, to have drains when compared to any other biradery. Belonging to the Muslim Sheikh biradery in connected villages, however, has no significant effect. Furthermore, Ansari households are actually targeted for provision in villages close to the road, as they are 28% more likely to have drainage provision, when compared to any other biradery. This result is significant at the 10% level.

---

<sup>25</sup> The local mayor has considerable discretion regarding the allocation of public funds between the various public goods in the villages. As mentioned earlier, in isolated peasant based villages the politician chose to invest mostly in drains while the politician in peasant based villages close to the road chose to split spending between drains and paved streets.

Interestingly, Bhatti households are 19% less likely to have drains when compared to other biraderies in isolated villages, significant at the 5% level.

Splitting the data by land tenure systems in Columns 3 and 4 illustrates the positive effect of connectivity on landlord dominated villages, as those residing close to the motorway are 21% more likely (significant at the 5% level) to have drains in comparison with isolated landlord dominated villages. Furthermore, within these villages, Kharral and Ansari households are 22% and 36% more likely to have drains compared to all other biraderies. While the higher level of provision to the Kharrals is not unexpected, given that they belong to the upper class, the increased provision to the Ansaris is. The data reveal that it is actually the Ansari households living close to the motorway in landlord dominated villages who are enjoying the higher levels of provision. This can also be seen from Column 1 which highlights the beneficial impact of being an Ansari household in villages close to the motorway.

Table 3: Does the household have drains?

	Drains provided post 1998			
	Close to the Motor Way (1)	Far from the Motor Way (2)	Landlord Based Villages (3)	Peasant Based Villages (4)
Household is situated far from the motorway			-0.21** (0.014)	0.24** (0.023)
Household belongs to a landlord dominated village	0.013 (0.882)	-0.45*** (0.00)		
Amount of land owned by the household (acres)	0.0002 (0.935)	0.02*** (0.00)	0.001 (0.797)	0.024*** (0.00)
Bhatti	-0.016 (0.871)	-0.197** (0.012)	-0.05 (0.577)	-0.096 (0.422)
Kharral	0.24** (0.016)	-0.097 (0.357)	0.22** (0.019)	-0.019 (0.897)
Ansari	0.28* (0.072)	-0.22 (0.249)	0.362*** (0.00)	-0.132 (0.398)
Muslim Sheikh	0.13 (0.371)	-0.50*** (0.00)	-0.11 (0.636)	-0.074 (0.784)
N	111	116	103	124
R <sup>2</sup>	0.0378	0.2226	0.0718	0.1224

Robust standard errors calculated. P-values in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

When focusing on peasant based villages we find that households situated in isolated peasant based villages are 24% more likely to have drains provided to them. This can be explained by the local politician's decision to provide drains in villages far from the road and not focus on paved streets. In villages connected by the motorway, as can be seen from Figure 1, the local politicians split resources between drainage provision and paved streets.<sup>26</sup> Furthermore, in peasant based villages land ownership has a significant impact on the households' chances of having public goods provided to them. However, given the high levels of drainage provision in these villages, a substantial proportion of landless households have also been provided for.<sup>27</sup> Lastly, it is interesting to find that in peasant based

<sup>26</sup> Since paving streets is more expensive than the provision of drains the exchange is not one to one. Moreover, the decision regarding which of the two goods to provide is purely up to the politician. As far as the villagers are concerned, due to low levels of provision and their resultant low expectations, they are happy as long as some public good is provided to them.

<sup>27</sup> 65% of landless households had a drain provided to them in peasant based villages.

villages the households' biradery has no significant impact on its chances of having drains provided to them.

Turning next to the provision of paved streets, Table 4 analyses the impact of connectivity and land tenure systems on households' chances of receiving these goods. As before, Column 1 first runs a test of endogeneity to analyse if there are any systematic differences, based on location, between the eight villages, driving the differences in the provision of paved streets. The test is found to be negative. Moreover, as with drainage provision, the pre-motorway data finds that households' land ownership has a significant impact, at the 1% level, on their chances of having their streets paved. However, the level is not substantial.



Table 4: Does the household have paved streets?

	Pre-Motorway (1)	Post-Motorway (2)	Post-Motorway (3)	Post-Motorway (4)
Household is situated in an isolated village	-0.017 (0.514)	-0.13** (0.021)	-0.083* (0.057)	-0.084** (0.022)
Household belongs to a landlord dominated village	0.015 (0.489)	-0.0018 (0.973)	0.027 (0.737)	0.027 (0.725)
Household resides in an isolated landlord dominated village			-0.0769 (0.367)	-0.075 (0.285)
Amount of land owned by the household (acres)	0.0006** (0.026)	0.0004 (0.482)	0.0003 (0.478)	0.0004 (0.953)
Household has access to a newspaper				-0.001 (0.469)
Household has heard of participatory bodies				0.003 (0.59)
Bhatti	-0.019 (0.329)	0.0252 (0.678)	0.0065 (0.919)	0.006 (0.93)
Kharral	-0.039 (0.292)	-0.003 (0.935)	0.011 (0.802)	0.01 (0.79)
Ansari	-0.038 (0.338)	-0.033 (0.596)	-0.0316 (0.603)	-0.032 (0.601)
Muslim Sheikh	-0.028 (0.533)	-0.061 (0.437)	-0.056 (0.466)	-0.056 (0.467)
N	383	346	346	346
R <sup>2</sup>	0.0156	0.0506	0.0543	0.0544

Robust standard errors calculated. P-values in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Turning to provision after the construction of the motorway, we find that households situated in isolated villages are 13% less likely to have their streets paved, significant at the 5% level. Including the interaction term in Column 3 does not take away the significance of the motorway variable, highlighting the positive impact that connectivity has had on peasant based villages. The interaction term itself though, is insignificant. Furthermore, the positive impact of

the motorway continues to hold even after controlling for levels of awareness in Column 4.<sup>28</sup>

To sum up, the tables above highlight three important and interconnected findings. Firstly, as argued by Banerjee and Iyer (2005), land tenure system matters for public investment, but only if villages are isolated. Isolated villages dominated by a large landlord are less likely to be provided with public goods when compared to those with a relatively egalitarian distribution of land. In peasant based villages, on the other hand, dispersed land ownership has led to the existence of a large number of patrons, each too small to exert significant control over the peasants. Therefore, in order to maintain their cliental following patrons need to offer their clients goods and services (Michie 1981). One outcome of this is for the patron to include provision to his clients in his contract with the politician. Patrons in landlord dominated villages do not feel the same constraints, as their large land holdings give them monopoly/monopsony power over the landless peasants (Bhaduri 1977, Michie 1981). The clients whose needs patrons cater for in these villages are those who are economically and socially better off in society and thus have some leverage over the patron.

Secondly, being connected by a motorway significantly increases the average household's chances of having public goods provided to it. This effect is felt more strongly by peasants residing in villages dominated by large landlords than those living in peasant based villages. The presence of alternative options, at least in the employment market, has created competition for the large patrons, as it restricts the patron's ability to impose economic sanctions, thus leading to a shift in relative bargaining powers in favour of the rural poor. As a result, the landlord is forced to broker public goods for his clients, as otherwise he runs the risk of losing his clientelist following (Scott and Kerkvliet 1977). Thus connectivity is

---

<sup>28</sup> The lack of substantial variation in the results could be explained by the fact that paved streets are not a widely provided public good, as is evident from Figure 1. The same was found when the data were disaggregated and so it is not presented here.

enabling outcomes in landlord dominated villages to converge to those found in their peasant based counter-parts.

Lastly, connectivity, and the increase in outside options that come with it, is found to benefit the socially and economically lower classes of village society. These are those members of society who are most dependent on the patron's resources and, ordinarily, are least likely to withdraw their support from him due to under-provision. However, as the construction of the motorway has provided these households with a viable alternative means of employment, the patron can no longer expect their unwavering support in the face of under-provision. Therefore the patron has had to channel some of the resources contracted with the politician towards them, leading to an increase in their overall welfare.

### **3. Conclusion**

Literature on rural development documents the importance of public goods provision in reducing inequality, yet there is wide spread evidence of under-provision. While efforts have been made by governments to improve provision, inefficiency, corruption, elite-capture and patronage politics have meant that they have failed to achieve the desired results (see for example Banerjee and Iyer 2005, Bardhan and Mookherjee 2002, Gazdar 2000, Charlton, et al. 2003). This chapter argued that the presence of patron-client networks has eroded the politicians' incentive to provide for their constituents directly, as they are able to guarantee success by contracting with local patrons. Thus any provision that is made is brokered through a patron (Mason and Joshi 2008, Keefer 2007, Cheema and Mohmand 2004). The outcome of this has been that public goods provision to peasants largely depends on their bargaining power vis-à-vis the patron. This bargaining power, as argued in Chapter 1, is a function not only of peasants' endowments, but also of the number of alternatives they have to the patron for satisfying their needs. Hence, while peasants in isolated landlord dominated

villages tend to have low bargaining power, those residing in either egalitarian villages or villages which are unequal, but connected to the external economy are relatively better off.

This chapter has therefore explored the possibility of increasing peasants' bargaining power, and hence their levels of public goods provision, by connecting isolated villages to the wider national economy through road networks. Connectivity, through the multitude of alternative options it brings for the peasants reduces their dependence on the patron, even when there are high levels of inequality. While in the last chapter this led to a reduction in the landlords' influence over peasants independent relationships and thus altered the nature of the interlinked relationships they engaged in, in this chapter we find that peasants access to alternative options has meant that, in order to maintain the peasants support, particularly in the political domain, patrons have had to divert greater levels of public spending towards their peasant client. While the difference between provision levels in isolated and connected landlord dominated villages is not extremely large, it is statistically significant. More importantly, the data reveals that while in isolation the level of inequality had a significant impact on the amount of public goods poor households will receive, in connected villages this becomes insignificant as outcomes between egalitarian and unequal villages are found to converge. Furthermore, as in the previous chapter, we find that the benefits of connectivity flow most strongly towards the socially lower classes who are most vulnerable in village society and therefore most likely to be excluded by a monopolistic patron.

However, this is not to say that building roads is the sole solution to the age old development problem. Looking at the levels of provision in villages close to the motorway, it is obvious that even the 'fortunate' ones have very low levels of provision. What the road does do is provide the stimuli needed to change the power dynamics in rural villages which, in turn, enables villagers to start demanding their rights. Hence it is a first step on the long road to development.

## **5. The Impact of Connectivity on Clients’ Level of Collective Action**

In recent years, considerable emphasis has been placed on community based development as a way of improving the wellbeing of the poor. The World Bank alone has more than doubled its spending on such projects over the last ten years (Mansuri and Rao 2004). In the presence of state failure, community based projects can be an alternative avenue for citizens to provide the goods and services needed to improve their well-being (Hirshman 1984, Abers 1998, Dongier et al. 2002, Tripp 1992, Di Gregorio et al. 2008). The emphasis on community based projects is not only due to the direct benefit that such projects have of providing citizens with public goods, but also due to the perceived indirect benefit of building trust and cooperation so as to facilitate future community based activities (Hadenius and Ugglä 1996, Fox 1994). And while Mancur Olson (1971) would have argued that the collective action problem would restrict the success of community based activities, empirical and experimental research has shown us otherwise (see for example Wade 1988, Ostrom 2000, Camerer 2003, Frey 1994 Krishna 2002, Baker 2005, Hadenius and Ugglä 1996, Bratton 1994, Shue 1994, Meinzen-Dick et al. 2002). Collective action theories, over the last few decades, have come to acknowledge that individuals’ preferences are not homogenous, rather they vary depending on the society the individual resides in as preferences are shaped by societal interactions (see for example Ostrom 2005, 2000, Ostrom and Ahn 2009, Camerer 2003, Blomquist 1992, Granovetter 1992).

Thus, a major contribution of the literature, post-Olson, is to highlight that the type of society individuals reside in has an impact, not only on their ability to engage in collective action, but also on the type of projects they can undertake. While societies with strong horizontal ties should be able to tackle fairly complex

and varied projects, those undertaken by fragmented societies would be relatively limited in their scope. However, an implicit assumption in most collective action studies is that social interaction is between individuals of relatively equal status and power, but this is, of course, not always the case, and particularly so in rural societies. As surveyed in Chapter 1, the literature on rural development has extensively documented the existence of patron-client networks, characterised as relationships of dependence and inequality, with the resource rich having considerable control over the activities of their peasant clients (Scott 1972, Powell 1970, Bardhan 1984, Pitt-Rivers 1954, Auyero et al. 2009, Eisenstadt and Roniger 1984, Basu 1986). Putnam (1993) in his study of Italy argued that collective action within such hierarchical networks would be fairly limited due to the asymmetric distribution of power. Furthermore, and more importantly for this chapter, the presence of this hierarchical network is also argued to have a detrimental impact on peasants' ability to engage in collective action within their horizontal networks, both indirectly, by making peasants compete against one another for the patrons' resources (Eisenstadt and Roniger 1984, Putnam 1993) and directly, by the patron investing in ways to minimize horizontal linkages, out of fear that peasant based collaboration may lower their dependence on him and enable them to collectively bargain for better terms of exchange (Popkin 1979).

However, contrary to this pessimistic view of clientelist networks, this Chapter argues that patrons' ability to influence their clients' horizontal relationships is highly dependent on the environment in which the hierarchical network exists. In areas which are relatively isolated, and where there is high inequality, peasants would have few options aside from the patron to satisfy their needs. Such an environment leads to the establishment of 'authoritarian clientelism' (Fox 1994), where the patron is in essence a monopolist/monopsonist in the rural economy (Bhaduri 1977), which enables him to influence his clients' behaviour and their third party interactions (Basu 1986, see also Chapter 3). However, if one relaxes either of these two conditions, i.e. lowering inequality to create multiple patrons or increasing connectivity in order to provide peasants with exit options, the patron's ability to impose sanctions – and thus control third party interactions –

are weakened considerably. The focus of this book is on the latter of the two conditions, as it has been argued that connectivity lowers peasants' dependence on the patron by breaking his monopoly/monopsony in the village economy, and thereby his influence their independent decisions, such as whether to engage in collective action or not.

Making use of the empirical data this chapter explores the impact connectivity has on peasants' ability to engage in collective action. The empirical section finds that peasants residing in connected villages are more likely to take part collective action, even when dominated by a large patron. In fact, qualitative interviews reveal that when faced with the possibility of losing clients to the external market, patrons not only restrained from blocking peasants' collective action, but actually went as far as to assist, and at times mobilise them, in such activities. Thus by actively participating in peasants' collective activities, the patron essentially directed and channelled these endeavours in a manner that increased their likelihood of being successful. According to Krishna (2002) the presence of such an agent is essential for converting "collective action into collective achievement" (pg 165), which is what I find to be the case in connected villages. Ironically, the patrons' motivation for assisting his clients in an activity that could possibly have weakened his level of control was his desire to maintain the integrity of the hierarchical network and thus his level of control.

The remainder of the chapter is organized as follows: Section 1 briefly looks at the literature on collective action, highlighting how the environment in which citizens try to mobilize has a significant impact not only on their ability to successfully engage in collective action, but also on the scope of the projects that they can undertake. The section then explores the role that clientelist networks play in the peasants' decision to engage in collective action, focusing particularly on the effect of a strong patron within an isolated village economy. Finally, it analyses the change in this relationship when peasants get access to outside markets. Section 2 looks at data from the four different types of villages to illustrate the effect connectivity has had on peasants' ability to successfully

undertake collective action projects, even when they reside in villages dominated by a large patron. Section 3 concludes.

## **1. Collective Action in Context**

Collective action is the ability of citizens to come together for activities believed to be in their common interest. Prior to Olson's (1971) work it was generally believed that in the presence of common interests, groups would form to take advantage of these benefits. Olson (1971) challenged this idea by arguing that rational individuals had an incentive to free-ride on other peoples' efforts so as to minimise the costs to themselves while still enjoying the benefits. This implied that collective action would almost always fail.<sup>1</sup> Although this argument was widely accepted, as mentioned before, countless laboratory findings have since documented that collective action succeeds far more often than Olson's theory predicts (see for example Camerer 2003, Ostrom and Walker 2005, Ostrom 2000, Cardenas and Ostrom 2004). For instance, Olson's assumption that individuals make their decisions relatively insulated from social relations is contradicted by laboratory experiments finding increased chances of successful collective action when people engage in face-to-face interaction (Ostrom and Walker 2005) and that an individual's decision to free-ride is significantly affected by his perception of the other participants' trustworthiness (Ostrom and Ahn 2009). These are but a few of the experimental results which indicate that in order to investigate the dynamics of collective action more carefully we need to move beyond the restrictive assumptions of Olson and understand how individuals' preferences and motives are shaped by their social context (Ostrom 2000).

---

<sup>1</sup> The only exceptions were when the group size was small enough to make free riding observable or when individuals received some selective benefits from participation, which were not extended to non-participants.



### **1.1 Collective Action Based on Horizontal Networks**

When investigating the chances and types of collective action among peasants in developing countries, it may therefore be useful taking into account that village communities are often characterised by strong ties between individuals of relatively similar backgrounds - such as kinship groups or families (see for example Ahmed 1972, Epstein 1962, Cheema and Mohmand 2004). These networks build on what the social capital literature has referred to as bonding social capital (Gittell and Vidal 1998; see generally Putnam 2000). Due to their ability to transmit information effectively, they are able to curtail the collective action problem by making free-riding visible. This provides a strong incentive to participate in collective action, as not doing so could lead to sanctions – some as strong as social ostracization (Svendsen and Svendsen 2004). However, the potential of relying on such networks for collective action may be fairly limited for two reasons. Firstly, ties between people of relatively similar backgrounds leads to little diversity, particularly amongst the poor who have few resources to bring to the network. So, while the poor in developing countries may have extensive social ties amongst members of their kinship groups or families, this rarely enables them to improve their well-being, as members of such networks often lack sufficient skills and resources (Szreter 2002, Putnam 2000). As argued by Granovetter (1983), strong social ties can have the disadvantage of being closed to outside information regarding new opportunities, thus hampering innovation and effectiveness when engaging in collective action. Secondly, the ability of such networks to engage in successful collective action would be confined to projects whose benefits are restricted to group members only. For projects with benefits spilling over to other communities, the free riding problem arises once again.

Hence, for activities which require higher levels of resources and skills, and whose benefits spill over to other groups, collaboration needs to span across communities. It needs to build on bridging social capital, i.e. relationships and cooperation between, rather than just within, communities (Gittell and Vidal 1998; see generally Putnam 2000). For instance, rather than relying on a specific

kinship group or family, collaboration would have to involve several groups. While relying on relatively weak ties – such as belonging to the same village - this form of cooperation enables individuals to enjoy access to varied skills, resources, connections and information (Granovetter 1983). It typically takes place in societies where individuals of different background are able to signal their trustworthiness so as to sustain cooperation (Grief et al. 1994, Janssen 2006). Once established, such cross-collaboration can allow members to draw on a wide range of resources to successfully engage in relatively challenging forms of collective action (see for example Wade 1988, Krishna 2002, Baker 2005, Grief et al. 1994).<sup>2</sup>

But despite spanning communities, bridging social capital is still a horizontal network established between members with relatively equal levels of power (Halpern 2005). In societies with strong hierarchical networks, collective action would have to take into account asymmetric power relations and the impact they have on the effectiveness of horizontal networks. The insights on how bonding and bridging social capital can facilitate and sustain collective action, therefore need to be complemented with an understanding of relationships between members of unequal status - such as patron-client networks – and how they interact and/or influence horizontal networks. Unfortunately, few have investigated the dynamics of collective action under hierarchical networks in much detail, and, as I will argue below, those that have, tend to treat patron-client networks as homogenous relationships independent of time and place, leading to somewhat simplified conclusions.

## **1.2 Collective Action Under Hierarchical Networks**

The literature on patron-client relationships, as surveyed in Chapter 1, firmly establishes how the patron tries his best to maintain control over the clients and

---

<sup>2</sup> Naturally, the existence of bridging social capital does not preclude individuals from also relying on their bonding networks, and Krishna (2002) finds that societies often rely on both types of social capital to engage in various types of collective action projects.

thus ensure their dependence on him. Hence it is not surprising that those contributions that have dealt with peasant collective action under patron-client networks have been rather pessimistic. First of all, Putnam (1993) makes the somewhat intuitive point that collective action between actors in an asymmetrical power relationship – i.e. between the landlord and the peasant - is severely hampered by the fact that sanctioning the powerful is difficult.<sup>3</sup> Secondly, and more important for my purposes, several contributions have noted that hierarchical networks may also preclude collective action amongst the horizontal networks that co-exist alongside it, i.e. collective action among peasants themselves (Putnam 1993, Popkin 1979). In order to sustain his bargaining power, the patron is here argued to minimize his clients' horizontal networks (Popkin 1979), whether through the use of violence, privileged access to state resources, or his ability to manipulate ties and monopolistic control over village resources (Putnam 1993, Eisenstadt and Roniger 1984, Roniger 1990, Scott 1972, Holzner 2004). Following from this argument, it is conjectured that participation in clientelist networks would significantly decrease the amount of collective action peasants engage in, irrespective of the purpose.

Furthermore, besides explicitly blocking collective action, the patron-client network also has an adverse effect on peasants' ability to engage in collective action due to the strain the network places on peasants' horizontal relationships. This happens due to two reasons. Firstly, the fact that peasants can potentially ostracize a fellow peasant on the demands of the patron, as was seen in Chapter 3, should limit the scope of horizontal networks as peasants can no longer rely on each other for support when sanctioned by the patron. Such threats are also likely to minimise the level of trust and cooperation within a rural community, both of which are seen as integral for collective action (Putnam 1993, Svendsen and Svendsen 2004, Ostrom and Ahn 2009). Secondly, clientelist networks require peasants to compete against one another for the patron's limited resources in order

---

<sup>3</sup> While not central to the literature on social capital, cooperation of this kind has occasionally been referred to as linking social capital, i.e. relationships and cooperation between individuals of unequal power (Woolcock 2001).

to fulfil their basic needs, once again possibly lowering their level of trust and cooperation (Eisenstadt and Roniger 1984). Combined, the effect is then to reduce both the scope and the cohesion of the network, which should significantly limit its ability to overcome the collective action problem. For this reason as well, the literature predicts low levels of collective action in a patron-client network.<sup>4</sup>

However, this conclusion is based on the key assumption that clients have limited, if any, exit options resulting in them being firmly tied to the local patron. For instance, Southern Italy, which was one of Putnam's (1993) case studies, was found to be isolated from the centre of the country due to the absence of road networks and any market centre located near the hinterlands (Eisenstadt and Roniger 1984). As a result peasants had no option but to approach the landed nobility to satisfy their needs. The question is, however, what happens when you change the environmental setting by exposing villages to the external market?

### **1.3 Connectivity, Patron-Client Networks and Collective Action**

The ability of the patron to exert high levels of control over his clients is dependent largely on peasants having few alternative options to the patron to satisfy their needs. As has been argued in the last four chapters, both theoretically and with the help of empirical results, neither inequality nor isolation is sufficient in and of themselves to create an environment that allows patrons to control their clients' activities. Rather it is the combined effect of the two that creates a monopolist/monopsonist patron (Bhaduri 1977) with the ability, among other things, to interfere with peasants' independent relationships (Basu 1986, see also Chapter 3). This was particularly evident from the results in Chapter 3 where we saw that when exposed to the external economy patrons were no longer found to interfere with peasants' independent relationships. Moreover, as stipulated in Chapter 2 the presence of external options should also take away some of the

---

<sup>4</sup> Studies that do find collective action to emerge under clientelist networks document them as being conflictual (see Auyero et al. 2009 for an overview of this literature on social movements). However, Auyero himself argues that patron-client networks and contentious collective action need not always be in conflict.

pressure peasants face when competing for the patrons resources in isolated economies. Therefore, provided peasants have access to alternative options, clientelist networks – even those where the patron owns most village resources – should not necessarily weaken peasants’ horizontal networks nor should they necessarily be able to interfere with clients’ independent decision to engage in collective action. Hence, we need to look at the context in which patron-client networks exist in order to understand whether they are detrimental to collective action amongst peasants’ horizontal networks. By focusing on the connectivity of the network, this adds yet another level to our anticipation of the chances and types of collective action in the patron-client context, as illustrated in the last cell of Table 1.

Table 1: Collective action under horizontal and hierarchical networks

		<b>Collective action among peasants</b>
<b>Horizontal networks</b>	<i>Based on bonding social capital</i>	Limited to projects whose benefits can be restricted to the community.
	<i>Based on bridging social capital</i>	Extensive and varied.
<b>Hierarchical networks</b>	<i>Isolated</i>	Fairly limited as the patron should block it.
	<i>Not isolated</i>	Has the potential for being extensive and varied.

However, before continuing to the empirical analysis, it is worth highlighting an important finding of Krishna (2002) from his study of collective action in 69 villages in India. He argues that collective action, if conducted without direction, need not always result in increased benefits for the peasants. In the wide array of villages that he visited he found that, while collective action was widespread, the benefits it extended were relatively limited. He found that villages which were successful in their collective endeavours were those that had a number of educated

but unemployed young individuals who assisted villagers with various activities, and thus gave competition to old patrons for their clientelist following. Due to their education and the increased awareness that came with it, these new agents/leaders were able to channel peasants' collective action in a direction that increased its chances of success. Villages that lacked such agents, he found, did not see very high returns from their collective activities. Hence, he highlights how having the ability to engage in collective action is not the same as having the ability to successfully provide collective goods and services. In order to convert the former into something successful villagers need a leader who can steer their efforts towards beneficial directions. Thus the empirical section also explores whether villages, where peasants have the freedom to engage in collective action, are able to nurture individuals who could act as leaders/agents in peasants' collective endeavours. Interestingly the village studies reveal that, as was mentioned in the introduction to this chapter, in connected villages patrons were playing such a role. Instead of being passive bystanders, these patrons were found to actively assist their clients by offering moral support, advice and financial assistance, thus increasing the chances of these projects being successful.

## **2. Empirical Analysis<sup>5</sup>**

### **2.2. Levels of Collective Action**

Walking around the isolated landlord dominated villages it was hard to miss the low levels of public goods provision. Most neighbourhoods had muddy streets, soiled with household waste due to the absence of functioning drains.<sup>6</sup> As Chapter 4 documents, peasants there had the lowest levels of public investment out of all the villages visited. But while they thereby had the highest need to engage in collective action for the purpose of self provision, few households had ever done so. This was perplexing, at first, as equally poor and equally isolated households in peasant based villages were much more active in working together to self-

---

<sup>5</sup> All interviews were in Urdu and have been translated by the author.

<sup>6</sup> This waste, besides making it important to pay close attention to where one placed one's next step, resulted in a significant increase in insects in the area.

provide (see also below), despite the fact that they actually had high levels of state provision to begin with (see again Chapter 4, Figure 1).

The reason for low levels of community based projects in isolated landlord dominated villages, as explained by my key respondents, was that the landlords greatly ‘frowned’ upon such activities, and asked peasants to approach them instead if they had a problem.<sup>7</sup> The villagers were extremely cautious when talking about the landlord. They always started off by saying that he is our elder and the head of the village and that they are extremely grateful for the mercy he shows them. Thus disobeying him was not an exercisable option. As demonstrated in Chapter 3, inequality combined with isolation, deeply entrenched the peasants’ dependence on the patron, as he was not only the main provider of employment but also the main source of credit, housing, dispute resolution and access to the local politician. This empowered him to make high demands of his clients, one being to restrict their collective action. As one household noted, “*The landlord is our village head, our elder,<sup>8</sup> and the protector of our children. If he tells us not to try and fix things ourselves, how can we possibly defy him?*”<sup>9</sup> Households were perfectly aware that given the isolated nature of their village, they would be excluded from the village economy and community if they went against the wishes of their landlord. “*Where would we go if we defied him?*”<sup>10</sup> one household responded when I questioned why they so willingly obeyed the landlord’s wishes, while another asked, “*How would we feed our children if he cuts us off?*”<sup>11</sup>

The threat from the landlords however, was not always implicit. In response to peasants trying to provide irrigation channels with the help of an NGO in one of the two landlord dominated villages, the landlord had gone as far as to threaten

---

<sup>7</sup> Key Respondent 3, interview, isolated landlord dominated village 1, 13 May, 2008.

Household ID 45, interview, isolated landlord dominated village 1, 16 May, 2008.

Key Respondent 9, interview, isolated landlord dominated village 2, 21 May, 2008.

<sup>8</sup> Being an elder in Pakistani culture commands a high level of respect and authority.

<sup>9</sup> Household ID 42, interview, isolated landlord dominated village 1, 16 May, 2008.

<sup>10</sup> Household ID 45, interview, isolated landlord dominated village 1, 16 May, 2008.

<sup>11</sup> Household ID 286, interview, isolated landlord dominated village 2, 24 May, 2008.

with violence any household that assisted in these activities.<sup>12</sup> Not surprisingly, he himself denied ever doing such a thing:

“I have never stopped the villagers from engaging in collective action. But you must understand that these are poor people who are unable to fulfil their own needs. Also they are not educated people like you and me. They don’t know how to provide themselves with the things they need. That is why I tell them that they should come to me and not try to self-provide.”<sup>13</sup>

His ‘belief’ that uneducated people cannot engage in collective action was clearly misguided, as poor uneducated households in all other types of villages were found to have no difficulties engaging in community based projects. Moreover, as was acknowledged by the patron in one of the landlord dominated villages close to the road “*Being uneducated does not mean that the villagers are unaware of their needs and how to go about fulfilling them.*”<sup>14</sup> Nonetheless, for the sake of argument, I asked him whether he was available to village peasants, given that he had told them to come to him instead: “*They are like my children*<sup>15</sup>, *I’ve told them, my door is always open and they can come to me whenever they need anything.*”<sup>16</sup> The peasants, however, saw things differently. During my field trips to this village, I myself observed how they tried to reach the landlord by loitering outside his main gate in the hope of talking to him. When his car pulled out of the driveway they swarmed around it, trying to catch his attention, but not once did he roll down his window to talk to them. The only time peasants in the isolated landlord dominated villages could reach their respective patrons was when they held ‘court’ a few times a month.<sup>17</sup> But despite their inability to communicate

---

<sup>12</sup> Key Respondent 10, interview, isolated landlord dominated village 2, 21 May, 2008.

<sup>13</sup> Landlord 2, interview, isolated landlord dominated village 2, 24 May, 2008. I have kept the landlord anonymous to protect my key respondent’s identity.

<sup>14</sup> Landlord 1, interview, connected landlord dominated village 1, 3 May 2008.

<sup>15</sup> This was said in a very patronizing tone.

<sup>16</sup> Landlord 2, interview, isolated landlord dominated village 2, 24 May, 2008.

<sup>17</sup> Key Respondent 2, interview, isolated landlord dominated village 1, 13 May, 2008.

Household interviews, isolated landlord dominated village 1, 16 May 2008.

Key Respondent 10, interview, isolated landlord dominated village 2, 21 May, 2008.



their needs, the patrons' monopoly over village resources meant that peasants found it 'cheaper' to simply refrain from engaging in collective action: fixing or providing a public good might be important for a household, but not important enough to risk being punished or ostracised by the all powerful landlord. The end result was a gross under-provision of public goods – not just drains and paved streets but also tapped water, health facilities, schooling, street lighting, etc.

The situation in landlord dominated villages close to the road was starkly different. Despite having higher levels of public investment, a large number of household reported engaging in collective action for the purpose of self provision (the details of these projects are given in Section 2.3 below). And unlike the isolated landlord dominated villages, peasants faced no constraints from their patrons when trying to undertake such activities. Given that peasants had access to alternative employment opportunities, both within the village and outside of it (see again Table 1), even though these patrons controlled most of the resources in their respective villages, they were by no means monopolists/monopsonists. Therefore, they had limited ability to interfere with their clients' independent activities. Hence in contrast to peasants in isolated landlord dominated villages, who spoke of an alliance driven out of necessity and desperation to fulfil their basic needs,<sup>18</sup> peasants in connected villages engaged in the clientelist relationship because they found it beneficial. This was evident from peasants' responses when asked why they considered the landlord their patron: "*He provides for our needs,*"<sup>19</sup> was a typical response close to the road, or "*he listens to us and does good work around the village,*"<sup>20</sup> or simply "*he is a good person*".<sup>21</sup>

---

Household interviews, isolated landlord dominated village 2, 24 May 2008.

<sup>18</sup> Household ID 37 and 45, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 286, interview, isolated landlord dominated village 2, 24 May, 2008.

<sup>19</sup> Household ID 249, interview, connected landlord dominated village 1, 3 May, 2008.

<sup>20</sup> Household ID 396, 393 and 407, interview, connected landlord dominated village 2, 23 May, 2008.

<sup>21</sup> Household ID 281 and 284, interview, connected landlord dominated village 1, 3 May, 2008.  
Household ID 386 and 411, interview, connected landlord dominated village 2, 23 May, 2008.

The patrons' responsiveness to their clients was evident from their general availability. In one of the villages, this was easily observable as the landlord was often seen walking around the village socialising with the peasants - something interviews confirmed was not unusual<sup>22</sup> – and in the other peasants said that if the need arose they could always reach the landlord through his manager (he did not himself reside in the village). Furthermore, in contrast to patrons in isolated landlord dominated villages, patrons, instead of blocking their clients' collective activities, were actually reported to have assisted in them. I was informed that the landlords often came to see how the projects were progressing, and occasionally assisted financially or by giving management advice.<sup>23</sup> In fact, in an interview with one of the local school teachers I was told that the patron in his village had given peasants the idea for various projects they could undertake, and encouraged peasants from all biraderies to come and assist in these activities.<sup>24</sup> During field-work my surveyors and I heard many similar stories. Some households reported their patron “*gave us money to buy the materials we needed*”,<sup>25</sup> and others talked about how “*he visited the site to see how the project was going*.”<sup>26</sup> Thus in contrast with Popkin's (1979) expectation, large patrons in villages closer to the road were therefore not blocking their clients' collective activities. On the contrary, in these villages, the hierarchical bonds between peasants and landlords actually appeared to be working in the peasants' favour, as it gave them access to additional resources and expertise.

The landlords' incentives to assist the peasants were arguably two-fold. Firstly, since connectivity altered the relative value of the goods and services exchanged, patrons had to offer more in the relationship in order to still have access to most of the services provided by the peasants (labour, political backing, etc.). As the local

---

<sup>22</sup> Key Respondent 6, interview, connected landlord dominated village 1, 3 May, 2008.

<sup>23</sup> Key Respondent 1, interview, connected landlord dominated village 1, 30 April, 2008.

Key Respondent 5, interview, connected landlord dominated village 2, 20 April, 2008.

See also household interviews later.

<sup>24</sup> Key Respondent 1, interview, connected landlord dominated village 1, 30 April, 2008.

Household ID 369, interview, connected landlord dominated village 2, 23 May, 2008.

<sup>25</sup> Household ID 393, interview, connected landlord dominated village 2, 23 May, 2008.

<sup>26</sup> Household ID 264, interview, connected landlord dominated village 1, 3 May, 2008.

school teacher in one of the villages told me, *“he helps us in our collective activities because he wants our votes. If he does not help the community get collective goods he would not be able to attain our political support.”*<sup>27</sup> The feeling that they had something to give in the relationship was also expressed by the households in their survey interviews, as households asserted that now they had options other than the patron and unless the exchange with him was beneficial they would not hesitate to pursue those other options.<sup>28</sup> Therefore, in order to sustain the desired balance of exchange, the patrons facilitated collective action for the public goods that they were unable to broker through the local politician.<sup>29</sup> As stated by one of the patrons in an interview:

*“If I treat them well and help them in their collective activities, they will be more inclined to help me if I ever need anything. And while I do not really need their help, they do assist me in my fields during harvesting and sowing season. Also during elections the peasants are more likely to align with me politically if I help provide them with the goods and services they need.”*<sup>30</sup>

Secondly, since the landlords were no longer able to stop collective action – an activity that Popkin (1979) argues may be used by peasants against them – joining it instead could subdue any collective resentment that might arise against them.<sup>31</sup> Thus the change in the patrons’ incentive structure, as brought about by connectivity, meant that peasants actually relied on the hierarchical patron-client network to assist them in their collective activities. This will become even clearer as we look at the character of the collective projects below.

---

<sup>27</sup> Key Respondent 1, interview, connected landlord dominated village 1, 30 April, 2008.

<sup>28</sup> This was particularly true when talking to the younger generation in the household. Household ID 258 and 266, interview, connected landlord dominated village 1, 3 May, 2008. Household ID 381, interview, connected landlord dominated village 2, 23 May, 2008.

<sup>29</sup> While public provision in landlord dominated villages close to the road was relatively high, it was still not universal (Chapter 4, Figure 1).

<sup>30</sup> Landlord 1, interview, connected landlord dominated village 1, 3 May 2008.

<sup>31</sup> It can be agreed that people are less likely to resent someone trying to assist them in providing for their needs.

But first let us end this section by turning to peasant based villages. As alluded to earlier, collective action levels were here fairly high, both close to and far from the road. In peasant based villages dispersed land ownership had led to the establishment of multiple patrons, each having to compete against one another for the peasants' services and cliental support. Such competition worked in the peasants' favour by providing them with alternative options to their patron for satisfying their needs – the alternative being to join another patron's network. These options significantly curtailed any single patron's ability to interfere with his clients' independent relationships. Moreover, competition meant that, similar to connected villages, peasants only chose to stay with their respective patron because they received certain benefits. This came out quite clearly in their responses as to why they considered someone their patron. These ranged from him catering to their needs<sup>32</sup> to having certain personality traits they found attractive – such as being a good leader and/or being a good person.<sup>33</sup> Given the competition amongst patrons in connected as well as isolated villages, it is not surprising then that patrons in both types of peasant based villages were found to assist their clients in their collective activities by giving either financial support or offering advice and/or their expertise.<sup>34</sup> It appears, therefore, that the effect of connectivity has been to change patrons' behaviour in landlord dominated villages so as to resemble patrons in the relatively egalitarian peasant based villages. This is shown clearly in Figure 1 below.

While only 25% of households engaged in collective action in isolated landlord dominated villages, 40% did so in similar tenured villages when situated close to the road. This difference is significant at the 5% level. Moreover, once connected to the external market, the levels of collective action in landlord dominated and peasant based villages tend to converge as the difference between the two is

---

<sup>32</sup> Household ID 162 and 164, interview, isolated peasant based village 2, 10 May, 2008.

<sup>33</sup> Household ID 211, interview, isolated peasant based village 1, 9 May, 2008.

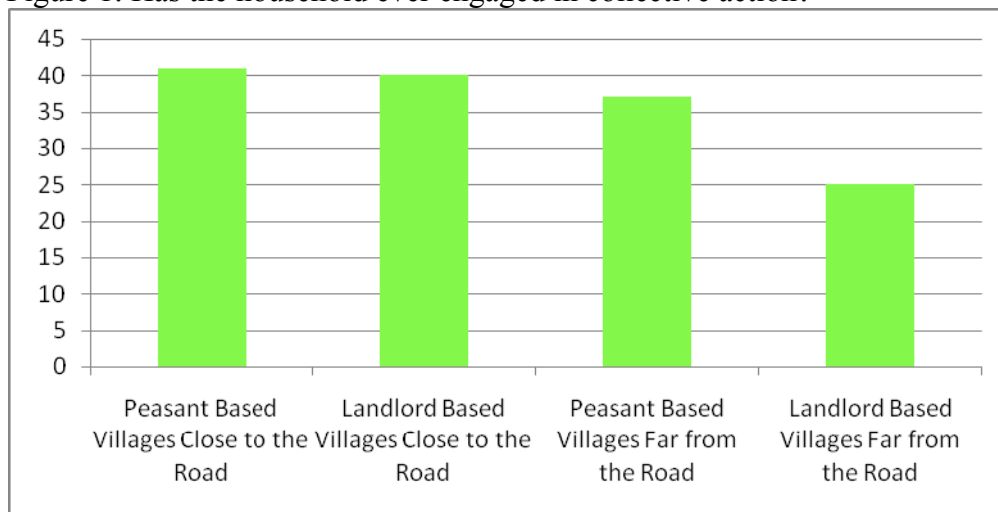
Household ID 144 and 193, interview, isolated peasant based village 2, 10 May, 2008.

<sup>34</sup> Household ID 135, interview, isolated peasant based village 2, 10 May, 2008.

Household ID 216, interview, isolated peasant based village 1, 9 May, 2008.

insignificant. Lastly, the quantitative data support the findings of field interviews that even when isolated, households in peasant based villages faced few hurdles towards their collective activities, as the difference in levels of collective action in isolated and connected peasant based villages is insignificant.

Figure 1: Has the household ever engaged in collective action?



However, Figure 1 does raise the question that, given the level of control enjoyed by patrons in isolated landlord dominated villages, how did 25% of households still manage to engage in collective action? The explanation, perhaps, could lie in the types of projects these households engaged in, particularly if they differed in nature and substance from those undertaken in other villages.

### 2.3. Types of Collective Action

The household projects undertaken in the villages can be broadly divided into two types; neighbourhood and village level projects. Neighbourhood level projects were small-scale activities, such as paving streets and building or repairing drains. These projects typically involved people from the same biradery coming together, as biraderies tended to cluster around the same area in the villages, thus making use of bonding social capital. Village level projects, on the other hand, involved activities such as repairing the wall around the mosque or the school building, cleaning the village water well, repairing the village transformer station, and so

forth. These were projects whose benefits extended to most households in the village and thus required peasants from different biraderies coming together, making use of bridging social capital.

Of the 25% of households who engaged in collective action in landlord dominated villages, around half were involved in projects meant to provide themselves with functioning drains and paved streets.<sup>35</sup> The scale of these projects was so small that they were unlikely to provide peasants with the critical mass needed to collectively bargain with the landlord. Moreover, while the projects may have resulted in stronger bonding social capital amongst the poorest communities, this did not necessarily threaten the landlords' control as it is questionable how much these communities can achieve, even in a group.<sup>36</sup> Therefore the landlords had little incentive to invest time and energy in blocking such activities on the part of their clients. But despite households having engaged in these community driven projects my surveyors and I observed that most lacked the goods they had set out to provide, indicating that their attempts to self-provide had failed. Nonetheless, these households did not feel they could communicate their needs to the landlord, as they felt that their poverty made them irrelevant in their patrons' eyes;<sup>37</sup> *"He (the patron) would never listen to us as we are too poor. No one cares about the poor."*<sup>38</sup> As a result they continued to live with muddy and soiled streets.

The other main projects undertaken in isolated landlord based villages were village level projects, which required peasants from different biraderies to come together. Such type of collective action should be threatening to the landlords' control and thus we would have expected the patrons to have blocked them. However, the ability of households to engage in such projects probably stemmed from the specific nature of the projects themselves. Only two village level projects were undertaken by these peasants: repairing the mosque wall and the wall around

---

<sup>35</sup> These were made using materials readily available in the villages so as to keep costs very low.

<sup>36</sup> In isolated landlord dominated villages households are unlikely to withhold their labour from the landlord as they have few alternatives available in the economy. Thus there are no real sanctions the group can impose on the landlord.

<sup>37</sup> Household ID 39 and 46, interview, isolated landlord dominated village 1, 16 May, 2008.

<sup>38</sup> Household ID 46, interview, isolated landlord dominated village 1, 16 May, 2008.

the school premises. In Muslim societies repairing a mosque is considered a holy activity, which was evident from the pride households expressed in having provided their assistance. Refusing the maulvis' request for their help, the households reported, would have been a sin as it was part of their religious duty.<sup>39</sup> So if the landlords tried to bar peasants from engaging in such projects, they would be branded as un-Islamic and thus stand to lose their legitimacy very quickly. Although working on the school wall was not considered a holy activity, it did involve providing the children of the village with a safer environment to study in, which again would be difficult for patrons to try and stop.

In landlord dominated villages close to the road, the households who engaged in collective action were also equally split between undertaking small scale neighbourhood level projects and more elaborate village level ones. But not only was the scope of the projects much wider in these villages, their success rate was also much higher. Starting with neighbourhood level projects, most households engaging in these activities reported having done so with the assistance of the local patron. They mentioned how the patron would visit the site while they were working<sup>40</sup> and would at times offer advice on how to do things better<sup>41</sup> or would offer his financial or moral support (see also above).<sup>42</sup> Also, unlike their isolated counter-parts, these peasants were much more successful in their collective endeavours – possibly due to their access to greater resources and expertise.<sup>43</sup> Furthermore, village level projects here were much more extensive than those in isolated landlord dominated villages. Households reported not only assisting with the maintenance of the school and the mosque, but also repairing the village transformer station, assisting in dispute resolutions, working on the provision of irrigation channels and mending the graveyard wall. And again all these activities

---

<sup>39</sup> Household ID 63, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 323, interview, isolated landlord dominated village 2, 24 May, 2008.

<sup>40</sup> Household ID 247 and 284, interview, connected landlord dominated village 1, 3 May, 2008.

<sup>41</sup> Household ID 249, interview, connected landlord dominated village 1, 3 May, 2008.

<sup>42</sup> Household ID 266, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 419, interview, connected landlord dominated village 2, 23 May, 2008.

<sup>43</sup> The success was easily observable from them having better functioning drains and well paved streets.

were undertaken with the support and assistance of their respective landlords. In fact, the patron was actually reported to have given the idea for some of the projects the households undertook. *“Given that the graveyard wall was about to break our landlord suggested that we all come together and rebuild it. He said he would help us, which he did by giving us the materials and advice.”*<sup>44</sup> Moreover, the patron was also reported to have given the idea to households to repair the transformer station, and again provided a substantial portion of the funding.<sup>45</sup>

Turning to isolated peasant based villages, most households here were found to be engaged in village level projects rather than neighbourhood ones. The explanation for this lies in the high levels of state provision in these villages, as illustrated in Chapter 4, resulting in most peasants having no need to engage in neighbourhood level projects. Still the few households that did undertake such activities were found to be more successful than those in equally isolated landlord dominated village, as patrons in peasant based villages assisted in the projects. In fact as reported by one household *“in order to ensure that we (the neighbourhood) were able to get functioning drains quickly he (the patron) sent some of his own workers to help us.”*<sup>46</sup> Village level projects included fixing the transformer, cleaning the village water wells<sup>47</sup>, maintaining the school and mosque, setting up a welfare committee and so forth. As with landlord dominated villages close to the road, patrons not only threw their full support behind their clients’ collective activities, but also initiated some of the projects by giving households the idea. For instance, in one of the two isolated peasant based villages the patrons had suggested that households with medical training set up a first aid centre, as the government basic health unit was located in another village. The peasants, of course, were very grateful for this initiative *Thanks to his (the patron’s) idea we now have some place close we can go if our kids get hurt or fall ill.*<sup>48</sup>

---

<sup>44</sup> Household ID 401, interview, connected landlord dominated village 2, 23 May, 2008.

<sup>45</sup> Key Respondent 5, interview, connected landlord dominated village 2, 20 May, 2008.

<sup>46</sup> Household ID 135, interview, isolated peasant based village 2, 10 May, 2008.

<sup>47</sup> These are communal wells that everyone uses to extract drinking water from.

<sup>48</sup> Household ID 216, interview, isolated peasant based village, 9 May, 2008.



Once connected to the motorway little changed in peasant based villages in terms of the variety of village level projects undertaken by households. However, as these peasants did not have as high a level of state provision, when compared to their isolated counter-parts, considerable focus was placed on neighbourhood level projects. Peasants talked about how their respective patrons encouraged them to build and maintain their own streets and drains and assisted them in these activities by providing funds and expertise.<sup>49</sup> With the added help from their patrons, it is no surprise that a large number of these projects were successful at providing peasants with functioning neighbourhood level public goods.

All in all, it is therefore clear that while a quarter of households in isolated landlord dominated villages did engage in collective action, the scope and relative success rates of these projects were limited when compared to the activities of peasants in all other types of villages visited. Isolation combined with inequality meant that patrons were assured of their peasants' clientelist support. They therefore did not have to assist their clients' collective projects, and could even block them at will.

The analysis so far has compared peasants' experiences with collective action across the different types of villages. Before concluding the chapter it is worth investigating who within isolated landlord dominated villages was engaging in collective action and who within the villages benefitted from connectivity? Following our discussion in Section 1.2, we would expect some variation in the peasants' relationship with their patron depending on their economic status. Landless households, due to their extreme dependence on the patron, should find the impact of 'authoritarian clientelism' much more constraining when compared to land owning households. Hence, despite both types of households being in a hierarchical relationship in landlord based villages, we would expect systematic differences in their levels, types, and success in collective action activities.

---

<sup>49</sup> Household ID 81 and 120, interview, connected peasant based village 1, 2 May, 2008. Household ID 344 and 374, interview, isolated peasant based village 2, 10 May, 2008.

#### **2.4. Collective Action, Connectivity, and the Landless**

In isolated landlord dominated villages, there was a clear distinction between the types of projects undertaken by land owning and landless households. While the land owning households were more inclined towards village level projects, the landless were much more likely to engage in small scale neighbourhood level projects. However, the limited resources of the landless meant that they failed entirely to provide themselves with functioning public goods (Table 3 below). This could give some weight to one of the patrons' argument that poverty made peasants unable to provide themselves with public goods (see above). This is further strengthened by the fact that the land owning households undertaking neighbourhood level projects had significantly higher success rates. However, the experience of landless households, just a few kilometres away, in landlord dominated villages close to the road, causes us to question whether it was poverty that limited peasants from gaining access to public goods through community driven projects. As can be seen from Table 2, equally landless households in connected villages were much more successful in such activities. The difference between the experiences of isolated and connected landless households could lie in the role their patron played in their collective activities. While in isolated landlord dominated villages the patron blocked such activities, as mentioned above, in connected villages the patron assisted the landless,<sup>50</sup> with two of five projects being successful. Thus while poverty may have been a limiting factor for collective action as it restricted peasants' access to the needed resources, the experience of households close to the road illustrates that it can be overcome. Besides giving money, the patron also gave these peasants direction and leadership, thus steering peasants' collective activities in a direction that would make them more mutually beneficial for the village society.

---

<sup>50</sup> Most landless households spoke of their patron offering them advice and support, and some also reported him helping them with buying the materials needed (Interviews household ID 238, 284, 247, 417).

Table 2: Success rate of neighbourhood level projects in landlord dominated villages

	<b>Land owning households</b>	<b>Landless households</b>
<b>Close to the road</b>	43%	40%
<b>Far from the road</b>	75%	0%

Lastly, we turn to village level projects, which in isolated villages were mostly undertaken by land owning households. This further explains why the patrons did not block these projects, as they had less control over these households' activities. In landlord dominated villages close to the road, these projects were also mostly undertaken by land owning households, but with a strong presence of landless households as well (see Figure 2 below). Interestingly, some of the village level projects undertaken by landless households were those which were initiated by their patron – for example, that of the village transformer station<sup>51</sup> – and thus they were encouraged by him to come and participate.

---

<sup>51</sup> Household ID 398, interview, connected landlord dominated village 2, 23 May, 2008.

Figure 2: Collective action amongst landless and land owning households



The differences in the experiences of landless and land owning households is also supported by the quantitative survey data. In isolated villages land owning households were much more inclined towards village level projects while the landless tended to focus on neighbourhood level projects. The difference is statistically significant at the 5% level. However, once connected to the motorway, households' economic status no longer had a significant impact on the type of project they engaged in. Not only were landless households more actively involved in community driven projects in villages close to the road, the scope of their activities was also much wider. Thus it appears that the beneficial impact of connectivity is felt most strongly by the landless – and thus poorest - households in the village economy. Hence, while field interviews highlighted the patrons' role in collective action in villages close to and far from the road, and the impact that had on projects' chances of success, the quantitative data illustrates the convergence taking place between households of different economic status in terms of the nature and scope of collective projects they can take part in. The implication is encouraging: the poorest has most to gain from reducing the isolation of rural villages.

### **3. Conclusion**

According to standard social science theory, collective action should be severely restricted in the presence of strong hierarchical networks. In rural developing economies in particular, patron-client networks should prevent peasants from engaging in community based projects. This chapter has argued, however, that such predictions may be overly simplistic by failing to consider the social and economic contexts in which patron-client networks exist. Rather than being homogenous, such networks are largely dependent on the environment in which they are nurtured. Thus, as highlighted in the empirical section, hierarchical bonds need not always be detrimental to peasants' ability to engage in collective action. In fact, under certain circumstances these bonds were shown to be an added source from which peasants could draw expertise and financial assistance so as to ensure the successful completion of community driven projects.

In particular, peasants in strong patron-client networks were much more likely to engage in successful and varied types of collective projects when they were connected to the outside economy. Unlike the 'authoritarian clientelism' in isolated rural villages, their exposure to new opportunities significantly improved peasants' bargaining power vis-à-vis their landlords. This, in turn, made them just as likely to engage in community driven projects as peasants in peasant based villages with less strong hierarchical bonds. In fact, in environments where peasants had higher bargaining power, landlords were reported to have initiated and assisted their clients in many community driven projects, as a way of maintaining the integrity of the patron-client network. In such environments, patrons were found to play the role of a leader in peasants' collective activities which, according to Krishna (2002), is a main determinant of how successful these projects will be.

It therefore appears that, while inequality naturally defines the nature of clientelism, it may only be truly detrimental to peasants' welfare when interacted with isolation, making the landlord a monopolist/monopsonist. Moreover, while evidence from field interviews and quantitative data highlighted an overall increase in the level of collective action in landlord dominated villages, it also indicated that the beneficial impact of connectivity was felt most strongly by landless households. Once connected to the external economy, households' economic status became irrelevant for the types of projects that they engaged in and their relative levels of success.

While isolation enabled large landlords to make demands on their clients, which were found to be detrimental to peasants' welfare, connectivity has helped curtail such behaviour. Even though patrons in connected villages continue to control most of the village resources, they are no longer able to force peasants into submission, as the availability of exit options enables peasants to satisfy their needs in the market if the patron cuts them off. In fact, not only were patrons in connected villages unable to exploit their clients, they actually had to cater for their needs to ensure that the benefits that the peasants derived from interacting in the clientelist network exceeded, or were at least at par with, the benefits of engaging with the external market. This change was evident both from patrons trying to increase their clients' access to public goods – either by brokering them from the local politician (as in Chapter 4), or by providing monetary and advisory assistance to community driven projects. Moreover, it was evident from one of the patron's response to why he was assisting his clients, *"If I treat them well and help them ... they will be more inclined to help me."*<sup>52</sup> Thus connectivity has helped change the clientelist relationship from one, which was focused on exploitation and maintaining control, to one which is actually beneficial towards peasants' needs.

---

<sup>52</sup> Landlord 1, interview, Connected landlord dominated village 1, 3 May 2008.

## 6. Conclusion

Inequality in developing countries' rural societies has meant that the vast majority of the poor lack control over their livelihood and have limited ability to satisfy many of their basic needs with their own resources. Moreover, the inability of the state to provide its citizens with basic public services and safety nets, due to corruption and elite capture, has meant that public resources are not a viable alternative for the poor to rely on (see for example Banerjee and Somanathan 2007, Bardhan and Mookherjee 2002, Gazdar 2000, Charlton, et al. 2003). As a result rural peasants have been found to approach the resource rich to gain access to goods and services such as employment, credit, housing, social insurance, public goods provision, and so forth. In return, peasant households reciprocate by providing the resource holder with a cheap supply of guaranteed labour, social following and political support (Scott 1972, Powell 1970, Basu 1983). The exchange, however, is far from equal, for while the demands of the peasants are urgent (fairly inelastic), those of the landlord are not (elastic). Therefore, depending on the needs that peasant households aim to fulfil from the relationship, and the extent to which they can rely on alternatives, the exchange can range from one which is highly exploitative to one which is fairly functional in nature.

The unequal exchange relationships that emerge from the presence of inequality in rural society have been studied quite extensively in the literature, and that too by researchers coming from a wide variety of disciplines. This diversity in the researchers' backgrounds has meant that each has applied his/her own analytical tools to the problems of inequality in search for a better understanding of the interaction between the resource poor and rich. However, as was highlighted in the introduction, academics analysing this subject have established two major frameworks for the analysis of unequal exchange relationships: interlinked markets, which is used mostly by economists, and patron-client structure, used by political scientists, anthropologists and sociologists. The fact that there exist two

major frameworks for studying the complexity of human relationships is by no means surprising. However, what is surprising is that the two literatures have never come into dialogue and thus have evolved parallel to one another rather than in consultation. In this context, the introduction to this thesis highlighted the similarity between the two frameworks, by arguing that they both dealt with interaction between two parties over the exchange of a bundle of goods and services. The difference, of course, lies in how the two disciplines frame the problem. While the literature on interlinked markets focuses on the impact that linked deals have on equilibria in unrelated markets, patron-client theory emphasises the personalised nature of the exchange between members of unequal economic and social status. Hence, by putting the two together, it can be stipulated that, while all patron-client relationships are conducted in an interlinked market setting, exchanges in interlinked markets can also be classified as a patron-client relationship provided the exchange fulfils certain criteria. Using a variety of tools, both sets of frameworks have established the advantage that the resource rich have in this relationship, as they have more to offer in the exchange. The resource poor, on the other hand, are disadvantaged due to their high dependency on the relationship for satisfying their needs. Thus it has been argued that this advantage enables the resource holder to extract high surpluses off the poor, much to the detriment of their welfare.

However, in spite of this advantage, both frameworks acknowledge that the exploitative tendency of the network is not inherent in the relationship, rather it is the environment in which it is cultivated that determines the vulnerability of the poor. As has been argued throughout this thesis, such an environment only exists when inequality is interacted with isolation thus creating high “transfer costs or exogenous barriers to entry” (Basu 1983, pg 272) that restrict peasants’ alternative options, and therefore lower their opportunity cost of interacting with the landlord – possibly as low as starvation. In the absence of either of these two conditions, the monopoly/monopsony of the landlord breaks down, and the relationship is forced to change so as to take into account the reduction in the landlord’s



bargaining power. In fact, provided the alternative options are feasible, patron-client relationships can possibly evolve to perform a functional role in peasants' lives, thus becoming second best solutions in response to poverty and state and market failures (Waterbury's 1977).

Policy recommendations regarding exploitative exchange relationships have historically focused on altering the unequal aspect of the relationship, and not so much on the role played by isolation. Hence the emphasis has been on redistribution, either directly through land reforms, or indirectly through welfare schemes that help improve and stabilize the incomes of the poor. However, as discussed in Chapters 1 and 2, these policies have not always been successful in achieving their goals. In the case of land reforms, Chapter 1 highlighted how countries that have successfully redistributed land have done so while taking advantage of some extraordinary circumstances – such as revolutions, external interventions or strong political mobilization (Herring 1983, Dorner and Thiesenhusen 1990). Other countries have not been as successful, as their landed elite have made use of their political clout to preserve their landholding, thus ensuring a minimal change in inequality. In the case of Pakistan, large landlords enjoy considerable influence over the government and its bureaucracy. Thus, whenever land reforms have been instituted in the past, the state has tended to turn a blind eye towards the circumvention of land ceilings by these landlords (Zaidi 1999, Hussain 1989). As argued by Rashid (1985) this was mostly because the enforcers were themselves the circumventers. And to make matters worse, the last attempt made in parliament to enact land reforms was declared un-Islamic by the head of a major religious political party (JUI), thus making land reforms in the near future even more politically difficult in Pakistan.

Other policy initiatives, made by governments of various developing countries to alter the level of inequality, have also had mixed results, with the balance tipped more towards failure than success. As surveyed in Chapter 1, policies such as cash transfers, micro-credit schemes and rural works programs have often tended to suffer from poor targeting, resulting in the benefits flowing towards the non-poor

rather than the poor. Moreover, the political clout enjoyed by the landowning patrons has, at times, enabled them to successfully lobby for government welfare schemes to be channelled through them, rather than directly to the poor (Kabeer et al 2010, Arif 2006). Such action on the part of politicians and the landowning patrons, have converted programs that were essentially meant as tools for poverty alleviation, into instruments of patronage where benefits to the poor are directly dependent on their relationship with their patron.

This is not to say that all government initiatives have failed to improve peasant welfare. Mexico, for instance, has been fairly successful in reaching the poor with its conditional cash transfers program (Handa and Davis 2006). Similarly, in Maharashtra, India, the state was able to establish a rural works program which guaranteed the poor employment for a certain number of days a year (Herring and Edwards 1983). Lastly, although microcredit programs have not been successful in targeting the poorest of the poor, they have been documented to benefit households that were not affluent enough to access formal credit markets and to pay market interest rates (Sebstad and Cohen 2000). However, despite the success of some policy initiatives, most governments of developing countries have not been able to significantly alter their respective levels of inequality. As a result, clientelism is still a predominant structure in rural societies. This has been found to be particularly the case in Pakistan, where persistent inequality has meant that large landowning patrons continue to enjoy considerable control over their rural clients (Hussain et al 2004, Cheema and Mohmand 2004, Cheema et al 2005, Arif 2006, Gazdar 2004). In light of this failure, this thesis has argued for a shift in policy focus, at least in the short to medium term, towards the role isolation plays in creating a monopolist and an authoritarian patron. While the role of isolation in enhancing the vulnerability of the poor has been acknowledged in the literature (Basu 1983, Bhaduri 1972), increasing connectivity has seldom ever been recommended as a policy tool for reducing the authority of a patron in rural society.

This thesis has tried to illustrate this point explicitly by arguing that, under isolation, the urgency of peasants' needs, combined with the absence of alternative options, leaves peasants no choice but to comply with the extractive demands of the patron. Any attempt to reject his demands, in a closed economy, carries the risk of being punished and/or ostracized by the all powerful landlord. However, once connected to the external market, the level of its peasants' dependency on their patron falls considerably, as they now have a credible exit option to walk away from the relationship. In order to sustain his clientelist following, the patron then has to provide peasants with goods and services whose benefits outweigh, or at least match those received from the external market. Put another way, he has to lower his extractive practices to the extent that the costs to the peasants of staying in the patron-client relationship are lower than the costs of pursuing alternative options (Scott & Kerkvliet 1977).

Whether viewed as an increase in benefits or a reduction in costs, connectivity should thus change the nature of clientelism to the benefit of the rural poor. This expectation was clearly reflected in the empirical analyses of the thesis, where connectivity, through road networks, was found to significantly weaken the hold of the large patron. Compared to their isolated counterparts, peasants in strong patron-client networks close to the roads were far better off. So much so, that convergence had taken place towards the socio-economic situation in villages with relatively egalitarian distribution of land.

The thesis made use of a natural experiment found in the construction of a motorway in Pakistan to analyse the impact connectivity has on socio-economic and political outcomes in villages dominated by large landlords. The data collected was both quantitative and qualitative so as to clearly identify the direction, nature and mechanism of change taking place in the villages. The quantitative data allowed me to establish not only an increase in welfare outcomes in landlord dominated villages close to the road, but also the convergence that was taking place between villages with differing land tenure systems. By also using qualitative data I could more credibly conclude that the econometric results

reflected actual changes ‘on the ground’: observing peasants in their dealings with the landlord as well as interviewing them about their perceptions on the clientelist relationship, made it clear that the change in outcomes was indeed a reflection of an underlying change in clientelist relationships.

This analysis focused on three distinct, yet related, implications of clientelism. Chapter 3 started off the analysis by investigating market interlinkages in rural economies. It was found that in isolated villages dominated by a powerful landlord, interlinkages were established in a manner that facilitated surplus extraction by the landlord, whereas in peasant based villages such links were largely meant to reduce transaction costs in the presence of incomplete and missing markets. Exposure to the external market did not break interlinkages completely in either of the two different tenured villages. Instead, it resulted in a change in the nature of the relationship within unequal villages. In particular, connectivity was found to break triadic relationships, thus limiting the influence that patrons had on peasants’ independent activities. This was especially evident from the freedom that peasants had to engage in their horizontal networks, in spite of the presence of a large patron. Thus market interlinkages in connected landlord dominated villages were found to function similar to those in egalitarian villages, i.e. as dyadic exchange relationships which helped reduce uncertainty and transaction costs in the presence of missing and/or incomplete markets.

Convergence was also found in terms of public goods provision in Chapter 4. When villages were isolated, the dominant landlords were able to use their peasants’ votes as bargaining chips with the local politician in order to appropriate public resources for their own private benefit. As a result, public investment was under-provided for the peasants in unequal isolated villages. Once connected to the external economy, however, patrons with similarly large landholdings were found to be unable to appropriate public resources to the same extent. Instead, they had to use their peasants’ votes to broker public goods for the village economy. While the difference in provision levels between connected and isolated landlord dominated villages was not very large, it was found to be statistically

significant. Moreover, aside from the change in connected landlord based villages being in the right direction, the levels of provision were also found to converge with those found in relatively egalitarian villages, thus making land tenure systems irrelevant. The responsiveness of the patrons towards the needs of their clients was driven by a desire to maintain peasants' political support, in an environment where it could no longer be enforced with the threat of sanctions. As a result, public provision in landlord dominated villages connected to the outside economy was at par with those in egalitarian villages.

Despite having access to greater public investment through local politicians, public goods provision was still not universal in any of the villages researched. The last empirical chapter, therefore, analysed peasants' ability to engage in collective action for the purpose of self provision. Here it was found that large landlords in isolated villages used the threat of restricting access to their resources, or even violence, to curtail their clients' collective action. By contrast, landlords in villages connected to the external economy not only refrained from blocking their clients' collective activities, but actually went so far as to facilitate them with financial and technical assistance. In some cases they even initiated the projects themselves. Thus patrons in connected villages acted as leaders of collective action projects and helped steer peasants' activities in a direction that increased their chances of success. Krishna (2002), in his study of 68 villages in India, found that villages that had individuals who could perform such a role were much more likely to convert peasants "collective action into collective achievement" (pg. 195). The benefit of such leaders in my sample was evident from the fact that projects initiated under the supervision of the patron in connected villages had a much higher success rate when compared to projects in isolated unequal villages. This was also found in peasant based villages, indicating – yet again – that breaking isolation led to a considerable increase in peasants' welfare in rural economies, even in the presence of large-scale inequality.

Moreover, the empirical analysis in all three chapters also focused on who, within the villages, was benefiting from connectivity. In this respect each chapter probed into how connectivity changed outcomes for the four main social groups in the villages. Interestingly, for all the indicators, it was revealed that the benefits of connectivity were felt most strongly by the lower class biradery – the Muslim Sheikhs. Households belonging to this biradery, apart from belonging to the bottom of the social ladder were also found to be landless, which made them highly dependent on others for securing a livelihood. Thus these households had very low bargaining power within the patronage network, and were therefore most vulnerable to exploitation under isolation. However, once connected to the external economy, belonging to this biradery had no significant effect on the various outcomes analysed. This result is not entirely surprising when we take into account that these households had high occupational mobility due to them being hired as casual labourers, rather than as tenant farmers (see Table 3 in Chapter 2). This meant that when the economy was exposed to external opportunities, these households had the ability to walk away from exchanges which they deemed detrimental to their welfare. As a result, in order to maintain these households' clientelist following, patrons had to offer them more in return than what they did when the village was secluded. Tenancy farmers, on the other hand, while more tied to the village economy due to their contractual arrangements, nonetheless had the advantage of belonging to the socially upper class biradery (see Table 3 in Chapter 2) and having additional ties to the landlord. Hence, as we saw in the empirical chapters, these households enjoyed favourable outcomes even when isolated. Therefore, while they continued to enjoy the advantages of belonging to the upper class in connected villages, the difference in these villages was that the lower classes were no longer found to suffer a disadvantage.

However, this is not to say that biradery was no longer important in connected villages. Key respondent interviews and household surveys both revealed it to be an important indicator of the households' social status in all 8 village societies. This is similar to what Bailey (1957) observed in his mountainous village in India,

which was exposed to the external economy a little under a hundred years before his visit. In spite of the fact that the lower caste households were able to improve their economic wellbeing by taking advantage of the changing economy, they were not able improve their social status so as to bring it at par with their new found wealth. This led to considerable frustration amongst these households. As a result they were found to retaliate by invoking their rights as citizens of India, and approaching formal institutions in times of conflict instead of adhering to village customs and institutions. I did not see such behaviour in my villages, but this is not to say that it may not come about in the future. The outcomes that Bailey observed occurred close to a hundred years after the village was opened up, whereas my results are based on a mere ten years of exposure. Therefore, the socio-political structures of these villages are still very much in transition and thus are likely to evolve significantly before resting on a stable equilibrium. However, I must add that while there is much more that is likely to change, I do not believe that connectivity will make biradery redundant in the rural society of Pakistan, despite Marx's (1853) prediction that railroad access to Indian villages would make caste identity irrelevant. Even Bailey (1957), who documented a change in the caste relationships in the villages, found that caste continued to be an important form of identity in rural India.

Another interesting change brought about by connectivity was the way in which resources – both public and private – were used by the patron. As the chapters highlighted, the patrons' access to resources often extended to public funds and institutions. As a result, as mentioned in Chapters 2 and 4, all public resources were diverted to the patron who then decided on how they were to be spent. Moreover, Chapter 2 also highlighted the influence that patrons had on formal institutions – particularly those dealing with dispute resolution. This meant that if peasants wanted to gain fruitful access to these institutions, they would have to approach them through their patron. In isolated villages monopolistic patrons were found to use this privileged access to the state and their monopoly over private resources to maximise their own private benefit. In connected villages, as patrons now faced the threat of losing their clientelist following, similar funds

were used by them to compete with the peasants' outside options. Put another way, the presence of alternative options meant that the landlord now had to use his resources, combined with state funds, to reinforce his importance in his clients' lives so as to maintain the integrity of the network. This was only possible by providing for his clients' needs so as to make their staying in the network more attractive than pursuing their outside options. Hence connectivity caused a shift in the patrons' incentive structure, resulting in his benefits being aligned with those of the poor. As argued by Scott (1972), the fact that the patron close to the road had promise of rewards to maintain support is a clear sign that connectivity is weakening the hold of the landlord. By his own admission, the large patron in a connected village realised that, in order to continue enjoying access to peasants' labour in the fields and their political support during elections, he had to offer them more from the exchange.

Lastly, connectivity appears to have changed the way peasants interact in their horizontal networks. In isolation large landlords use their high levels of control to minimise peasants from engaging in mutually beneficial activities with fellow villagers. As such control is not possible by patrons in connected villages, peasants claim to interact extensively with their fellow villagers to improve their joint welfare. In time, this could prove to be another avenue through which government resources can be combined with patronage networks for the benefit of the peasants. As mentioned in Chapter 2, the Local Government Ordinance makes provision for citizens' participation by providing funds for collective action projects. However, these funds are only released after an application is made and approved by the funding body. Given the level of corruption in Pakistan, and the process through which all other government resources are spent, it is not unreasonable to assume that these too would require some amount of lobbying by persons of influence. Thus the patron could use his privileged access to the local politicians to help secure such funds for peasants' participatory projects.

Overall, the results present an interesting story of both continuity and change that resonates with the broader literature on institutions and development of the past



decade. At a very general level, it is clear that patron-client networks persist in rural Pakistan. Relationships, cultivated over generations in closely-knit village societies, are bound to display a great deal of path dependency. Also, the lack of state provision means that if peasants choose to break their links with the landlord completely, they would have to seek new alliances to gain access to all their necessary services (Scott 1972). This would entail considerable uncertainties and transaction costs (see generally, North 1990). So, even in the presence of outside options, landlords are likely to play a key role in the economic and social fabric of rural Pakistan for decades to come. However, despite their persistence, their character changes considerably when opportunities are made available and constraints lessened. Whereas in isolated villages peasants align with the large patrons out of necessity, as they have no alternative for satisfying their needs, in connected villages the relationship persists because landlords have strong incentives to cater for the needs of the peasants. Therefore, even though the institutional setup of clientelism is based on levels of inequality which have stayed largely constant since the creation of Pakistan, this thesis documents that an external shock, brought about by the building of the motorway, provided the necessary critical juncture to change the relationship from one focused on exploitation to one based on cooperation (see generally, Pierson 2000). The chapters highlighted how, while in isolation, large landlords used their resources along with public funds, to maximise their own surplus, in connected villages similar resources were used by patrons to compete against clients' alternative options. At least for the three variables analysed in this thesis it therefore appears that breaking isolation has had the same effect as redistributive policies.

One possible caveat to this conclusion is, of course, that the results could simply reflect that landlords close to the road just happened to be benevolent. Since the study was conducted at the household rather than village level, it is difficult - albeit not impossible - to comment on the character of the landlords. But I can, and have, commented on their incentive structure. The effect of connectivity, as documented throughout this thesis, has been to alter the relative costs and benefits of exploitation. As a result the outcomes seen in the three empirical chapters are

consistent with an incentive structure that is independent of patrons' personality traits. That said; the effect of connectivity on landlords' behaviour and perception is an important question which future research should address in more detail. This could be done as a quantitative study of a large number of villages, or explored through in-depth qualitative interviews in carefully selected cases, such as the sample of this thesis. Another possible area of future research is to analyse in greater detail the impact of connectivity on the control group – the peasant based villages. While connectivity is undoubtedly having an impact on these villages as well, the effect is much more subtle and was not tested out here as these villages were not the focus of this study. Thirdly, the absence of time-series data meant that my methodological setup had to take advantage of a natural experiment, but studies over time would be able to reveal important insights. It would therefore be relevant to study changes in clientelist relationships over the next decades. My own expectation is that increased interaction with the outside market over the years is unlikely to break clientelist relations completely for the reasons cited above, but this remains to be seen. Finally, a question not addressed here, is whether the new opportunities that arise from connectivity lead to an increase in the marginal productivity of agricultural workers: under isolation it can be assumed that peasants were under-employed, as a vast number worked on the fields due to the absence of viable alternatives. This may well change when peasants get access to alternative labour markets. These are but a few examples which indicate that, as always with studies in underexplored fields, the thesis has raised more questions than answers.

Nevertheless, the results do quite clearly indicate that decreasing isolation of rural economies can lead to some of the same outcomes aspired to by redistributive policies. While inequality does, of course, have detrimental effects on peasants' economic welfare, as it makes it harder for them to pull themselves out of poverty (World Bank 2000), in the absence of isolation it has limited implications for their social and political welfare. This study centred on a motorway that provided a useful natural experiment to overcome a number of methodological challenges. Although the impact on clientelism of this particular road was clearly an

unintended consequence, it provides a useful illustration that policy makers seeking to increase peasants' welfare should take into consideration. The advantage of this policy option is that it should be politically easy to implement. Already, we have seen that peasants have benefited not only by obtaining additional employment opportunities, but also from their stronger bargaining position vis-à-vis the patron. The landlords also benefit, despite their weakened bargaining position, due to increase in the value of their land and transport cost reductions in accessing their agrarian fields and getting their produce to the market. Therefore, as in the case of Maharashtra's employment guarantee scheme, rural elites are unlikely to block such policy initiatives. And, of course, the politicians benefit, as they can claim credit for a tangible result: providing roads to the masses.

Lastly, apart from its political ease and the spill-over effects in the village economy, building infrastructure should also have some village and economy wide benefits not analysed in the empirical chapters. These can range from the free flow of ideas, to greater access to education, to a reduction in transportation costs to the possible increase in food security in the country. As was mentioned earlier, with connectivity comes an increase in contact with outsiders who not only bring information into the rural economy, but also introduce new ideas and worldviews that can help facilitate change. While economists have looked at how the flow of such ideas encourages the adoption of new technology and new techniques in the production process (see for example Platteau 1996), sociologists have focused on how this impacts societal organisation (see for example Skinner 1985, Liu 2007). While this may manifest itself in multiple ways, one example may be the positive effect that a flow of ideas can have on gender relations and gender mobility within the village economy. While gender issues were not the focus of this thesis, I did at times interview households where the women would tell me enviously that I had seen more of their village than they had, since their household did not consider it appropriate for women to venture outside their homes. The constraints faced by women in isolated villages are not peculiar to Pakistan (see for example Saul 1993, Bruce 1993, Mackenzie 1993). In most

cases, studies have found that women are given restricted access to land and labour markets so that their households can control their incomes and thus their level of mobility. Exposure to the external economy, it is hoped, will alter social setups by changing their 'worldviews', thus reducing the restrictions placed on their women. This change would not only allow women to enjoy more freedom, but may also lead to their greater participation in the labour market, thus assisting the household in pulling itself out of poverty.

Another positive impact of connectivity is to increase households' access to educational institutions – both for basic and higher education. Aside from the obvious advantages of increased education, this should also help the flow of ideas and thus facilitate cultural change in the rural economy. The importance of education in changing the social structure of rural societies has also been discussed extensively by Krishna (2002) through his findings in 69 Indian villages. He documents how the availability of an educated group of young individuals resulted in a reduction in the authority of old patrons, as villagers now had the option to approach this new group for help with activities such as filling out forms, applying for national identity cards, registering for elections etc. Also, with education there should be an increase in the general level of awareness amongst the villagers. As was argued in Chapter 4, this should result in an increase in the responsiveness of government officials (see for example Prat and Strömberg 2006, Besley et. al. 2002, Besley and Burgess 2000, Olsen 1982).

In purely economic terms, connectivity benefits small farmers by lowering costs associated with transporting their produce to the market. Improved infrastructure should increase the number of transport options available to small farms, thus creating competition which should lower the price that the transporters charge. These cheaper options should make it possible for farmers to profitably take advantage of price changes in the urban centres, and maybe even in the international market (de Janvry et al 1991, Delgadi 1992), which in the presence of isolation was monopolised by middlemen (Fafchamps and Hill 2008). Furthermore, having a well functioning road that connects the village to the

external market, should significantly lower the time it takes to transport produce from farm to market. Apart from freeing up farmers' time for other productive activities, this time saving should also help to reduce post-harvest losses caused due to the produce lying idle too long in inadequate storage facilities (Platteau 1996). At the national level, stock mobility should enable governments to increase food security within their countries by providing regions with bad harvests with food from areas of abundance (Dreze and Sen 1991). These are but a few examples of the benefits that connectivity can provide for not only the rural villages, but also for the wider national economy.

However, before concluding, it must be stated that this policy prescription is extended with the caveat that road networks are by no means the silver bullet of development, despite their win-win character. In order to have a much stronger and more effective impact, connectivity must be followed by wider governmental and economic reforms so as to enable institutions to work better for the poor. Nonetheless, even in the absence of these reforms, connectivity does appear to provide a small step on the very long road to development.

# Bibliography

*Abers, R. N. (1998). "From Clientelism to Cooperation: Local Government, Participatory Policy, and Civic Organizing in Porto Alegre, Brazil " Politics & Society 26: 511-537.*

*Abers, R. N. (2007). "Organizing For Governance: Building Collaboration in Brazilian River Basins." World Development 35(8): 1450-1463.*

*Abraham, A. and J.-P. Platteau (2004). Participatory Development: When Culture Creeps. Culture and Public Action: A Cross-Disciplinary Dialogue on Development Policy. V. Rao and M. Walton. Palo Alto, Stanford University Press.*

*Acemoglu, D. and S. Johnson (2005). De Facto Political Power and Institutional Persistence. MIT Working Paper.*

*Acemoglu, D., S. Johnson, et al. (2002). "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution." Quarterly Journal of Economics 117(4): 1231-1294.*

*Ahmad, S. (1970). "Social Stratification in a Punjabi Village." Contributions to Indian Sociology 4(1): 105-125.*

*Ahmad, S. (1977). Class and power in a Punjabi village. New York, Monthly Review Press.*

*Akerlof, G. (1976). "The Economics of Caste and of the Rat Race and Other Woeful Tales." The Quarterly Journal of Economics 90(4): 599-617.*

Akerlof, G. A. (1970). "The Market for "Lemons": Quality Uncertainty and the Market Mechanism." *The Quarterly Journal of Economics* 84(3): 488-500.

Akhtar, A. S. (2006). "The State as Landlord in Pakistani Punjab: Peasant Struggles on the Okara Military Farms." *Journal of Peasant Studies* 33(3): 479 - 501.

Akmal, H. (2008). "Institutional Imperatives of Poverty Reduction." *The Pakistan Development Review* 47(4): 605-630.

Alavi, H. (1972). "Kinship in West Punjab Villages " *Contributions to Indian Sociology* 6: 1-27.

Alavi, H. (1973). "Peasant classes and primordial loyalties." *Journal of Peasant Studies* 1(1): 23 - 62.

Alavi, H. (1983). *Class and Power. Pakistan : the roots of dictatorship : the political economy of a praetorian state.* H. N. Gardezi and J. Rashid. London, Zed Press.

Alavi, H. (1983). *Elite Farming Strategy and Regional Development of the Labour Movement. Pakistan : the roots of dictatorship : the political economy of a praetorian state.* H. N. Gardezi and J. Rashid. London, Zed Press.

Aleem, I. (1990). "Imperfect Information, Screening, and the Costs of Informal Lending: A Study of a Rural Credit Market in Pakistan." *World Bank Economic Review* 4(3): 329-349.

Ali, I. (1988). *The Punjab Under Imperialism.* Princeton, Princeton University Press.

Ali, I. (1994). *Sikh Settlers in the Western Punjab During British Rule*. CMER Working Paper Series. Lahore, LUMS.

Almond, G. and S. Verba (1965). *The Civic Culture: Political Attitudes and Democracy in Five Nations*. Boston, Little and Brown.

AnanthPur, K. (2007). "Rivalry or Synergy? Formal and Informal Local Governance in Rural India." *Development and Change* 38(3): 401-421.

Anwar, T. and S. K. Qureshi (2003). *Trends in Absolute Poverty in Pakistan: 1990-2001*. Proceedings of 18th PSDE Meeting and Conference Islamabad.

Anwar, T., S. K. Qureshi, et al. (2004). *Landlessness and Rural Poverty in Pakistan*. Islamabad, PIDE.

Arif, G. M. (2004). *Bonded Labour in Agriculture: a Rapid Assessment in Punjab and North West Frontier Province, Pakistan*. Geneva, Working Paper, ILO.

Arif, G. M. and M. Ahmed (2001). *Poverty Across the Agro-Ecological Zones in Rural Pakistan*. National Workshop on Pro-Poor Intervention Strategies in Irrigates Agriculture in Asia, Lahore, International Water Management Institute.

Atchi Reddy, M. (1996). *Lands and Tenants in South India*. New Delhi, Oxford University Press.

Auyero, J., P. Lapegna, et al. (2009). "Patronage Politics and Contentious Collective Action: A Recursive Relationship." *Latin American Politics and Society* 51(3): 1-31.

Badstue, L. B., M. R. Bellon, et al. (2005). *Collective Action for the Conservation of On-Farm Genetic Diversity in a Centre of Crop Diversity: An Assessment of*



*the Role of Traditional Farmers' Networks. CAPRI Working Papers. Washington, DC, International Food Policy Research Institute*

*Bailey, F. G. (1957). Caste And The Economic Frontier; A Village In Highland Orissa. Manchester, Manchester University Press.*

*Baker, M. (2005). The Kuhls of Kangra : Community-Managed Irrigation in the Western Himalaya. Seattle, University of Washington Press.*

*Balakrishnan, P. (1999). "Land Reforms and the Question of Food in Kerala." Economic and Political Weekly 34(21): 1272-1280.*

*Bandyopadhyay, D. (1986). "Land Reforms in India: An Analysis." Economic and Political Weekly 21(25/26): A50-A56.*

*Banerjee, A., L. Iyer, et al. (2005). "History, Social Divisions, and Public Goods in Rural India." Journal of the European Economic Association 3(2-3): 639-647.*

*Banerjee, A. and R. Somanathan (2007). "The Political Economy of Public Goods: Some Evidence from India." Journal of Development Economics 82(2): 287-314.*

*Banerjee, A. V. (1999). "Land Reforms: Prospects and Strategies." SSRN eLibrary.*

*Banfield, E. C. (1958). The Moral Basis of a Backward Society New York, Free Press.*

*Bardhan, P. (1980). "Interlocking Factor Markets and Agrarian Development: A Review of Issues." Oxford Economic Papers 32(1): 82-98.*

*Bardhan, P. (1984). Land, Labor, and Rural Poverty : Essays in Development Economics New York, Columbia University Press.*

*Bardhan, P. (1993). "Analytics of the Institutions of Informal Cooperation in Rural Development." World Development 21(4): 633-639.*

*Bardhan, P. (2005). "Institutions Matter, But Which Ones?" Economics of Transition 13(3): 499-532.*

*Bardhan, P. and D. Mookherjee (2002). Relative Capture of Local and Central Governments: An Essay in the Political Economy of Decentralization. Centre for International and Development Economics Research. Berkley, University of California: 99-109.*

*Bardhan, P. and D. Mookherjee (2006). "Pro-Poor Targeting and Accountability of Local Governments in West Bengal." Journal of Development Economics 79(2): 303-327.*

*Bardhan, P. and A. Rudra (1978). "Interlinkage of Land, Labour and Credit Relations: An Analysis of Village Survey Data in East India." Economic and Political Weekly 13(6/7): 367-384.*

*Bardhan, P. K. (1992). The Political Economy of Development in India. Oxford, UK ; New York, NY, USA, B. Blackwell.*

*Bardhan, P. K. and P. Oxford University (1991). The Economic Theory Of Agrarian Institutions. Oxford, Oxford University Press.*

*Bardhan, P. K. and I. Ray (2008). The Contested Commons: Conversations Between Economists And Anthropologists. Malden, MA ; Oxford, Blackwell Pub.*

Bari, F., E. Hooper, et al. (2005). *Conceptualizing a Social Protection Framework for Pakistan. Pakistan Poverty Assessment Update: Background Paper Series*, Asian Development Bank.

Barracclough, S. (1999). *Land Reform In Developing Countries: The Role Of The State And Other Actors. UNRISD Discussion Paper*, United Nations.

Barrientos, A. and J. DeJong (2006). "Reducing Child Poverty with Cash Transfers: A Sure Thing." *Development Policy Review* 24: 537-552.

Basu, K. (1983). "The Emergence of Isolation and Interlinkage in Rural Markets." *Oxford Economic Papers* 35(2): 262-280.

Basu, K. (1984). "Implicit Interest Rates, Usury and Isolation in Backward Agriculture." *Cambridge Journal of Economics* 8(2): 145-159.

Basu, K. (1986). "One Kind of Power." *Oxford Economic Papers* 38(2): 259-282.

Basu, K., C. Bell, et al. (1999). "Interlinkage, Limited Liability, and Strategic Interaction." *SSRN eLibrary*.

Baum, M. A. and D. A. Lake (2003). "The Political Economy of Growth: Democracy and Human Capital." *American Journal of Political Science* 47(2): 333-347.

Beall, J. (1997). "Social Capital in Waste - A Solid Investment?" *Journal of International Development* 9(7): 951-961.

Befu, H. (1977). "Social Exchange." *Annual Review of Anthropology* 6(ArticleType: research-article / Full publication date: 1977 / Copyright © 1977 Annual Reviews): 255-281.

*Bell, C. (1988). Credit Markets and Interlinked Transactions. Handbook of Development Economics H. Chenery and T. N. Srinivasan, Elseneia Science Publishers.*

*Bell, C. and T. N. Srinivasan (1989). "Interlinked Transactions in Rural Markets: An Empirical Study of Andhra Pradesh, Bihar and Punjab." Oxford Bulletin of Economics & Statistics 51(1): 73-83.*

*Bell, C. and T. N. Srinivasan (1991). "Some Aspects of Linked Product and Credit Market Contracts Among Risk-Neutral Agents." The Economic Theory of Agrarian Institutions 1: 221-237.*

*Bell, C., T. N. Srinivasan, et al. (1997). "Rationing, Spillover, and Interlinking in Credit Markets: The Case of Rural Punjab." Oxford Economic Papers 49(4): 557-585.*

*Besley, T. and R. Burgess (2000). "Land Reform, Poverty Reduction, And Growth: Evidence From India." The Quarterly Journal of Economics 115(2): 389-430.*

*Besley, T. and R. Burgess (2002). "The Political Economy of Government Responsiveness: Theory and Evidence from India." The Quarterly Journal of Economics 117(4): 1415-1451.*

*Besley, T., R. Burgess, et al. (2002). Mass Media and Political Accountability. The Right to Tell: The Role of Mass Media in Economic Development. R. Islam, S. Djankov and C. McLiesh. Washington D.C., The World Bank.*

*Besley, T., R. Pande, et al. (2005). Political Selection and the Quality of Government: Evidence from India. Political Economy and Public Policy Series. London, STICERD, London School of Economics and Political Science.*

Bhaduri, A. (1973). "A Study in Agricultural Backwardness Under Semi-Feudalism." *The Economic Journal* 83(329): 120-137.

Bhaduri, A. (1977). "On the Formation of Usurious Interest Rates in Backward Agriculture." *Cambridge Journal of Economics* 1(4): 341-352.

Bhaduri, A. (1986). "Forced commerce and agrarian growth." *World Development* 14(2): 267-272.

Bliss, C. J. and N. H. Stern (1982). *Palanpur: the Economy of an Indian Village*. Oxford Clarendon Press.

Blok, A. (1974). *The Mafia of a Sicilian Village, 1860-1960*. New York, Harper & Row Torchbooks.

Blomquist, W. A. (1992). *Dividing the Waters: Governing Groundwater in Southern California*. San Francisco, ICS Press; Distributed to the trade by National Book Network.

Bodemann, Y. M. (1982). "Class Rule As Patronage: Kinship, Local Ruling Cliques And The State In Rural Sardinia." *Journal of Peasant Studies* 9(2): 147 - 175.

Boissevain, J. (1974). *Friends of Friends: Networks, Manipulators And Coalitions*. Oxford, Blackwell.

Borges, A. (2007). "From Patronage Politics to Community Deliberation: The Recent Experience of Democratic School Management in Brazil." *Public Administration and Development* 27: 273-282.

Bratton, M. (1994). *Civil Society and Political transitions in Africa. Civil Society and the State in Africa. J. Harbeson, D. Rothchild and N. Chazan. Boulder, Lynne Reinner.*

Braverman, A. and T. N. Srinivasan (1981). "Credit And Sharecropping In Agrarian Societies." *Journal of Development Economics* 9(3): 289-312.

Braverman, A. and J. E. Stiglitz (1982). "Sharecropping and the Interlinking of Agrarian Markets." *The American Economic Review* 72(4): 695-715.

Bruce, J. W. (1993). *Do Indigenous Tenure Systems Constrain Agricultural Development? Land in African agrarian systems. T. J. Bassett and D. Crummey. Madison, Wis, University of Wisconsin Press: xi, 418 p.*

Camerer, C. (2003). *Behavioral Game Theory : Experiments in Strategic Interaction. Princeton, N.J. New York, Princeton University Press; Russell Sage Foundation.*

Chabal, P. and J.-P. Daloz (1999). *Africa Works : Disorder as Political Instrument. Oxford, International African Institute in association with James Currey,.*

Charlton, J., N. Manning, et al. (2003). *Devolution in Pakistan – Preparing for Service Delivery Improvements. Forum on Intergovernmental Relations and Service Delivery in Pakistan, World Bank-ADB-DfID.*

Chaudhary , I. S. (2003). *An Empirical Analysis of the Determinants Of Rural Poverty In Pakistan: A Case Study of Bahawalpur District With Special Reference To Cholistan. Economics. Bahawalpur, Islamia University of Bahawalpur PhD.*

Cheema, A. (2008). *Punjab Poor Districts Reducing Poverty through Land Access, On site with author.*

*Cheema, A., L. Khalid, et al. (2008). "The Geography of Poverty: Evidence from the Punjab." The Lahore Journal of Economics.*

*Cheema, A., A. I. Khwaja, et al. (2005). "Decentralization in Pakistan: Context, Content and Causes." SSRN eLibrary.*

*Cheema, A. and S. Mohmand (2004). Local Government Reforms in Pakistan: Legitimising Centralisation or a Driver for Pro-Poor Change. Structural Impediments to Pakistan's Development. H. Gazdar and A. U. Sayeed. Karachi, Oxford University Press.*

*Cheema, A., S. Mohmand, et al. (2007). History, Land Settlements and Informal Institutions in Sargodha. Informal Institutions Project. Sussex, LUMS-DRC.*

*Cheema, I. (2005). A Profile of Poverty in Pakistan. CRPRID Working Paper.*

*Chirwa, E. W., E. K. Zgova, et al. (2002). "Participation and Impact of Poverty-oriented Public Works Projects in Rural Malawi." Development Policy Review 20: 159-176.*

*Churchill, C. and I. Guérin (2004). Microfinance-Led Strategies to Eliminate Bonded Labor, Independent paper.*

*Crow, B. and K. A. S. Murshid (1994). "Economic Returns To Social Power: Merchants' Finance And Interlinkage In The Grain Markets Of Bangladesh." World Development 22(7): 1011-1030.*

*Danziger, S., R. Haveman, et al. (1981). "How Income Transfer Programs Affect Work, Savings, and the Income Distribution: A Critical Review." Journal of Economic Literature 19(3): 975-1028.*

*Darling, M. (1928). The Punjab Peasant in Prosperity and Debt. London, New York etc., H. Milford, Oxford university press.*

*Daron, A., J. Simon, et al. (2001). "The Colonial Origins of Comparative Development: An Empirical Investigation." The American Economic Review 91(5): 1369-1401.*

*Dasgupta, P. (1993). An Inquiry into Well-Being and Destitution. Oxford, Clarendon Press.*

*Dasgupta, P. (1993). Uncertainty, Insurance and Social Norms. An Inquiry into Well-Being and Destitution Oxford, Clarendon Press.*

*Dau, B. D. (1985). "Federalism or Patrimonialism: The Making and Unmaking of Chief Ministers in India." Asian Survey 25(8): 793-804.*

*de Janvry, A., M. Fafchamps, et al. (1991). "Peasant Household Behaviour with Missing Markets: Some Paradoxes Explained." Economic Journal 101(409): 1400-1417.*

*Deininger, K. and H. Binswanger (1999). "The Evolution of the World Bank's Land Policy: Principles, Experience, and Future Challenges." World Bank Research Observer 14(2): 247-276.*

*Delgado, C. L. (1992). "Why Domestic Food Prices Matter to Growth Strategy in Semi-Open West African Agriculture." Journal of African Economies 1(3): 446-471.*

*Desai, M. (1984). Power and Agrarian Relations: Some Concepts and Measurements. Agrarian Power and Agricultural Productivity In South Asia. M. Desai, S. H. Rudolph and A. Rudra, University of California Press.*



*Deshingkar, P., C. Johnson, et al. (2005). "State transfers to the poor and back: The case of the Food-for-Work program in India." World Development 33(4): 575-591.*

*DFID (2006). Social Protection Strategy for Pakistan. DFID.*

*Di Gregorio, M., K. Hagedorn, et al. (2008). Property Rights, Collective Action, and Poverty. The Role of Institutions for Poverty Reduction. CAPRI Working Paper. Washington D. C., International Food Policy Research.*

*Diamond, L. (1994). "Towards Democratic Consolidation." Journal of Democracy 5(3): 4-17.*

*Diamond, L. (1999). Developing Democracy: Toward Consolidation. Baltimore, Johns Hopkins University Press.*

*Diamond, L., J. L. Juan, et al. (1995). Politics in Developing Countries: Comparing Experiences with Democracy. Boulder, Lynne Rienner Publications*

*Dirven, M. (1993). "Rural Society: Its Integration and Disintegration." CEPAL Review 51: 5-17.*

*Dongier, P., J. V. Domelen, et al. (2002). Community Driven Development. World Bank, PRSP Sourcebook. Washington, DC, World Bank. 1.*

*Dorner, P. and W. C. Thiesenhusen (1990). "Selected Land Reforms in East and Southeast Asia: Their Origins and Impacts." Asian-Pacific Economic Literature 4(1): 65-95.*

*Doronila, A. (1985). "The Transformation of Patron-Client Relations and Its Political Consequences in Postwar Philippines." Journal of Southeast Asian Studies 16(1): 99-116.*

*Drèze, J., P. Lanjouw, et al. (1997). "Credit in Rural India: A Case Study." SSRN eLibrary.*

*Drèze, J., A. K. Sen, et al. (1991). Hunger and Public Action. Oxford, Oxford University Press.*

*Dunford, C. and V. Denman (2000). The Case for Credit With Educaiton: A Promising Title II Microfinance Strategy for Cost Effective and sustainable Impact on Chronic Food Insecurity and Malnutrition, Freedom from Hunger.*

*Easterly, W. (2003). The Political Economy of Growth Without Development: A Case Study of Pakistan. In Search of Prosperity:Analytic Narratives on Economic Growth. D. Rodrik, Princeton University Press.*

*Eisenstadt, S. (1998). "Comparative studies and sociological theory: Autobiographical notes." The American Sociologist 29(1): 38-58.*

*Eisenstadt, S. N. and L. Roniger (1980). "Patron--Client Relations as a Model of Structuring Social Exchange." Comparative Studies in Society and History 22(1): 42-77.*

*Eisenstadt, S. N. and L. Roniger (1984). Patrons, Clients and Friends : Interpersonal Relations and The Structure of Trust in Society. Cambridge, Cambridge University Press.*

*Epstein, T. S. (1962). Economic Development and Social Change in South India. Bombay, Media Promotors and Publishers.*

*Ercelawn, A. and M. Nauman (2004). "Unfree Labour in South Asia: Debt Bondage at Brick Kilns in Pakistan." Economic and Political Weekly 39(22): 2235-2242.*

*Eswaran, M. and A. Kotwar (1991). "Credit and Agrarian Class Structure." The Economic Theory of Agrarian Institutions 1: 166-185.*

*Fafchamps, M. and R. Hill (2008). "Price Transmission and Trader Entry in Domestic Commodity Markets." Economic Development and Cultural Change 56: 729-766.*

*Faguet, J.-P. and M. Shami (2008). Fiscal Policy and Spatial Inequality in Latin America and Beyond. LSE Research Online, LSE.*

*Fan, S., C. Chan-Kang, et al. (2005). Rural and Urban Dynamics and Poverty: Evidence from China and India. FCND Discussion Papers. Washington, DC International Food Policy Research Institute*

*Fan, S., P. B. R. Hazell, et al. (1999). Government Spending, Growth and Poverty: An Analysis of Interlinkages in Rural India. EPTD Discussion Papers. Washington, DC, International Food Policy Research Institute*

*Fan, S., X. Zhang, et al. (2004). Public Expenditure, Growth and Poverty Reduction in Rural Uganda. Development Strategy and Governance Division. Washington D. C., International Food Policy Research Institute.*

*FAO (2003). Land Reforms, FAO.*

*Farrington, J., N. Saxena, et al. (2003). Post Offices, Pensions and Computers: New Opportunities for Combining Growth and Social Protection in Weakly Integrated Rural Areas. London, ODI.*

*Farrington, J. and R. Slater (2006). "Introduction: Cash Transfers: Panacea for Poverty Reduction or Money Down the Drain?" Development Policy Review 24(5): 499-511.*

Feeny, D. (1983). "Extensive Versus Intensive Agricultural Development: Induced Public Investment in Southeast Asia, 1900-1940." *The Journal of Economic History* 43(03): 687-704.

Foster, G. M. (1963). "The Dyadic Contract in Tzintzuntzan, II: Patron-Client Relationship." *American Anthropologist* 65(6): 1280-1294.

Fox, J. (1992). "Democratic Rural Development: Leadership Accountability in Regional Peasant Organizations." *Development and Change* 23(2): 1-36.

Fox, J. (1994). "The Difficult Transition from Clientelism to Citizenship: Lessons from Mexico." *World Politics* 46(2): 151-184.

Fox, J. (1994). "Latin America's Emerging Local Politics." *Journal of Democracy* 5(2): 105-116.

Fox, J. (1997). "The World Bank and Social Capital: Contesting the Concept in Practice." *Journal of International Development* 9(7): 963-971.

Frey, B. S. (1994). "How Intrinsic Motivation Is Crowded Out and In." *Rationality and Society* 6(3): 334-352.

Gaiha, R., V. S. Kulkarni, et al. (2010). "National Rural Employment Guarantee Scheme, Poverty and Prices in Rural India." *Journal of Asian and African Studies* 45(6): 645-669.

Galt, A. H. (1974). "Rethinking Patron-Client Relationships: The Real System and the Official System in Southern Italy." *Anthropological Quarterly* 47(2): 182-202.

Gangopadhyay, S. and K. Sengupta (1987). "Small Farmers, Moneylenders and Trading Activity." *Oxford Economic Papers* 39(2): 333-342.

*Gardezi, H. N. and J. Rashid (1983). Pakistan: the roots of dictatorship: the Political Economy of a Praetorian State. London, Zed Press.*

*Gazdar, H. (2000). State, Community, and Universal Education: a Political Economy of Public Schooling in Rural Pakistan. London, London School of Economics and Political Science. PhD.*

*Gazdar, H. (2005). Determinants and Drivers of Poverty Reduction. Scoping Paper, ADB.*

*Gazdar, H. (2007). "Class, Caste or Race: Veils over Social Oppression in Pakistan." Economic and Political Weekly.*

*Gazdar, H. (2009). Policy Responses to Economic Inequality in Pakistan, Collective for Social Science Research.*

*Gazdar, H. (2011). Social Protection in Pakistan: in the Midst of a Paradigm Shift? . CSP Research Report Brighton, IDS.*

*Gazdar, H. and H. B. Mallah (2011). Class, Caste and Housing in Rural Punjab – The Untold Story of the Marla Schemes Karachi, Collective for Social Science Research.*

*Gelan, A. (2006). "Cash or Food Aid A General Equilibrium Analysis for Ethiopia." Development Policy Review 24: 601-624.*

*Gellner, E. and J. Waterbury (1977). Patrons and clients in Mediterranean societies. London, London : Duckworth.*

*Ghai, D., Azizur Rahman Khan, et al., Eds. (1979). Agrarian Systems and Rural Development. London, Macmillan.*

Gill, A. (2006). *Interlinked Agrarian Credit Markets in a Developing Economy: A Case Study of Indian Punjab. The International Conference on Globalization and Development. Glasgow, Development Studies Association, U.K.*

Gill, S. S. (1989). "Changing Land Relations in Punjab and Implications for Land Reforms." *Economic and Political Weekly* 24(25): A79-A85.

Gittell, R. and A. Vidal (1998). *Community Organizing: Building Social Capital as a Development Strategy Sage Publications.*

Glaeser, E. L., R. L. Porta, et al. (2004). "Do Institutions Cause Growth." *Journal of Economic Growth* 9(Journal Article): 271-303.

Gouldner, A. W. (1960). "The Norm of Reciprocity: A Preliminary Statement." *American Sociological Review* 25(2): 161-178.

Government of Pakistan (1998). *Census of Pakistan. Population Census Organization. Islamabad, GoP.*

Government of Pakistan (2000). *1998 District Census Report of Hafizabad. P. C. Organization. Islamabad, GoP.*

Granovetter, M. S. (1983). "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory* 1: 201-233.

Granovetter, M. S. and R. Swedberg (1992). *The Sociology of Economic Life. Boulder, Westview Press.*

Graziano, L. (1976). "A Conceptual Framework For the Study of Clientelistic Behaviour." *European Journal of Political Research* 4: 149-174.

Greif, A., P. Milgrom, et al. (1994). "Coordination, Commitment, and Enforcement: The Case of the Merchant Guild." *The Journal of Political Economy* 102(4): 745-776.

Griffin, K. B. (1974). *The Political Economy of Agrarian Change : An Essay on The Green Revolution* London, Macmillan.

Gugerty, M. K. and M. Kremer (2000). "Outside Funding of Community Organizations: Benefiting or Displacing the Poor?" *National Bureau of Economic Research Working Paper Series No. 7896*.

Hadenius, A. and F. Ugglä (1996). "Making civil society work, promoting democratic development: What can states and donors do?" *World Development* 24(10): 1621-1639.

Hall, A. (1974). "Patron-client relationships." *Journal of peasant studies* 1(4): 506-509.

Halpern, D. (2005). *Social Capital*. Cambridge, UK ; Malden, MA, Polity.

Handa, S. and B. Davis (2006). *The Experience of Conditional Cash Transfers in Latin America and the Caribbean*, Agricultural and Development Economics Division of the Food and Agriculture Organization of the United Nations (FAO - ESA).

Harriss, B. (1992). *Secret agents: private agrocommercial money-lending and formal sector credit in India*. Paper for Workshop. Brighton, Sussex Institute of Development Studies.

Harriss, J. and P. D. Renizo (1997). "'Missing Link' or Analytically Missing?: The Concept of Social Capital." *Journal of International Development* 9(7): 919-937.

Hart, G. (1986). "Interlocking Transactions : Obstacles, Precursors or Instruments of Agrarian Capitalism?" *Journal of Development Economics* 23(1): 177-203.

Harvey, P., R. Slater, et al. (2006). *Cash transfers - mere 'Gadaffi Syndrome', or serious potential for rural rehabilitation and development? Natural Resource Perspectives*. London, ODI.

Hashemi, S. and R. Rosenberg (2006). *Graduating the Poorest into Microfinance: Linking Safety Nets and Financial Services*. CGAP Focus Note, CGAP.

Hashemi, S. M., S. R. Schuler, et al. (1996). "Rural Credit Programs and Women's Empowerment in Bangladesh." *World Development* 24(4): 635-653.

Hasnain, Z. (2008). "The Politics of Service Delivery in Pakistan: Political Parties and the Incentives for Patronage, 1988-1999." *The Pakistan Development Review* 47(2): 129-151.

Hatlebakk, M. (2002). "A New and Robust Subgame Perfect Equilibrium in a Model of Triadic Power Relations." *Journal of Development Economics* 68(1): 225-232.

Hatlebakk, M. (2002). *Triadic Power Relations with Production, External Markets and Multiple Agents*, Cornell University, Center for Analytic Economics.

Havel, V. (1978). *The Power of the Powerless*. Mimeo. Prague.

Heltberg, R. (2004). *Targeting of Zakat and other Welfare Transfers in Pakistan*. Washington DC, The World Bank.

Herring, R. J. (1980). "Abolition of Landlordism in Kerala: A Redistribution of Privilege." *Economic and Political Weekly* 15(26): A59-A69.



Herring, R. J. (1983). *Land to the Tiller: The Political Economy of Agrarian Reform in South Asia*. New Haven, Yale University Press.

Herring, R. J. (2005). *Beyond The Political Impossibility Theorem of Agrarian Reform. Changing paths: international development and the new politics of inclusion*. P. P. Houtzager and M. Moore. Ann Arbor, University of Michigan Press.

Herring, R. J. and R. M. Edwards (1983). "Guaranteeing employment to the rural poor: Social functions and class interests in the employment guarantee scheme in Western India." *World Development* 11(7): 575-592.

Hintzen, P. C. (1983). "Bases of Elite Support for a Regime Race, Ideology and Clientelism as Bases for Leaders In Guyana and Trinidad." *Comparative Political Studies* 16(3): 363-391.

Hirschman, A. O. (1984). *Getting Ahead Collectively: Grass-Roots Experiences in Latin America* New York, Pergamon Press.

Hoff, K. and J. E. Stiglitz (1990). *Modern Economic Theory and Development. Frontiers of Development Economics*. G. M. Meier and J. E. Stiglitz. New York, Oxford University Press.

Holzner, C. (2004). "The End of Clientelism? Strong and Weak Networks in a Mexican Squatter Movement." *Mobilization: An International Quarterly* 9(3): 223 - 240

Huber, E., D. Rueschemeyer, et al. (1993). "The Impact of Economic Development on Democracy." *Journal of Economic Perspectives* 7(3): 71-85.

Hulme, D. and P. Mosley (1996). *Finance against poverty*. London, Routledge.

*Husain, I. (1999). Pakistan: the Economy of an Elitist State. Karachi, OUP.*

*Hussain, A. (1989). Pakistan: Land Reforms Reconsidered. South Asia. H. Alavi and J. Harriss, Macmillan.*

*Hussain, A., A. R. Kemal, et al. (2004). Pakistan: National Human Development Report 2003: Poverty, Growth and Governance Oxford University Press.*

*Ilchman, W. F. and N. T. Uphoff (1969). The Political Economy of Change. Berkeley, University of California Press.*

*ILO (2004). Unfree Labour in Pakistan: Work, Debt and Bondage in Brick Kilns. Working Paper, ILO.*

*Jalan, J. and M. Ravallion (1998). "Transient Poverty in Postreform Rural China." Journal of Comparative Economics 26(2): 338-357.*

*Janssen, M. (2006). "Evolution of Cooperation when Feedback to Reputation Scores is Voluntary " Journal of Artificial Societies and Social Simulation 9(1).*

*Joshi, P. C. (1974). "Land Reform and Agrarian Change in India and Pakistan Since 1947." Journal of Peasant Studies 1(2): 164 - 185.*

*Kabeer, N., K. Mustaz, et al. (2010). "Beyond Risk Management: Vulnerability, Social Protection And Citizenship In Pakistan." Journal of International Development 22(1): 1-19.*

*Kakwani, N., F. Soares, et al. (2005). Conditional Cash Transfers in African Countries. Brasilia, International Poverty Centre.*

*Kebede, E. (2006). "Moving from Emergency Food Aid to Predictable Cash Transfers: Recent Experience in Ethiopia." Development Policy Review 24(5): 579-599.*

*Keefer, P. (2004). Clientelism, Credibility and Democracy. Development Research Group. Washington DC, World Bank.*

*Keefer, P. (2007). Insurgency and Credible Commitment in Autocracies and Democracies, The World Bank.*

*Kettering, S. (1988). "The Historical Development of Political Clientelism." The Journal of Interdisciplinary History 18(3): 419-447.*

*Khan, S. (2009). Poverty Reduction Efforts: Does Microcredit Help? SAIS Review Johns Hopkins University.*

*Khasnabis, R. and J. Chakravarty (1982). "Tenancy, Credit and Agrarian Backwardness: Results of a Field Survey." Economic and Political Weekly 17(13): A21-A32.*

*Krishna, A. (2002). Active Social Capital: Tracing the Roots of Development and Democracy. New York, Columbia University Press.*

*Kurien, J. (1995). "The Kerala Model: Its Central Tendency and the Outlier." Social Scientist 23(1/3): 70-90.*

*Kurosaki, T. (2003). Measurement of Chronic and Transient Poverty: Theory and Application to Pakistan. Staying Poor: Chronic Poverty and Development Policy. University of Manchester.*

Kurosaki, T. (2007). "Community and Economic Development in Pakistan: The Case of Citizen Community Boards in Hafizabad and Japanese Perspectives." *Pakistan Development Review* 45(4).

Kurup, T. V. N. (1976). "Price of Rural Credit: An Empirical Analysis of Kerala." *Economic and Political Weekly* 11(27): 998-1006.

Lagarde, M., A. Haines, et al. (2007). "Conditional Cash Transfers for Improving Uptake of Health Interventions in Low- and Middle-Income Countries." *JAMA: The Journal of the American Medical Association* 298(16): 1900-1910.

Lande, C. (1977). *Group Politics and Dyadic Politics: Notes for a Theory Friends, followers, and factions : a reader in political clientelism*. S. W. Schmidt, L. Guasti, C. Lande and J. C. Scott. Berkeley, University of California Press: xxxvii, 512 p.

Lande, C. (1977). *Introduction: The Dyadic Basis of Clientelism. Friends, followers and factions : a reader in political clientelism*. S. W. Schmidt, L. Guasti, C. Lande and J. C. Scott. Berkeley ; London, University of California Press: xxxvii, 512p.

Lanjouw, J. O. and P. Lanjouw (2001). "The Rural Non-Farm Sector: Issues and Evidence from Developing Countries." *Agricultural Economics* 26(1): 1-23.

Lemarchand, R. and K. Legg (1972). "Political Clientelism and Development: A Preliminary Analysis." *Comparative Politics* 4(2): 149-178.

Lerche, J. (1995). "Is bonded labour a bound category? -Reconceptualising agrarian conflict in India." *Journal of Peasant Studies* 22(3): 484 - 515.

Linz, J. and A. Stepan (1996). *Problems of Democratic Transition and Consolidation*. Baltimore, Johns Hopkins University Press.

*Lipton, M. (1976). "Agricultural Finance And Rural Credit In Poor Countries." World Development 4(7): 543-553.*

*Lipton, M. (2009). Land Reform in Developing Countries Routledge.*

*Liu, S.-H. (2007). "Emerging Modernity in a Periodic Marketplace of Southwest China." Taiwan Journal of Anthropology 5(2): 1-30.*

*Long, M. (1968). "Interest Rates and the Structure of Agricultural Credit Markets." Oxford Economic Papers 20(2).*

*Lyon, S. M. (2002). Power and patronage in Pakistan. Canterbury, University of Kent: 262.*

*Mackenzie, F. (1993). A Piece of Land Never Shrinks. Land in African agrarian systems. T. J. Bassett and D. Crummey. Madison, Wis, University of Wisconsin Press: xi, 418 p.*

*Mahajan, V. and B. G. Ramola (1996). "Financial services for the rural poor and women in India: Access and sustainability." Journal of International Development 8(2): 211-224.*

*Malik, S. J. (2003). Rural Credit Markets in Pakistan: Institutions and Constraints. Background paper prepared for Pakistan Rural Factor Market Study. Washington, DC., The World Bank.*

*Mansuri, G. and V. Rao (2004). "Community-Based and -Driven Development: A Critical Review." World Bank Res Obs 19(1): 1-39.*

*Marcus, R., B. Porter, et al. (1999). Money Matters: Understanding Microfinance. Save the Children Working Paper London, Save the Children.*

*Marx, K. (1853). The Future Results of British Rule in India. New-York Daily Tribune. New York.*

*Mashall, G. (1998). Dictionary of Sociology. New York, Oxford University Press.*

*Mason, T. D. (1986). "Land Reform and the Breakdown of Clientelist Politics in El Salvador." Comparative Political Studies 18(4).*

*Mason, T. D. and M. Joshi (2008). "Between Democracy and Revolution: Peasant Support for Insurgency versus Democracy in Nepal " Journal of Peace Research 45.*

*Meillassoux, C. (1973). "The Social Organisation of the Peasantry: The Economic Basis of Kinship." Journal of Peasant Studies 1(1): 81 - 90.*

*Meinzen-Dick, R., K. V. Raju, et al. (2002). "What Affects Organization and Collective Action for Managing Resources? Evidence from Canal Irrigation Systems in India." World Development 30: 649-666.*

*Michie, B. H. (1981). "The Transformation of Agrarian Patron-Client Relations: Illustrations from India." American Ethnologist 8(1): 21-40.*

*Minten, B. and S. Kyle (1999). "The Effect of Distance and Road Quality on Food Collection, Marketing Margins, and Traders' Wages: Evidence from the Former Zaire." Journal of Development Economics 60(2): 467-495.*

*Mitra, P. K. (1983). "A Theory of Interlinked Rural Transactions." Journal of Public Economics 20.*

*Mohmand, S. and H. Gazdar (2007). Social Structures in Rural Pakistan. Determinants and Drivers of Poverty Reduction and ADB's Contribution in Rural Pakistan. Islamabad, Asian Development Bank.*

*Montgomery, R., D. Bhattacharya, et al. (1996). Credit for the Poor in Bangladesh: The BRAC Rural Development Programme and the Government Thana Resource Development and Employment Programme. Finance against Poverty. D. Hulme and P. Mosely. London, Routledge.*

*Moore, B. (1967). Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World. Boston, Beacon Press.*

*Morduch, J. (1999). "The Microfinance Promise." Journal of Economic Literature 37(4): 1569-1614.*

*Munshi, K. and M. Rosenzweig (2005). "Economic Development And The Decline Of Rural And Urban Community-Based Networks." The Economics of Transition 13(3): 427-443.*

*Naqvi, N. and F. Wemhöner (1995). "Power, Coercion, and the Games Landlords Play." Journal of Development Economics 47(2): 191-205.*

*Naqvi, S. N. H., M. H. Khan, et al. (1989). Structural Change in Pakistan's Agriculture. Islamabad, Pakistan Institute of Development Economics.*

*Narayan, D. (2002). Empowerment and Poverty Reduction: A Sourcebook Washington, DC, World Bank Publications*

*Navajas, S., M. Schreiner, et al. (2000). "Microcredit and the Poorest of the Poor: Theory and Evidence from Bolivia." World Development 28(2): 333-346.*

*Nelson, M. J. (2011). In the Shadow of Shari'ah: Islam, Islamic Law, and Democracy in Pakistan C Hurst & Co Publishers Ltd.*

*Newbery, D. M. G. and N. H. Stern (1987). The Theory of Taxation for Developing Countries. New York ; Oxford, Oxford University Press for the World Bank.*

*North, D. (1990). Institutions, Institutional Change and Economic Performance (Political Economy of Institutions and Decisions), Cambridge University Press*

*Nygren, A. and O. Myatt-Hirvonen (2009). "'Life here is just scraping by': livelihood strategies and social networks among peasant households in Honduras." Journal of Peasant Studies 36(4): 827 - 854.*

*Olsen, M. (1982). The Rise and Decline of Nations. New Haven and London, Yale University Press.*

*Olson, M. (1971). The Logic of Collective Action : Public Goods and the Theory of Groups. Cambridge (Mass.) ; London, Harvard University Press.*

*Østerdal, L. P. (2005). "Bargaining Power in Repeated Games." Mathematical Social Science 49: 101-110.*

*Ostrom, E. (2000). "Collective Action and the Evolution of Social Norms." The Journal of Economic Perspectives 14(3): 137-158.*

*Ostrom, E. (2005). Policies That Crowd Out Reciprocity and Collective Action. Moral Sentiments and Material Interests: The Foundations of Cooperation in Economic Life. H. Gintis, S. Bowles, R. Boyd and E. Fehr. Cambridge, MA, MIT Press.*



*Ostrom, E. and T. K. Ahn (2009). The Meaning of Social Capital and Its Link to Collective Action. Handbook of Social Capital: The Troika of Sociology, Political Science and Economics. G. T. Svendsen and G. L. Svendsen. Northampton, MA Edward Elgar.*

*Ostrom, E. and J.-C. Cardenas (2004). "What Do People Bring Into the Game? Experiments in the Field about Cooperation in the Commons." Agricultural Systems 82(3): 307-326.*

*Ostrom, E. and J. Walker (2005). Trust and Reciprocity: Interdisciplinary Lessons for Experimental Research Russell Sage Foundation.*

*Patnam, M. (2009). Power, Politics and Public Good Provision: Understanding Institutional Persistence in Rural Punjab. Working Paper, Cambridge University.*

*Pierson, P. (2000). "Increasing Returns, Path Dependence, and the Study of Politics " The American Political Science Review 94(2).*

*PILDAT (2008). Evaluating Parliament 2008-2009. Islamabad, Pakistan Institute of Legislative Development and Transparency*

*Pinstrup-Andersen, P. and S. Shimokawa (2006). Rural Infrastructure and Agricultural Development. Annual Bank Conference on Development Economics. Tokyo.*

*Pitt-Rivers, J. (1954). The People of the Sierra. New York, Criterion Books.*

*Platteau, J.-P. (1995). "A Framework for the Analysis of Evolving Patron-Client Ties in Agrarian Economies." World Development 23(5): 767-786.*

*Platteau, J.-P. (1995). "An Indian Model of Aristocratic Patronage." Oxford Economic Papers 47(4): 636-662.*

Platteau, J.-P. (1996). "Physical infrastructure as a constraint on agricultural growth: The case of sub-Saharan Africa." *Oxford Agrarian Studies* 24(3): 189 - 219.

Popkin, S. L. (1979). *The Rational Peasant : The Political Economy of Rural Society in Vietnam*. Berkeley ; London, University of California Press.

Poteete, A. R., M. Janssen, et al. (2010). *Working Together: Collective Action, the Commons, and Multiple Methods in Practice*. Princeton, NJ, Princeton University Press.

Powell, J. D. (1970). "Peasant Society and Clientelist Politics." *The American Political Science Review* 64(2): 411-425.

PPI (2010). *MQM's Land Reforms Bill un-Islamic: JUP*. *The Express Tribune*. Islamabad, *International Herald Tribune*.

Prat, A. and D. Strömberg (2006). *Commercial Television and Voter Information*, UCLA Department of Economics.

Przeworski, A., M. E. Alvarez, et al. (2000). *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990* New York, Cambridge University Press.

Putnam, R. D. (1993). *Making Democracy Work : Civic Traditions in Modern Italy* Princeton, N.J Princeton University Press.

Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York, Simon & Schuster.

Putzel, J. (1997). "Accounting for The 'Dark Side' of Social Capital: Reading Robert Putnam on Democracy." *Journal of International Development* 9(7): 939-949.

Qayyum, A. (1980). *Policies and Implementation of Land Reforms-Macro level Study for Pakistan. Land Reforms: Some Asian Experiences*, Kuala. Inayatullah.

Radhakrishnan, P. (1981). "Land Reforms in Theory and Practice: The Kerala Experience." *Economic and Political Weekly* 16(52): A129-A137.

Radhakrishnan, P. (1990). "Land Reforms: Rhetoric and Reality." *Economic and Political Weekly* 25(47): 2617-2621.

Rao, J. M. (1980). "Interest Rates in Backward Agriculture." *Cambridge Journal of Economics* 4.

Rao, J. M. (1988). "Fragmented Rural Labour Markets." *Journal of Peasant Studies* 15(2): 238 - 257.

Rashid, S. M. (1985). "Land Reforms in Pakistan " *Social Scientist* 13(9): 44-52.

Ravallion, M. (1991). "Reaching the Rural Poor through Public Employment: Arguments, Evidence, and Lessons from South Asia." *World Bank Research Observer* 6(2): 153-175.

Ravallion, M. (2003). "Targeted Transfers in Poor Countries: Revisiting the Tradeoffs and Policy Options." *SSRN eLibrary*.

Rawlings, L. B. and G. M. Rubio (2005). "Evaluating the Impact of Conditional Cash Transfer Programs." *The World Bank Research Observer* 20(1): 29-55.

Ray, D. (1984). "Intertemporal Borrowing to Sustain Exogenous Consumption Standards under Uncertainty." *Journal of economic Theory* 33: 72-87.

Ray, D. and K. Sengupta (1991). *Interlinkages and Pattern of Competition. The Economic theory of agrarian institutions. P. K. Bardhan. Oxford Clarendon Press; Oxford University Press: vi, 408 p.*

Reid, B. (2008). "Development NGOs, Semiclientelism, and the State in the Philippines: From "Crossover" to Double-crossed." *Kasarinlan: Philippine Journal of Third World Studies* 23(1).

Republic Engineering Cooperation (PVT) (1988). *Lahore-Islamabad Motorway Project; Route Selection Study. P. H. Authority. Lahore, Government of Punjab.*

Roniger, L. (1990). *Hierarchy and Trust in Modern México and Brazil. New York, Praeger.*

Rouse, S. (1983). *Systemic Injustices and Inequalities: Maliki abd Raiya in a Punjab Village. Pakistan : the roots of dictatorship : the political economy of a praetorian state. H. N. Gardezi and J. Rashid. London, Zed Press: xvii,394p.*

Rouse, S. (1988). *Agrarian Transformation in a Punjabi Village: Structural Change and its Consequences. Madison, University of Wisconsin. PhD.*

Sarap, K. (1991). *Interlinked Agrarian Markets in Rural India. London, Sage.*

Saul, M. (1993). *Land Custom in Bare: Agnatic Corporation and Rural Capitalism in Western Burkina. Land in African agrarian systems. T. J. Bassett and D. Crummey. Madison, Wis, University of Wisconsin Press: xi, 418 p.*

Sayeed, A. (2004). *Social Protection in Pakistan: Concept, Situation Analysis and the Way Forward*. Working Paper. Islamabad, United Nations Development Programme (UNDP), International Labor Organization (ILO), and CRPRID.

Schmidt, S. W., Ed. (1977). *Friends, Followers and Factions: Reader in Political Clientelism* University of California Press.

Schubert, B. and J. Goldberg (2004). *The Pilot Social Cash Transfer Scheme: Kalomo District, Zambia*. Lusaka, GTZ.

Schubert, B. and R. Slater (2006). "Social Cash Transfers in Low-Income African Countries: Conditional or Unconditional." *Development Policy Review* 24: 571-578.

Scott, J. C. (1969). "The Analysis of Corruption in Developing Nations." *Comparative Studies in Society and History* 11(3): 315-341.

Scott, J. C. (1969). "Corruption, Machine Politics, and Political Change." *The American Political Science Review* 63(4): 1142-1158.

Scott, J. C. (1972). "The Erosion of Patron-Client Bonds and Social Change in Rural Southeast Asia." *The Journal of Asian Studies* 32(1): 5-37.

Scott, J. C. (1972). "Patron-Client Politics and Political Change in Southeast Asia." *The American Political Science Review* 66(1): 91-113.

Scott, J. C. (1977). *Patronage or Exploitation? Patrons and Clients in Mediterranean Societies*. E. Gellner and J. Waterbury. London, Gerald Duckworth and Co. Ltd.

Scott, J. C. and B. J. Kerkvliet (1977). *How Traditional Rural Patrons Lose Legitimacy: A Theory With Special Reference to Southeast Asia*. Friends,

*Followers and Factions: Reader in Political Clientelism* S. W. Schmidt, University of California Press

Sebstad, J. and M. Cohen (2000). *Synthesis Report on Microfinance, Risk Management and Poverty*. Washington DC, USAID.

Seibel, H. D. (1994). *From Cheap Credit to Easy Money: How to Undermine Rural Finance and Development. Financial Landscapes Reconstructed*. F. Bouman and O. Hospes, Westview Press Inc.

Seligson, M. A. and J. Booth, A. (1976). "Political Participation in Latin America: An Agenda for Research." *Latin American Research Review* 11(3): 95-119.

Sen, A. (1985). *Choice, Welfare and Measurement*. Oxford Blackwell.

Sen, A. (1999). *Development as Freedom*. New York, Knopf.

Sewastynowicz, J. (1983). "Community Power Brokers and National Political Parties in Rural Costa Rica." *Anthropological Quarterly* 56(3): 107-115.

Shah, A. and A. K. Mehta (2008). "Experience of the Maharashtra Employment Guarantee Scheme: Are there Lessons for NREGS?" SSRN eLibrary.

Sharma, H. R. (1994). "Distribution of Landholdings in Rural India, 1953-54 to 1981-82: Implications for Land Reforms." *Economic and Political Weekly* 29(13): A12-A25.

Shue, V. (1994). *State Power and Social Organisations in China. State Power and Social Forces*. J. Migdal, A. Kohli and V. Shue. Princeton, Princeton University Press.

Siamwalla, A., C. Pinthong, et al. (1990). "The Thai Rural Credit System: Public Subsidies, Private Information, and Segmented Markets." *World Bank Econ Rev* 4(3): 271-295.

Silverman, S. F. (1965). "Patronage and Community-Nation Relationships in Central Italy." *Ethnology* 4(2): 172-189.

Silverman, S. F. (1977). *Patronage as Myth. Patron and Clients in Mediterranean Societies*. E. Gellner and J. Waterbury. London, Gerald Duckworth and Co. Ltd.

Skinner, G. W. (1964). "Marketing and Social Structure in Rural China: Part I." *The Journal of Asian Studies* 24(1): 3-43.

Sohail Jehangir, M. and N. Hina (1999). "Rural Poverty and Credit Use: Evidence from Pakistan." *The Pakistan Development Review* 38(4): 699-716.

Soiffer, S. M. and G. N. Howe (1982). "Patrons, Clients and the Articulation of Modes of Production: An Examination of the Penetration of Capitalism into Peripheral Agriculture in Northeastern Brazil." *Journal of Peasant Studies* 9(2): 176 - 206.

Songco, J. A. (2002). *Do Rural Infrastructure Investments Benefit the Poor? Evaluating Linkages: A Global View, a Focus on Vietnam*. World Bank Policy Research Working Paper Washington, DC, World Bank.

Srinivasan, T. N. (1979). "Agricultural Backwardness under Semi-Feudalism-Comment." *The Economic Journal* 89.

Srinivasan, T. N. (1991). *On the Choice Among Creditors and Bonded Labour Contracts. The economic theory of agrarian institutions*. P. K. Bardhan. Oxford, Oxford University Press.

- Stein, H. F. (1984). "A Note on Patron-Client Theory." *Ethos* 12(1): 30-36.
- Stiglitz, J. E. (1982). *Information and Capital Markets*. NBER Working Papers, National Bureau of Economic Research.
- Subbarao, K. (1997). "Public Works as an Anti-Poverty Program: An Overview of Cross-Country Experience." *American Journal of Agricultural Economics* 79(2): 678-683.
- Svendsen, G. L. H. and G. T. Svendsen (2004). *The Creation and Destruction of Social Capital : Entrepreneurship, Co-operative Movements, and Institutions*. Cheltenham, UK ; Northampton, MA, Edward Elgar.
- Swain, M. (1999). "Agricultural Tenancy and Inter-linked Transactions: Neoclassical and Marxist Approaches." *Economic and Political Weekly* 34(37).
- Swaminathan, M. (1991). "Segmentation, Collateral Undervaluation, and the Rate of Interest in Agrarian Credit Markets: Some Evidence from Two Villages in South India." *Cambridge Journal of Economics* 15(2): 161-178.
- Szreter, S. (2002). "The State of Social Capital: Bringing Back in Power, Politics, and History " *Theory and Society* 31(5): 573-621.
- Teklu, T. (1994). "Labor-Intensive Rural Roads in Kenya, Tanzania, and Botswana: Some Evidence on Design and Practice." *Ethiopian Journal of Economics* 3(2).
- Teklu, T. and S. Asefa (1999). "Who Participates in Labor-Intensive Public Works in Sub-Saharan Africa? Evidence from Rural Botswana and Kenya." *World Development* 27(2): 431-438.



Toor, I. A. and A. Nasar (2003). *Zakat as a Social Safety Net: Exploring the Impact. Research Report. Karachi, SPDC.*

Tripp, A. M. (1992). *Local Organizations, Participation, and the State in Tanzania Governance and Politics in Africa. G. r. Hydén and M. Bratton. Boulder, L. Rienner.*

Udry, C. (1990). "Credit Markets in Northern Nigeria: Credit as Insurance in a Rural Economy." *World Bank Econ Rev* 4(3): 251-269.

Uhlin, A. (2009). "Which Characteristics of Civil Society Organisations Support What Aspects of Democracy? Evidence from Post-Communist Latvia." *International Political Science Review* 30(3): 271-295.

Uphoff, N. and A. Krishna (2004). "Civil Society and Public Sector Institution: More Than A Zero-Sum Relationship." *Public Administration and Development* 24: 357-372.

Uphoff, N. T. and W. F. Ilchman (1972). *The Political Economy of Development: Theoretical and Empirical Contributions. Berkeley, University of California Press.*

van de Ruit, C., J. May, et al. (2001). *A Poverty Assessment of the Small Enterprise Foundation on Behalf of the Consultative Group to Assist the Poorest, University of Natal.*

Van, R. A. (1998). *Society and the Aid Industry. London, Earthscan.*

Verba, S., K. L. Schlozman, et al. (1995). *Voice and Equality: Civic Voluntarism in American Politics. Cambridge, MA, Harvard University Press.*

Wade, R. (1988). *Village Republics: Economic Conditions for Collective Action in South India*. Cambridge, Cambridge University Press.

Walker, J. and E. Ostrom (1997). *Neither Markets nor States: Linking Transformation Processes in Collective Action Arenas*. *Perspectives on Public Choice: A Handbook*. D. C. Mueller. Cambridge, Cambridge University Press.

Waterbury, J. (1977). *An Attempt to Put Patrons and Clients in Their Place*. *Patron and Clients in Mediterranean Societies*. E. Gellner and J. Waterbury.

Weingrod, A. (1968). "Patrons, Patronage, and Political Parties." *Comparative Studies in Society and History* 10(4): 377-400.

Weingrod, A. and E. Morin (1971). "Post Peasants: The Character of Contemporary Sardinian Society." *Comparative Studies in Society and History* 13(03): 301-324.

Wharton, C. R. (1962). *Marketing, Merchandising and Moneylending: A Note on Middlemen Monopsony in Malaya*. New York, Agricultural Development Council.

Wilder, A. (1999). *The Pakistani voter, electoral politics and voting behaviour in the Punjab*. Karachi, New York, Oxford University Press.

Wolf, E. (1966). *Kinship, Friendship, and Patron-Client Relations in Complex Societies*. *The Social Anthropology of Complex Societies*. M. Banto. New York, Praeger.

Woolcock, M. (2001). "The Place of Social Capital in Understanding Social and Economic Outcomes." *Canadian Journal of Policy Research* 2(1): 11-17.

World Bank (1990). *Poverty Reduction and the World Bank*. Washington DC, World Bank.

*World Bank (1994). Poverty Reduction in South Asia: Promoting Participation By the Poor. Washington, D.C World Bank.*

*World Bank (2000). Attacking Poverty. World Development Report. Washington DC, World Bank.*

*World Bank (2002). Pakistan Poverty Assessment Poverty in Pakistan: Vulnerabilities, Social Gaps, and Rural Dynamics. Washington DC, South Asia Region, World Bank.*

*World Bank (2006). Equity and Development. Washington DC, World Bank.*

*World Bank (2008). Agriculture for Development. World Development Report. Washington DC, The World Bank.*

*World Bank (2009). Reshaping Economic Geography. World Development Report. Washington, DC, World Bank.*

*Wright, G. (2000). Microfinance Systems: Designing Quality Financial Services for the Poor. London, Zed.*

*Zaidi, A. (1999). Issues in Pakistan's economy. Karachi, Oxford University Press.*

*Zaman, H. (2000). Assessing the Poverty and Vulnerability Impact of Micro-Credit in Bangladesh: A case study of BRAC, World Bank.*

## Interview List

Mr. Chaudry Muhammad Altaf, Chairman National Highway Authority, interview, 15 April 2008.

### *Key Respondent Interviews*

Key Respondent 1, interview, Connected landlord dominated village 1, 30 April 2008.

Key Respondent 2, interview, isolated landlord dominated village 1, 13 May 2008.

Key Respondent 3, interview, isolated landlord dominated village 1, 13 May, 2008.

Key Respondent 5, interview, connected landlord dominated village 2, 20 April, 2008.

Key Respondent 6, interview, connected landlord dominated village 1, 3 May, 2008.

Key Respondent 9, interview, isolated landlord dominated village 2, 21 May, 2008.

Key Respondent 10, interview, isolated landlord dominated village 2, 21 May, 2008.

Landlord 1, interview, connected landlord dominated village 1, 3 May 2008.

Landlord 2, interview, isolated landlord dominated village 2, 24 May, 2008.

### *Landlord Dominated villages:*

Household ID 37, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 39, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 42, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 45, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 46, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 63, interview, isolated landlord dominated village 1, 16 May, 2008.

Household ID 249, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 281, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 284, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 411, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 386, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 264, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 247, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 249, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 258, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 266, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 284, interview, connected landlord dominated village 1, 3 May, 2008.

Household ID 286, interview, isolated landlord dominated village 2, 24 May, 2008.

Household ID 323, interview, isolated landlord dominated village 2, 24 May, 2008.

Household ID 369, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 381, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 393, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 396, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 398, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 401, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 407, interview, connected landlord dominated village 2, 23 May, 2008.

Household ID 419, interview, connected landlord dominated village 2, 23 May, 2008.

*Peasant Based Villages:*

Household ID 81, interview, isolated peasant based village 1, 2 May, 2008.

Household ID 120, interview, connected peasant based village 1, 2 May, 2008.

Household ID 135, interview, isolated peasant based village 2, 10 May, 2008.

Household ID 144, interview, isolated peasant based village 2, 10 May, 2008.

Household ID 162, interview, isolated peasant based village 2, 10 May, 2008.

Household ID 164, interview, isolated peasant based village 2, 10 May, 2008.

Household ID 193, interview, isolated peasant based village 2, 10 May, 2008.

Household ID 135, interview, isolated peasant based village 2, 10 May, 2008.

Household ID 211, interview, isolated peasant based village 1, 9 May, 2008.

Household ID 216, interview, isolated peasant based village, 9 May, 2008.

Household ID 344, interview, isolated peasant based village 2, 10 May, 2008.

Household ID 374, interview, isolated peasant based village 2, 10 May, 2008.

**Appendix 1**  
**Payoffs for Chapter 3**

## Payoffs

<p><i>No exploitation:</i></p> $U_p = Y_p + [wl - \psi(l)] + [\tau(x_p) - Px_p]$ $U_M = Y_M + Px_p + Px_L$ $U_L = Y_L + [\pi - wl] + [\lambda(x_L) - Px_L] - \phi(d_M)$	<p><i>Exploitation:</i></p> $U_p = Y_p + [wl - \psi(l)] + [\tau(x_p) - Px_p]$ $U_M = Y_M + Px_p + Px_L$ $U_L = Y_L + [\pi - wl] + [\lambda(x_L) - Px_L] - \phi(d_M)$
(A,t,T)	(A,t,T)
$U_p = -20 + 30 + 30 = 40$	$U_p = -20 + -5 + 30 = 5$
$U_m = -10 + 10 + 15 = 15$	$U_m = -10 + 10 + 15 = 15$
$U_L = 0 + 10 + 10 + 0 = 20$	$U_L = 0 + 30 + 10 + 0 = 40$
(A,t,N)	(A,t,N)
$U_p = -20 + 30 + 30 = 40$	$U_p = -20 + -5 + 30 = 5$
$U_m = -10 + 10 + 0 = 0$	$U_m = -10 + 10 + 0 = 0$
$U_L = 0 + 10 + 0 + 0 = 10$	$U_L = 0 + 30 + 0 + 0 = 30$
(A,n,T)	(A,n,T)
$U_p = -20 + 30 + 0 = 10$	$U_p = -20 + -5 + 0 = -25$
$U_m = -10 + 0 + 15 = 5$	$U_m = -10 + 0 + 15 = 5$
$U_L = 0 + 10 + 10 + 0 = 20$	$U_L = 0 + 30 + 10 + 0 = 40$

(A,n,N)	(A,n,N)
$U_P = -20 + 30 + 0 = 10$	$U_P = -20 + -5 + 0 = -25$
$U_m = -10 + 0 + 0 = -10$	$U_m = -10 + 0 + 0 = -10$
$U_L = 0 + 10 + 0 + 0 = 10$	$U_L = 0 + 30 + 0 + 0 = 30$
(R,t,T)	(R,t,T)
$U_P = -20 + 0 + 30 = 10$	$U_P = -20 + 0 + 30 = 10$
$U_m = -10 + 10 + 15 = 15$	$U_m = -10 + 10 + 15 = 15$
$U_L = 0 + 0 + 10 - 5 = 5$	$U_L = 0 + 0 + 10 - 5 = 5$
(R,t,N)	(R,t,N)
$U_P = -20 + 0 + 30 = 10$	$U_P = -20 + 0 + 30 = 10$
$U_m = -10 + 10 + 0 = 0$	$U_m = -10 + 10 + 0 = 0$
$U_L = 0 + 0 + 0 - 5 = -5$	$U_L = 0 + 0 + 0 - 5 = -5$
(R,n,T)	(R,n,T)
$U_P = -20 + 0 + 0 = -20$	$U_P = -20 + 0 + 0 = -20$
$U_m = -10 + 0 + 15 = 5$	$U_m = -10 + 0 + 15 = 5$



$$U_L = 0 + 0 + 10 + 0 = 10$$

$$U_L = 0 + 0 + 10 + 0 = 10$$

(R,n,N)	(R,n,N)
$U_p = -20 + 0 + 0 = -20$	$U_p = -20 + 0 + 0 = -20$
$U_m = -10 + 0 + 0 = -10$	$U_m = -10 + 0 + 0 = -10$
$U_L = 0 + 0 + 0 + 0 = 0$	$U_L = 0 + 0 + 0 + 0 = 0$

<p><i>Merchant has outside options:</i></p> $U_p = Y_p + [wl - \psi(l)] + [\tau(x_p) - Px_p]$ $U_m = Y_m + Px_p + Px_L + Px_O + (1 - \alpha)[\pi - wl]$ $U_L = Y_L + \alpha[\pi - wl] + [\lambda(x_L) - Px_L] - \phi(d_M) - \phi(d_o)$	<p><i>Merchant and peasant have outside options :</i></p> $U_p = Y_p + [wl - \psi(l)] + [\tau(x_p) - Px_p] + [w'l - \psi'(l)]$ $U_m = Y_m + Px_p + Px_L + Px_O$ $U_L = Y_L + [\pi - wl] + [\lambda(x_L) - Px_L] - \phi(d_M) - \phi(d_o)$
(A,t,T)	(A,t,T)
$U_p = -20 + -5 + 30 = 5$	$U_p = -20 + 30 + 30 + 0 = 40$
$U_m = -10 + 10 + 15 + 0 + 0 = 15$	$U_m = -10 + 10 + 15 + 0 = 15$
$U_L = 0 + 30 + 10 + 0 + 0 = 40$	$U_L = 0 + 10 + 10 + 0 + 0 = 20$
(A,t,F)	(A,t,N)

$U_p = -20 + -5 + 30 = 5$	$U_p = -20 + 30 + 30 + 0 = 40$
$U_m = -10 + 10 + 15 + 0 + 9 = 24$	$U_m = -10 + 10 + 0 + 10 = 10$
$U_L = 0 + 21 + 10 + 0 + 0 = 31$	$U_L = 0 + 10 + 0 + 0 - 5 = 5$
(A,t,N)	(A,n,T)
$U_p = -20 + -5 + 30 = 5$	$U_p = -20 + 30 + 0 + 0 = 10$
$U_m = -10 + 10 + 0 + 10 + 0 = 10$	$U_m = -10 + 0 + 15 + 0 = 5$
$U_L = 0 + 30 + 0 + 0 + -5 = 25$	$U_L = 0 + 10 + 10 + 0 + 0 = 20$
(A,n,T)	(A,n,N)
$U_p = -20 + -5 + 0 = -25$	$U_p = -20 + 30 + 0 + 0 = 10$
$U_m = -10 + 0 + 15 + 0 + 0 = 5$	$U_m = -10 + 0 + 0 + 10 = 0$
$U_L = 0 + 30 + 10 + 0 + 0 = 40$	$U_L = 0 + 10 + 0 + 0 - 5 = 5$
(A,n,F)	(R,t,T)
$U_p = -20 + -5 + 0 = -25$	$U_p = -20 + 0 + 30 + 30 = 40$
$U_m = -10 + 0 + 15 + 0 + 9 = 14$	$U_m = -10 + 10 + 15 + 0 = 15$
$U_L = 0 + 21 + 10 + 0 + 0 = 31$	$U_L = 0 + 0 + 10 - 5 - 5 = 0$

(A,n,N)	(R,t,N)
$U_P = -20 + -5 + 0 = -25$	$U_P = -20 + 0 + 30 + 30 = 40$
$U_m = -10 + 0 + 0 + 10 + 0 = 0$	$U_m = -10 + 10 + 0 + 10 = 10$
$U_L = 0 + 30 + 0 + 0 - 5 = 25$	$U_L = 0 + 0 + 0 - 5 - 5 = -10$
(R,t,T)	(R,n,T)
$U_P = -20 + 0 + 30 = 10$	$U_P = -20 + 0 + 0 + 30 = 10$
$U_m = -10 + 10 + 15 + 0 + 0 = 15$	$U_m = -10 + 0 + 15 + 0 = 5$
$U_L = 0 + 0 + 10 - 5 + 0 = 5$	$U_L = 0 + 0 + 10 + 0 - 5 = 5$
(R,t,F)	(R,n,N)
$U_P = -20 + 0 + 30 = 10$	$U_P = -20 + 0 + 0 + 30 = 10$
$U_m = -10 + 10 + 15 + 0 + 0 = 15$	$U_m = -10 + 0 + 0 + 10 = 0$
$U_L = 0 + 0 + 10 + 0 - 5 = 5$	$U_L = 0 + 0 + 0 - 5 - 5 = -10$
(R,t,N)	
$U_P = -20 + 0 + 30 = 10$	
$U_m = -10 + 10 + 0 + 10 + 0 = 10$	

$U_L = 0 + 0 + 0 + -5 + -5 = -10$	
(R,n,T)	
$U_P = -20 + 0 + 0 = -20$	
$U_m = -10 + 0 + 15 + 0 + 0 = 5$	
$U_L = 0 + 0 + 10 + 0 + 0 = 10$	
(R,n,F)	
$U_P = -20 + 0 + 0 = -20$	
$U_m = -10 + 0 + 15 + 0 + 0 = 5$	
$U_L = 0 + 0 + 10 + 0 + 0 = 10$	
(R,n,N)	
$U_P = -20 + 0 + 0 = -20$	
$U_m = -10 + 0 + 0 + 10 + 0 = 0$	
$U_L = 0 + 0 + 0 + 0 + -5 = -5$	

## **Appendix 2**

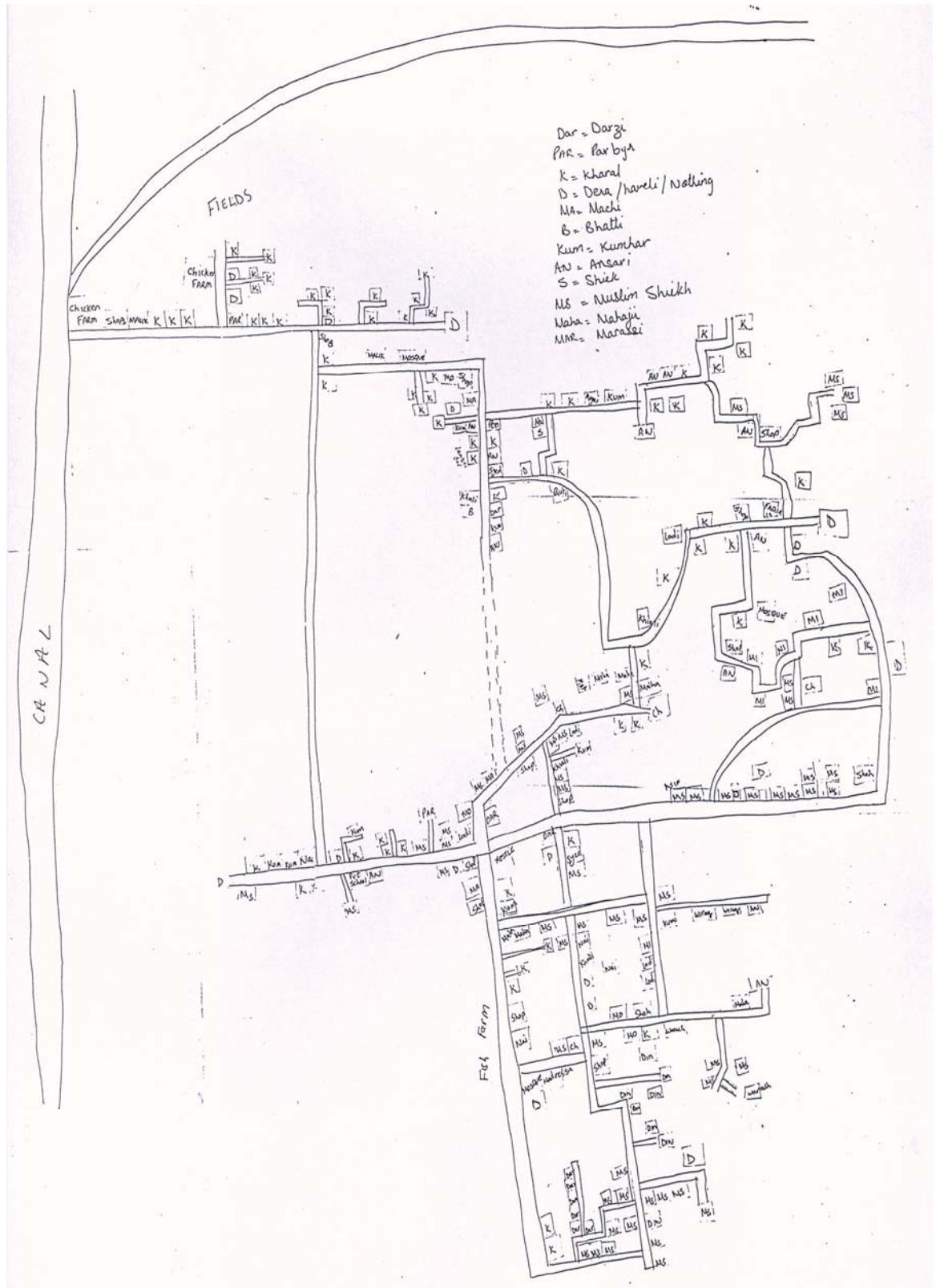
### **Village**

### **Maps<sup>162</sup>**

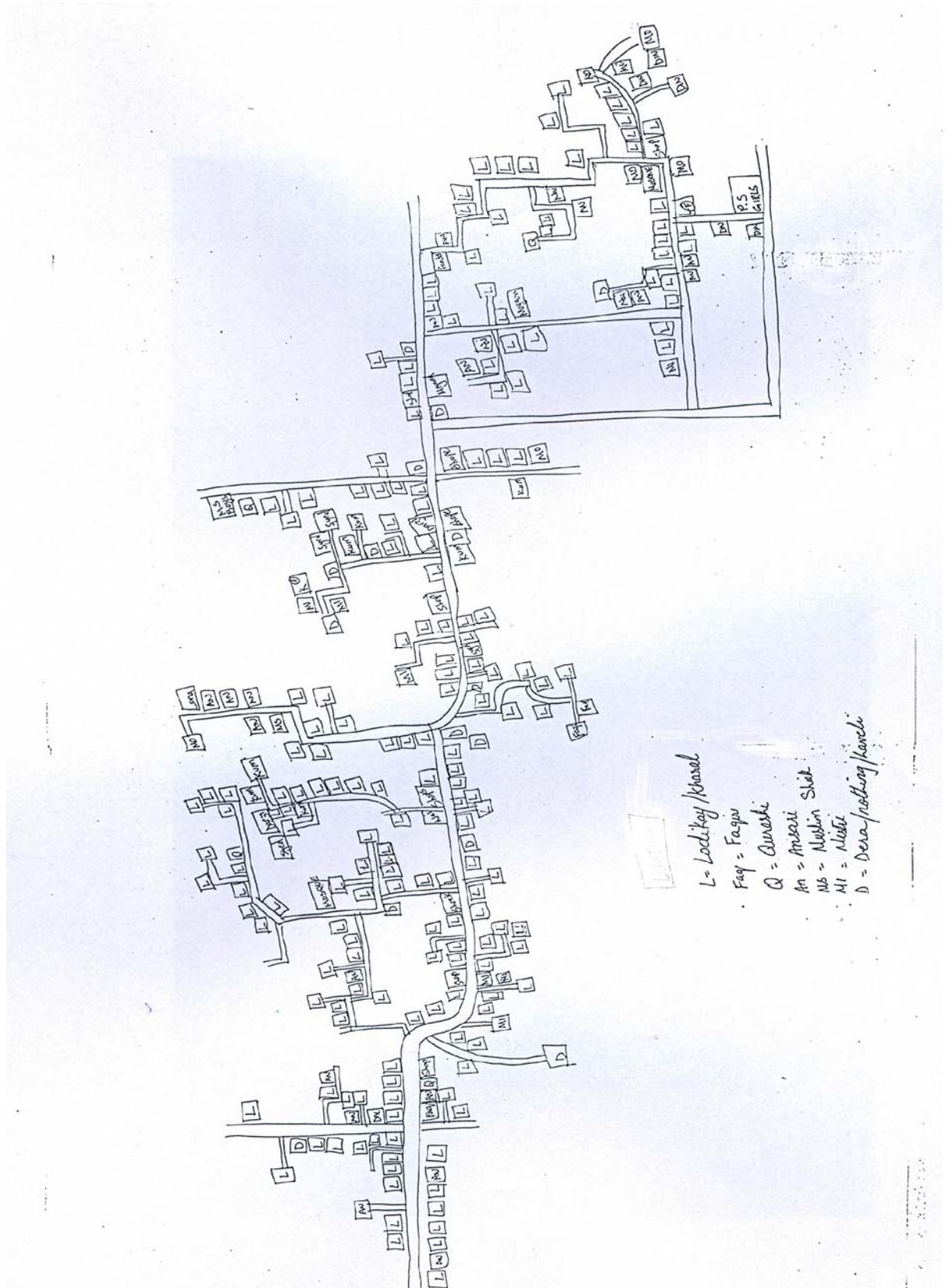
---

<sup>162</sup> These maps are not drawn to scale. Also they have been compressed to A4 size. The actually maps used in the field were double in size.

## Isolated Landlord Dominated Village 1

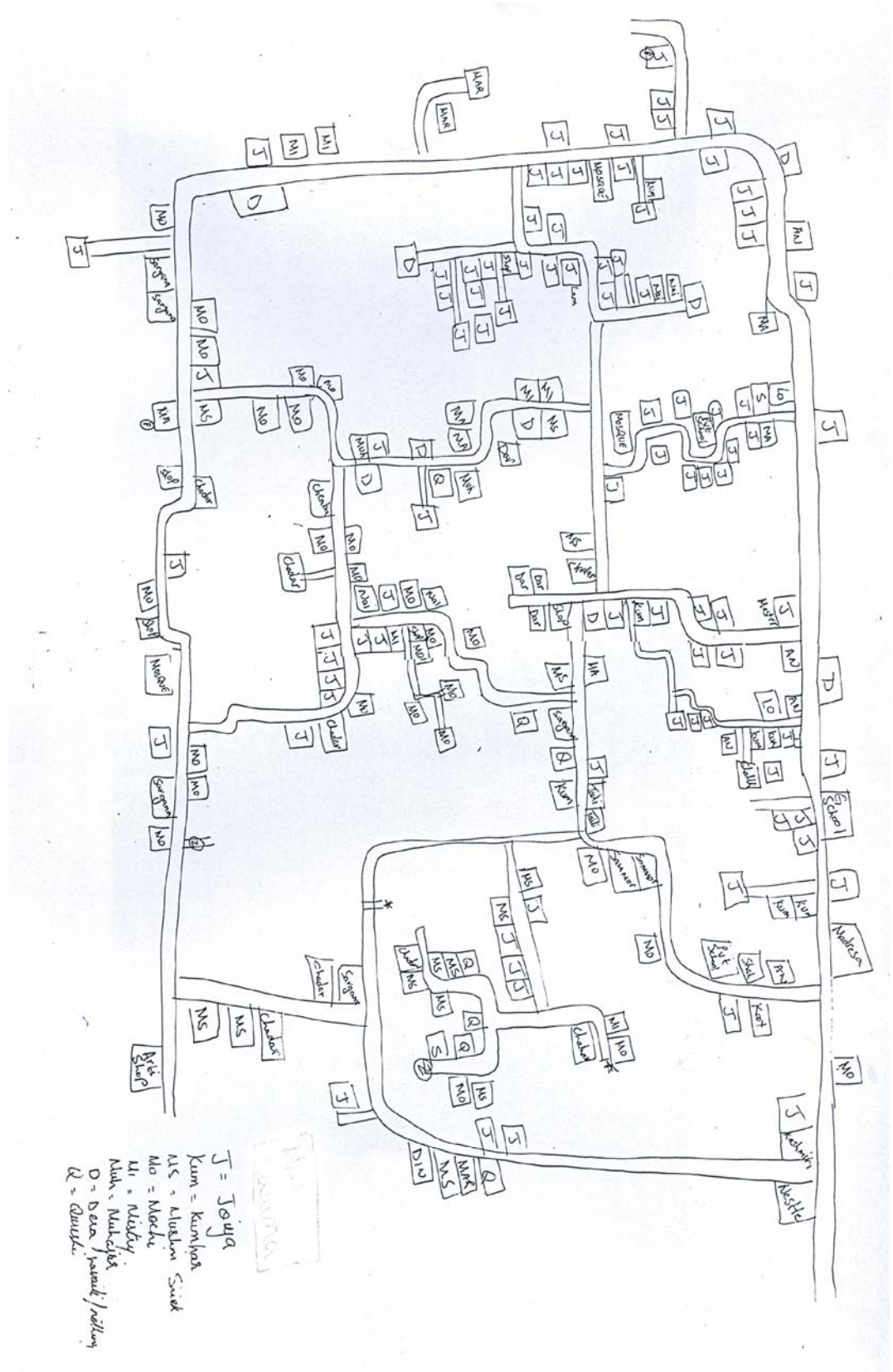


## Isolated Landlord Dominated Village 2

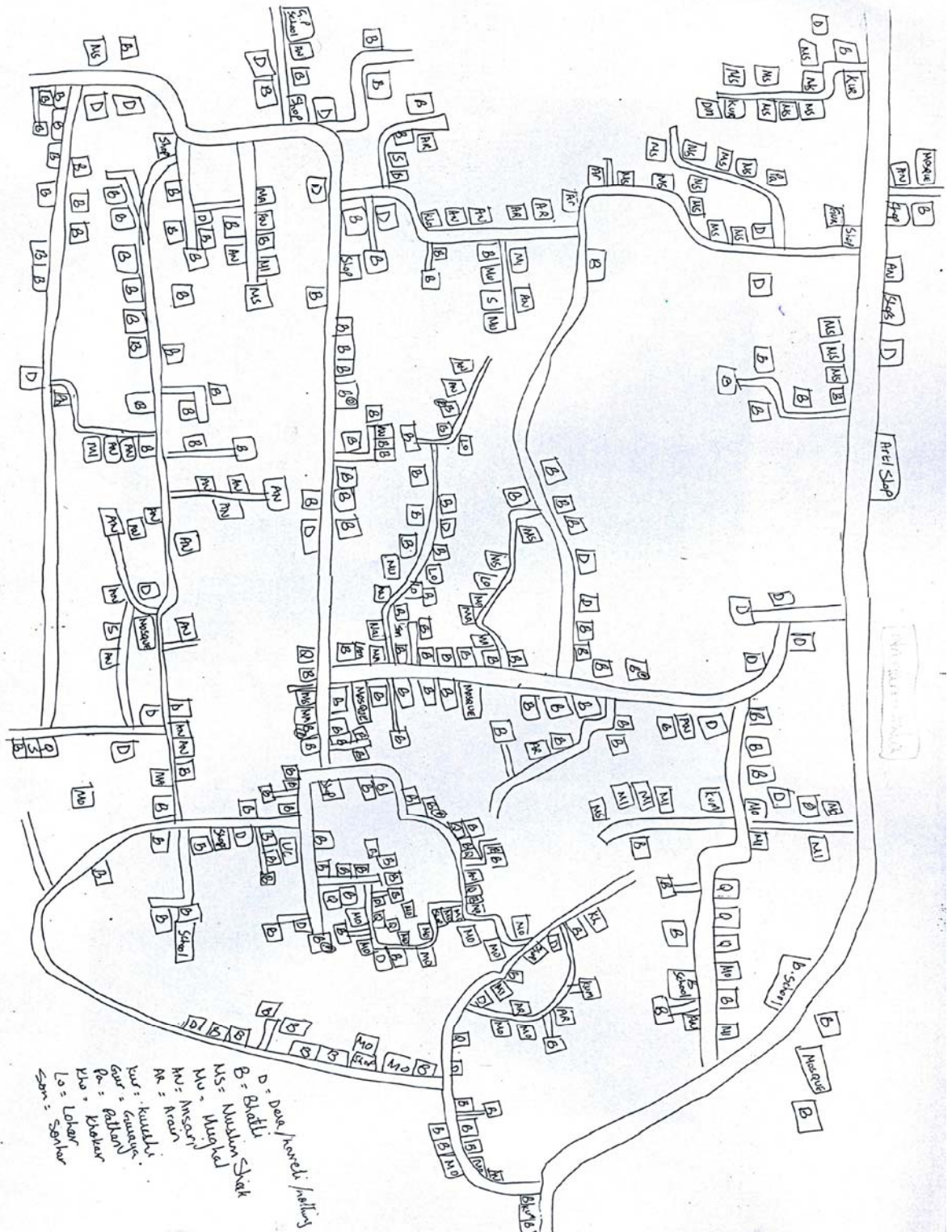




# Isolated Peasant Based Village 1

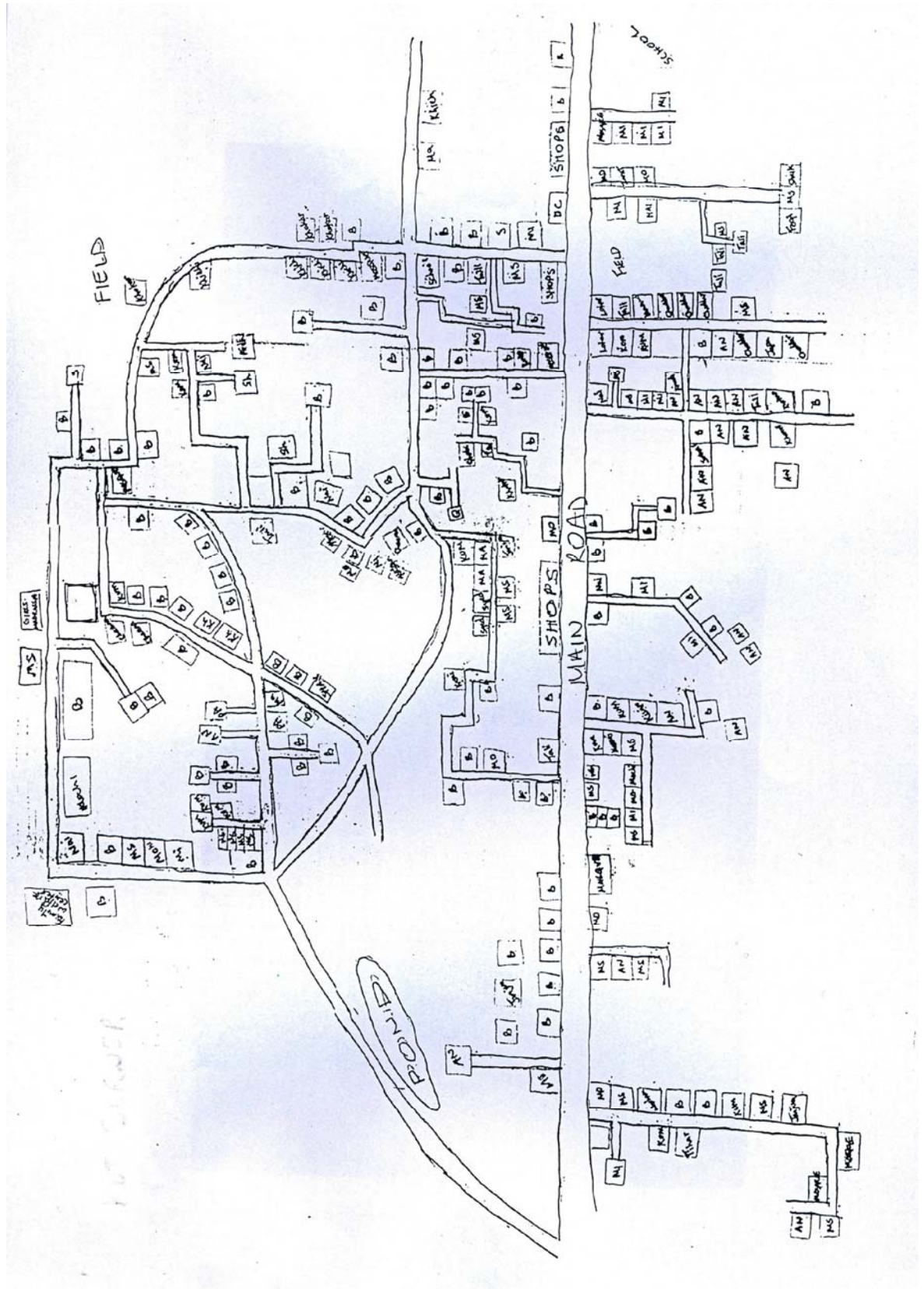


## Isolated Peasant Based Village 2

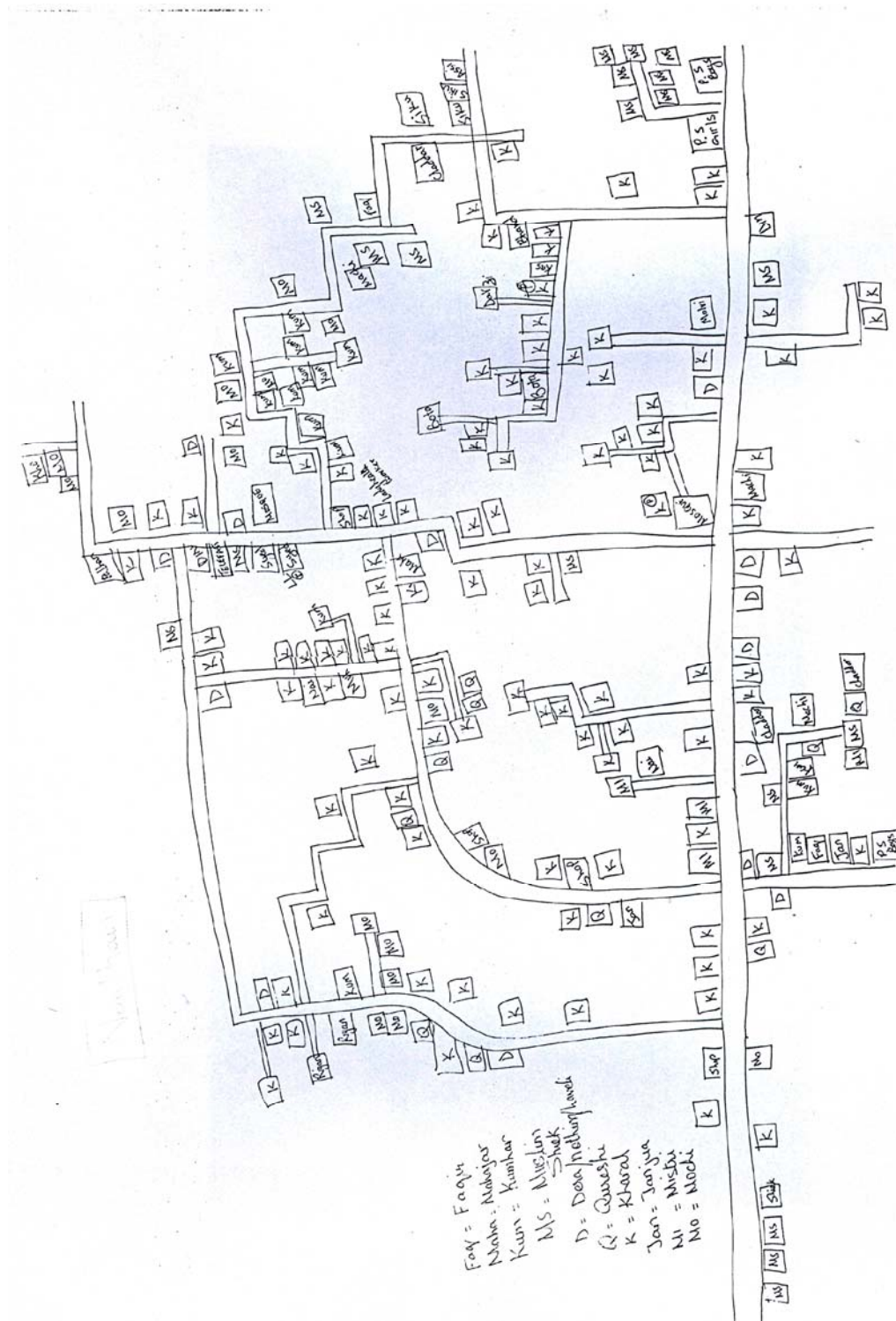




## Connected Landlord Dominated Village 1

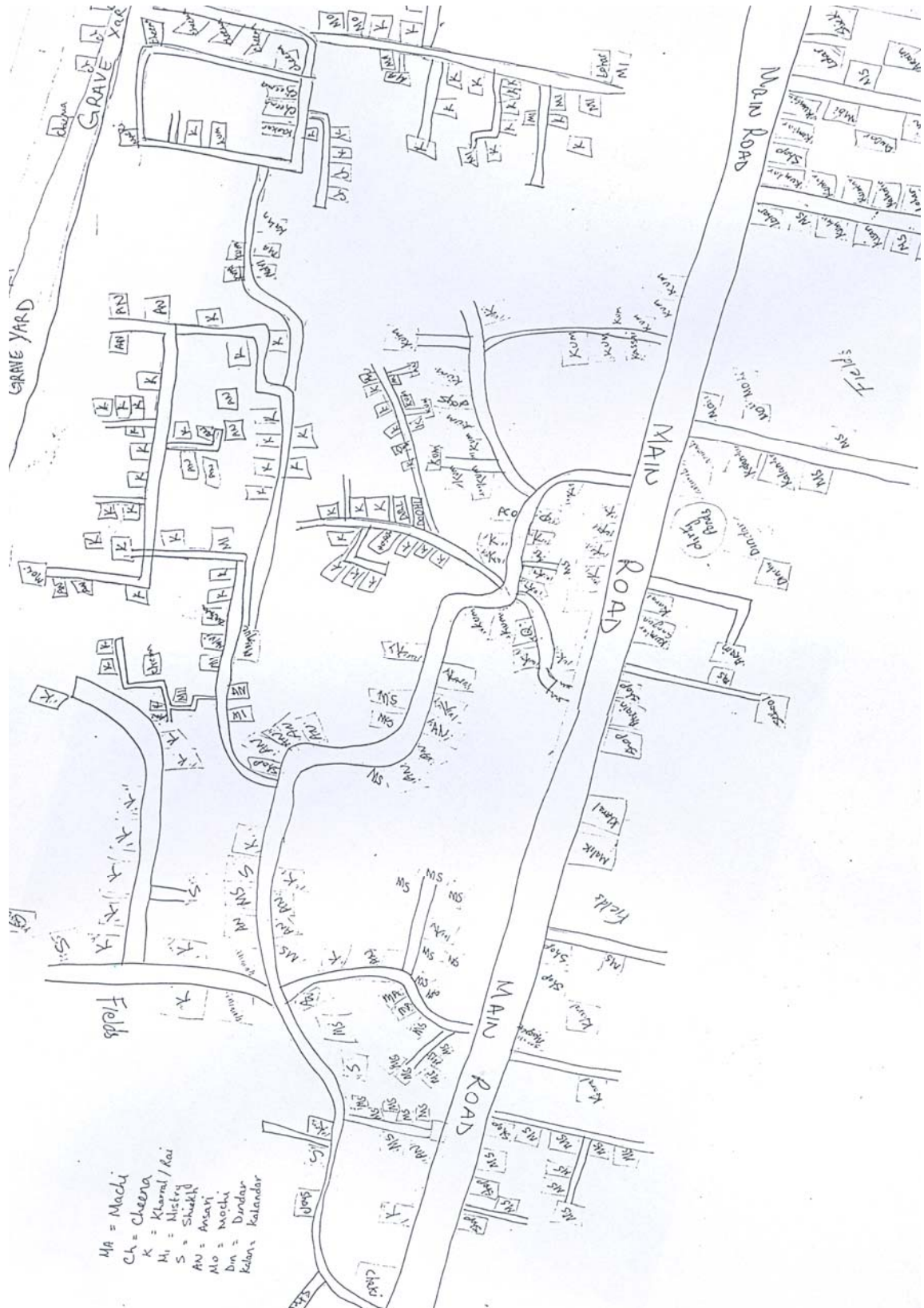


## Connected Landlord Dominated Village 2

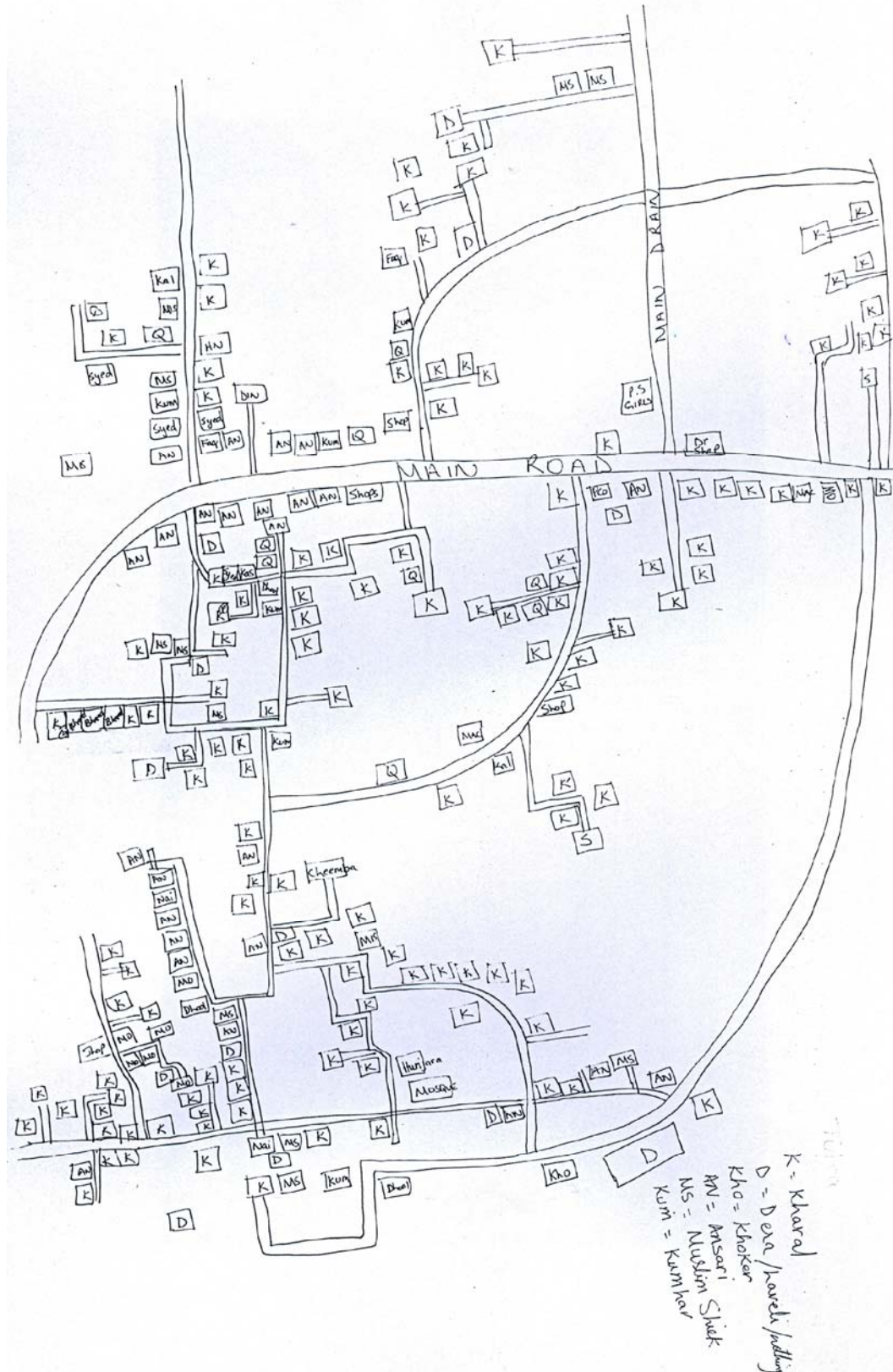




## Connected Peasant Based Village 1



## Connected Peasant Based Village 2



## **Appendix 3**

### **Household Survey**

Within each village 20% of the households were selected to be included in the sample. This led to the collection of a total of 383 household interviews. These surveys were collected by a team of 14 surveyors, supervised by me. Of the total sample I conducted 10% of the interviews myself. The survey used is given below.

## Household Survey

	Education		
E1	Do you send your children to School?	0	No
	کیا آپ اپنے بچوں کو	1	No kids
		2	Kids too young
	سکول بھیجتے ہیں؟	3	Kids graduated
		4	Yes
		5	Only the boys
		6	Some of the kids go
		7	They go to a madressa
		50	Other (specify)
		100	Unwilling to respond

If answer to QE1 is between 0-3 go to QE3, otherwise go to QE2.

E2	If yes to qE1, What level of schooling are they enrolled in?	1	primary school
	آپ کے بچے کئی جماعتوں میں	2	middle school
	پڑھتے ہیں؟	3	high school

E3	If no to qE1, Why do you not send your kids to school?	1	can't afford it
	کیوں سکول نہیں	2	unIslamic
		3	need the girls to work at home
	بھیجتے؟	4	the school is co-education
		5	the school is too far
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

E4	When was the school made? (write code)		یہ سکول کب بنے تھے؟
a	Boys primary		
b	Girls Primary	1	before 1998
		2	after 1998
c	Boys middle	99	Don't know



		100	Unwilling to respond
d	Girls Middle		
e	Boys high		
f	Girls high		

E5	Who was the intermediary who played a role in providing the school? (write code)	ان سکولوں کے قیام کرنے میں کون لوگوں نے اہم کردار ادا کیا تھا؟
a	Boys primary	
b	Girls Primary	0 No one 1 MNA 2 MPA
c	Boys middle	3 Village influential (get name) 4 Other influential (get name)
d	Girls middle	5 CBOs 6 NGO
e	Boys high	50 Other (Specify) 99 Don't know
f	Girls high	100 Unwilling to respond
E6	Does someone monitor the performance of the teachers?	کیا کوئی اساتذہ کی کارکردگی کی نگرانی کرتا ہے؟
		0 No 1 Yes 99 Don't know 100 Unwilling to respond

E7	If yes to qE6 then who?	1 MNA 2 MPA 3 Village influential (get name) 4 Other influential (get name) 5 CBOs 6 NGO 50 Other (Specify) 99 Don't know 100 Unwilling to respond
	کون نگرانی کرتا ہے؟	

E8	Are you happy with the school?	0 No
----	--------------------------------	------

1	Yes
100	Unwilling to respond

E9	If no to qE8 then why?	1	Teachers don't teach
		2	Teachers don't come
		3	There are no proper facilities
		4	The school has no toilet
			School has no water
		50	Other (specify)
		100	Unwilling to respond

### Health

H1a	If a member of the household is ill where do you normally go?	1	BHU
		2	Pvt doctor
		3	Pvt dispenser
		4	Hakem
		5	Homeopath
		50	Other (specify)
		99	don't know
		100	Unwilling to respond

H2	If the household opts to use a pvt health facility then what is the reason for this?	1	Get better care
		2	They give medicines
		3	They are more responsive
		4	The govt doctor never comes
		5	BHU too far
		50	Other (specify)
		100	Unwilling to respond

H3	Who was the intermediary that played a role in providing the closest health facility?	0	No one
		1	MNA
		2	MPA
		3	Village influential (get name)
		4	Other influential (get name)

		5	CBOs
		6	NGO
		50	Other (Specify)
		99	Don't know
		100	Unwilling to respond

**Only ask the remaining questions if they use a BHU.**

**If they don't then go to next section.**

H4	Are there ample medicines available to you?	0	No
	کیا اس سہولت میں دوائیں موجود ہیں؟	1	Yes
		99	Don't know
		100	Unwilling to respond

H5	Are you happy with the medical facility?	0	No
	کیا آپ اس طبی سہولت سے مطمئن ہیں؟	1	Yes
		100	Unwilling to respond

H6	If no to QH5 then why?	1	The hospital has no equipment
	اگر نہیں تو کیوں؟	2	They don't give medicines
		3	They are not responsive
		4	The govt doctor never comes
		5	The BHU is very far
		50	Other (specify)
		100	Unwilling to respond

H7	Does someone monitor the performance of the doctors?	0	No
	کیا ڈاکٹروں کی کارکردگی کی کوئی نگرانی کرتا ہے؟	1	Yes
		99	Don't know
		100	Unwilling to respond

H8	If yes to qH7 then who?	1	MNA
	کون نگرانی کرتا ہے؟	2	MPA
		3	Village influential (get name)
		4	Other influential (get name)
		5	CBOs

		6	NGO
		50	Other (Specify)
		99	Don't know
		100	Unwilling to respond

### Roads

R1	What kind of roads does the household have: (write code)		کیا آپ کو کسی قسم کی سڑکوں کی سہولت موجود ہیں؟
		1	Mettle
a	leading to the closest town? قریبی شہر تک	2	Bricks
		3	Mud
b	leading to the closest trading market? قریبی منڈی تک	50	Other (specify)
		99	Don't know
c	leading to the motorway? موٹروے تک؟	100	Unwilling to respond

R2	Where is the closest market? (name of town or city) قریبی مارکیٹ کہا ہے؟	
----	--------------------------------------------------------------------------	--

R3	How far is the closest trading market? (distance km) قریبی منڈی کہا ہے؟	
----	-------------------------------------------------------------------------	--

R4	When were these roads made? یہ سڑکیں کب بنی تھیں؟	1	Pre 1998
a	to the closest town?	2	Post 1998
		99	Don't know
b	to the closest market?	100	Unwilling to respond
c	to the motorway?		

R5	Who took the initiative to provide these roads?	0	No one
a	to the closest town? سڑکوں کو بنانے میں کسی نے اہم کردار ادا کیا؟	1	MNA
		2	MPA
		3	Village influential (get name)
b	to the closest market?	4	Other influential (get name)
		5	CBOs

c	to the motorway?	6	NGO
		50	Other (Specify)
		99	Don't know
		100	Unwilling to respond

R6	What is the condition of the road after rains? (write code)		بارشوں کے بعد ان سڑکوں کی حالت ہوتی ہے؟
		1	Significantly worse
a	to the closest town?	2	Worse
		3	Average
b	to the closest market?	4	No effect
		99	Don't know
c	to the motorway?	100	Unwilling to respond

R7	How much traffic passes through the village?	0	None
	گاؤں کے پاس/درمیان سے کتنی گاڑیاں گزرتی ہیں؟	1	A little
		2	Moderate
		3	A substantial amount
		99	Don't know
		100	Unwilling to respond

R8	Has the level of traffic increased since the motorway was built in 1998?	0	No
		1	Yes - a little
	کیا موٹروے نے گاڑیوں کی آمدورفت میں اضافہ کیا ہے؟	2	Yes - substantially
		99	Don't know
		100	Unwilling to respond

R9	Has there been an increase in the transport facilities available to the village since 1998?	0	No
		1	Yes (specify)
	لیا موٹروے کے بعد سواہی والی گاڑیوں میں اضافہ ہوا ہے؟	50	Other (specify)
		99	Don't know
		100	Unwilling to respond

R10	What is the cost to go: (in Rs.)		مندرجہ ذیل منازل تک پہنچنے کا کرایہ کتنا ہے؟
a	to the nearest town?		

b	to the nearest market?		
c	to your place of work?		
d	to the motorway?		

R11	How often does a member from the household travel outside the village?	0	Never
		1	Every day
	گھر کے افراد کتنی بار گاؤں سے باہر سفر کرتے ہیں؟	2	At least once a week
		3	Once a week
		4	Once in 2 weeks
		5	Once a month
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

#### Soling

S1	What type of streets are outside your house?	0	Kaccha (mud)
	(observe)	1	Kaccha soling (bricks)
		2	Pucca soling (bricks with cement)
		3	Pucca (mettle)

S2	What is the condition of the street?	1	Extremely poor
	(observe)	2	Poor
		3	Average
		4	Good
		5	Excellent

S3	When was the soling provided?	1	Pre 1998
	آپ کے گھر کے باہر والی گلی کب بنی تھی؟	2	Post 1998
		99	Don't know
		100	Unwilling to respond

S4	Who was the intermediary that helped provide the soling?	0	No one
	اس گلی کو بنانے میں کون سے لوگ مددگار تھے؟	1	MNA
		2	MPA

		3	Village influential (get name)
		4	Other influential (get name)
		5	CBOs
		6	NGO
		99	Don't know
		100	Unwilling to respond

S5	What is the impact of rain on the street?	1	Significantly damaging
	بارشوں کا گلی پر کیا اثر ہوتا ہے؟	2	Damaging
		3	No effect
		99	Don't know
		100	Unwilling to respond

S6	Are you happy with the street?	0	No
	کیا آپ اپنی گلی سے مطمئن ہیں؟	1	Yes
		100	Unwilling to respond

#### Sanitation

SA1	What kind of sanitation system does the household have?	0	None
		1	Open-drain kaccha (mud)
	آپ کے گھر کے باہر نالیاں کس قسم کی ہیں؟	2	Open-drain pucca (cemented)
		3	Underground drain
		100	Unwilling to respond

SA2	Where is the waste disposed?	1	Pond inside the village
	نالوں کا پانی کہاں گرتا ہے؟	2	Pond outside the village
		3	Agricultural channel
		4	Main drain
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

SA3	When was the drainage provided?	1	Pre 1998
	یہ نالیاں کب بنی تھیں؟	2	Post 1998
		99	Don't know
		100	Unwilling to respond

SA4	How was the system	1	Public health engineering dept
-----	--------------------	---	--------------------------------

	provided?		
	نالوں کا نظام کس نے دیا	2	Zila council
	کب تھا؟	3	Town municipal adm
		4	Community self help
		5	Self provided
		6	NGO
		7	Local Government
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

SA5	Who was the intermediary that helped provide the drainage?	0	No one
		1	MNA
	نالوں بنانے میں کون لوگ	2	MPA
	نے آہم کردار ادا کیا تھا؟	3	Village influential (get name)
		4	Other influential (get name)
		5	CBOs
		6	NGO
		50	Other (Specify)
		99	Don't know
		100	Unwilling to respond

SA6	What is the impact of rain on the drain?	1	Significantly damaging
	بارشوں کے بعد نالوں کی	2	Damaging
	کیا حالت بختری ہے؟	3	No effect
		99	Don't know
		100	Unwilling to respond

SA7	What is the level of blockage of the drain?	0	None
	آب کے گھر کی نالوں میں	1	Minimal
	کوئی رکاوٹیں ہیں؟	2	Average
		3	High
		4	Very high
		99	Don't know
		100	Unwilling to respond

SA8	Who maintains the drainage system?	0	No one
	نالوں کی دیکھ بھال کس کی	1	Public health engineering dept



	ذمہ داری ہے؟	2	Zila council
		3	Town municipal adm
		4	Community self help
		5	Self provided
		6	NGO
		7	Local government
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

#### Electoral voting blocks

V1	Was the household part of a voting block in: (write code)		آپ کا خاندان کسی انتخابی گروپ (دھڑے) کا حصہ تھا؟
a	1997		
b	2001	0	No
		1	Yes
c	2002	99	Don't know
		100	Unwilling to respond
d	2005		

V2	What is the size of the voting block? (approximate)		اسی دھڑے میں کتنے گھر تھے؟
a	1997		
b	2001		
c	2002		
d	2005		

V3	What was the basis of joining the vote block?	0	None
		1	Political party
	آپ کے خاندان کے دھڑے کا حصہ بننے کی کیا وجہ تھی؟	2	Biradery
		3	Religion
		4	Family
		5	Agriculture
		6	Industry
		7	Other occupation

		8	Biradery alliance
		9	Neighborhood
		10	Social influence of the village influential
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

V4	Was there a rival voting block? (Write code)	لیا آپ کے دھرم کے مقابلے میں کوئی اور دھرم کو اپنا لگتا؟
a	1997	
b	2001	0 No
		1 Yes
c	2002	99 Don't know
		100 Unwilling to respond
d	2005	

V5	What was the basis of the rival blocks' formation?	0	None
	اس مقابلے دھرم کے بننے کی کیا وجہ تھی؟	1	Political party
		2	Biradery
		3	Religion
		4	Family
		5	Agriculture
		6	Industry
		7	Other occupation
		8	Biradery alliance
		9	Neighborhood
		10	Social influence of the village influential
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

V6	Who was the head of your vote block? (name and status)	آپ کے دھرم کا لیڈر کون ہے؟
a	1997	
b	2001	

c	2002		
d	2005		

V7	What was the basis of the power of the head of the vote block? (write code)		اسی شخص کو بید رہانے کی کیا وجہ تھی؟
		1	Biradery
		2	religion
a	1997	3	Family
		4	Agriculture
b	2001	5	Industry
		6	Local moneylender
c	2002	7	Trader
		8	Landlord
d	2005	9	Village head
		10	Aarti (middleman)
		11	Political activist
		12	Personality/leadership
		13	Educated
		14	Elder
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

#### Village Influential

I1	Is there more than one Village Influential?	0	No
	کیا آپ کے گاؤں میں ایک سے زیادہ بااثر شخصیات ہیں؟	1	Yes
		99	Don't know
		100	Unwilling to respond

If yes to QI1 then ask QI2

I2	Have there always been multiple Influentials?	0	No
	کیا اس گاؤں میں ہمیشہ ایک سے زیادہ بااثر شخصیات رہے ہیں؟	1	Yes
		99	Don't know
		100	Unwilling to respond

If no to QI2 then ask the next questions, otherwise go to QI7.

I3	Where did the new influential come from?	1	Migrated from another village
	نئی بااثر شخصیت ایکے گاؤں	2	Migrated from a town
	میں کہاں سے آئی تھی؟	3	Migrated from the city
		4	Rose from within the village
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

I4	When did the new Village Influential arise? (approximate time)		نئی بااثر شخصیت اس گاؤں میں کب سے ہے؟
----	----------------------------------------------------------------	--	---------------------------------------

I5	What is the basis of the new influentials power?	1	Biradery
	نئی بااثر شخصیت کے اہم ہونے کی کیا وجہ ہے؟	2	Religion
		3	Agriculture (Landlord)
		4	Economic power
		5	Local moneylender
		6	Aarti (middleman)
		7	Educated
		8	Opposition to the old Village Influentials
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

I6	Does the new Village Influential own land?	0	No
	کیا نئے بااثر شخص بڑے زمیندار ہیں؟	1	Yes
		99	Don't know
		100	Unwilling to respond

I7	What is the relationship between the two Village Influentials?	1	They work together
		2	They are rivals
	گاؤں کے دو بااثر شخصیات کے آپس کے تعلقات کیسے ہیں؟	3	They have their own following but are not rivals
		50	Other (specify)
		99	Don't know

	100	Unwilling to respond
--	-----	----------------------

### Needs

N1	What are the household's 3 most important needs? (write code)	اسم	آپ کو گھر کی تین سب سے اہم ضروریات کیا ہیں؟
		1	Agriculture
a	Need 1	2	Irrigation
		3	Transport
b	Need 2	4	Roads
		5	Soling
c	Need 3	6	Education
		7	Sewerage
		8	Health
		9	Water (piped)
		10	Water (quality)
		11	Gas
		12	Crime reduction
		13	Welfare/poverty reduction
		14	Land (for cultivation)
		15	Land (for home)
		16	Loans
		17	Employment
		18	Post office
		19	Telephone
		20	Mosque
		21	Market
		22	Vet hospital
		23	Sanitation
		24	Housing
		50	Other (specify)
		100	Unwilling to respond

N2	Whom does the household approach to articulate these needs?		
		0	No one
		1	MNA
		2	MPA
	Need 1	3	Village influential (get name)
		4	Other influential (get name)
	Need 2	5	Biradery members
		6	Neighbourhood
	Need 3	7	CBOs

		8	NGO
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

N3	Has your household always approached this person for their needs?	0	No
		1	Yes
	کیا آپ ہمیشہ اپنی ضرورتوں کے لیے اسی شخص کے پاس رکتے ہیں؟	99	Don't know
		100	Unwilling to respond

If Yes to Q13 then skip Q

N4-N6

N4	Who did they go to before? (name and status)		
----	----------------------------------------------	--	--

N5	When did they switch? (approximate date)		
	پہلے کس کے پاس جاتے ہیں؟		

N6	Why did they switch?		
	آپ نئے شخص کے پاس کب سے جاتے ہیں؟		

N7	Has the household ever approached a government official for their major needs?	0	No
		1	Unable to contact the government official directly
	کیا آپ کبھی کسی گورنمنٹ کے افسر کے پاس اپنی ضرورتوں کے لیے گئے ہیں؟	2	Yes
		100	Unwilling to respond

N8	If you feel unable to contact the govt official directly then what are the restrictions?	0	No restrictions
	کیا کوئی رکاوٹیں آپ کو روکتی ہیں؟	1	The Village Influential doesn't allow it
		2	Unable to get an appointment
		3	Don't know where he sits
		4	We come from a lower biradery
		5	We are economically inferior

		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

N9	If yes to QN7 then whom did they approach and were they responsive?	تو بہ	کیا افسر نے آپ کی ضرورتوں کو دیکھا؟
		0	No
		1	Yes
		100	Unwilling to respond

N10	If no to QN7 then why not?		کیوں تو جواب نہیں دی؟
-----	----------------------------	--	-----------------------

N11	Has the community ever collectivized to self-provide for their needs?	0	No
		1	Yes
		100	Unwilling to respond

N12	If no to QN11 then what is the reason?	1	My community doesn't belong to a dominant biradery
	اگر نہیں تو اسی کی کیا وجہ ہے؟	2	My community doesn't belong to the dominant political party
		3	My community belongs to a minority religious group
		4	Lack of a sense of community because of biradery divisions
		5	Lack of a sense of community because of political divide
		6	Lack of resources
		7	Don't have contacts with government officials
		8	Lack of technical know-how
		9	Not our responsibility
		10	Lack of leadership
		11	Lack of a sense of community
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

If yes to QN11 then ask QN13-16  
otherwise go to the next section.

N13	If yes to QN11 then give details of the project and how the community came together.	0	No
	بھون پرو جینکے ہر کام کیا ہے ان تفصیلات دیں؟	1	Yes
		99	Don't know
		100	Unwilling to respond

N14	If yes to QN11 then did the Village Influential encourage it?	0	No
	کیا اس شخصیت نے اسی کی حمایت مادارہ کی؟	1	Yes
		99	Don't know
		100	Unwilling to respond

N15	Where did the community get the resources from?	1	Household's gave money
	پروجیکٹ کے لیے سید اور عالات	2	Borrowed form the government
	کیاں سے ائے تھے؟	3	Borrowed form the moneylender
		4	Borrowed from the Village Influential
		5	Money given by the Village Influential
		6	Borrowed from a bank
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

N16	Did the Village Influential help in any way نہ گاؤں کی آپ شخصیت نے مدد کی؟		
-----	----------------------------------------------------------------------------------	--	--

#### Participatory bodies

P1	Have you heard of the musalihat anjuman committee?	0	No
	کیا آپ نے کوئی مصالحت انجمن کے بارے میں سنا ہے؟	1	Yes
		100	Unwilling to respond

P2	If yes to P1 then how active is it	1	Very active
----	------------------------------------	---	-------------

یہ گاؤں میں کتنا کام کرتی ہے؟



	in the village?		
		2	Active
		3	Average
		4	Not very active
		5	Not active at all
		99	Don't know
		100	Unwilling to respond

P3	Have you heard of Village Neighbourhood committees? محلے پٹیسا کے کمیٹی کے بارے میں سنا ہے؟	0	No
		1	Yes
		100	Unwilling to respond

P4	If yes to P3 then how active are they in the village?	1	Very active
	یہ گاؤں میں کتنا کام کرتی ہے؟	2	Active
		3	Average
		4	Not very active
		5	Not active at all
		99	Don't know
		100	Unwilling to respond

P5	Have you heard of Citizen Community Boards? CCB کے بارے میں سنا ہے؟	0	No
		1	Yes
		100	Unwilling to respond

P6	If yes to P5 then how active are they in the village?	1	Very active
	یہ گاؤں میں کتنا کام کرتی ہے؟	2	Active
		3	Average
		4	Not very active
		5	Not active at all
		99	Don't know
		100	Unwilling to respond

P7	Have you heard of School Management Committees? سکول مینجمنٹ کمیٹی کے بارے میں سنا ہے؟	0	No
		1	Yes
		100	Unwilling to respond

P8	If yes to P7 then how active are they in the village?	1	Very active
	یہ مکیش گاؤں میں کتنا کام کرتے ہیں؟	2	Active
		3	Average
		4	Not very active
		5	Not active at all
		99	Don't know
		100	Unwilling to respond

P9	Have you participated in the activities of an NGO?	0	No
	فلاحی کام کرنے والی تنظیم کی سرگرمیوں میں حصہ لیا ہے؟	1	Yes
		2	Not aware of NGOs
		100	Unwilling to respond

P10	If no to P9 then what was the most dominant restriction?	0	No restriction
	کیا شرکت، مداخلت نہ کرنے کی وجہ کوئی؟	1	No NGO has worked here
	دوکانٹ بھی؟	2	The NGO didn't involve us in their activities
		3	Not interested in working with NGOs
		4	Don't trust NGOs
		5	Not concerned with the project the NGO was working on
		6	Bared by the Village Influential to work with NGOs
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

#### Conflict resolution

C1	Who does the household approach for conflict resolution?	0	No one
	کس مسئلے کو سلجھانے کے لیے آپ	1	Police
	کس کو پاسی جلاتے ہیں؟	2	Panchayat
		3	Village Influential
		4	Local Government official
		5	Biradery head

		6	Neighbourhood head
		7	Moneylender
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

C2	Has the household always approached the same person for conflict resolution?	0	No
		1	Yes
	کیا آپ ہمیشہ اسی شخص کے پاس گئے ہیں؟	99	Don't know
		100	Unwilling to respond

C3	Has your household ever approached the police?	0	No
	کیسی پولیس کے دروازے پر گئی؟	1	Yes
	کئی کوششیں نہیں کی گئیں؟	100	Unwilling to respond

C4	If yes to C3 then how responsive were the police?	1	Extremely responsive; problem resolved
	پولیس نے آپ کے مسئلے کو کتنی توجہ دی؟	2	Responsive, but problem not solved
		3	Indifferent
		4	Not very responsive
		5	Not responsive at all
		100	Unwilling to respond

C5	If no to C3 then why not?	0	There was no problem which would require us to approach the police
	پولیس کے پاس نہ جانے کی کیا وجہ تھی؟	1	They don't do anything
		2	They are puppets of the landlord
		3	They are part of the problem (the dispute)
		4	They are corrupt and abuse their power
		5	They make matters worse
		6	We come from a minority biradery thus we get no attention

		7	They refuse to meet us
		8	We come from a minority class
			due to which they give us no attention.
		9	They have no authority to do anything
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

C6	Is there a panchayat in the village?	0	No
	کیا آپ کے گاؤں میں پنچایت ہے؟	1	Yes
		99	Don't know
		100	Unwilling to respond

C7	If yes to C6 then what is the basis of choosing members?	1	Biradery basis
	پنچایت کے ممبران کیسے چنے جاتے ہیں؟	2	Level of education
		3	Age
		4	Social power
		5	Link to the Village Influential
		6	Issue wise
		7	Economic power
		8	Link to the Local Government
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

C8	If yes to C6 then has any member of the household participated in the panchayat?	0	No
		1	Yes
	کیا آپ کے گھر کے پنچایت میں حصہ لیا؟	99	Don't know
		100	Unwilling to respond

C9	If yes to C8 then did the household find it helpful? (specify)	0	No
		1	Yes
	کیا پنچایت نے آپ کی مدد کی؟	99	Don't know
		100	Unwilling to respond

C10	If no to C8 then was there a restriction on the household's participation?	0	No
		1	Yes
	کیا کوئی روکاوٹ تھی؟	99	Don't know
		100	Unwilling to respond

C11	If yes to C10 then what was that restriction?	0	No restrictions
	یہ روکاوٹ کیا تھی؟	1	Biradery specific
		2	Religious
		3	We are rivals of the Village Influential
		4	Lack of economic power
		5	Lack of social power
		6	Gender
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

### Household profile

H1	What are the total number of people in the household?	ایس؟ افراد	آپ کے گھر میں (بچے ملا کر) کتنے
----	-------------------------------------------------------	------------	---------------------------------

H2	What is the biradery of the household?	1	Ansari
	آپ کے گھر کی ذات / برادری / قوم کیا ہے؟	2	Arain
		3	Baloch
		4	Bhatti
		5	Chauhan
		6	Darzi
		7	Dhoodhi
		8	Faqir
		9	Gappa
		10	Gujjar
		11	Haral
		12	Jats
		13	Jolahay
		14	Juj
		15	Kami
		16	Kashmiri
		17	Kharral
		18	Khokar
		19	Kichi
		20	Kumar
		21	Lohar
		22	Machay
		23	Malik
		24	Maral
		25	Masiah
		26	Maulvi
		27	Mir
		28	Mistry
		29	Mochi
		30	Mughal
		31	Muslim Sheikh
		32	Nayee
		33	Other Kami
		34	Pathan
		35	Pir

		36	Qureshi
		37	Raja
		38	Rajput
		39	Sayal
		40	Shah
		41	Sheikh
		42	Sunhar
		43	Tarkhan
		44	Utwal
		45	Vains Jat
		46	Wattoo
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

H3	Does the village have pattis?	0	No
	کیا آپ کے گاؤں میں پٹیاں ہیں؟	1	Yes
	ہیں؟	99	Don't know
		100	Unwilling to respond

If yes to H3 ask H4 and H5,  
otherwise go to H6

H4	If yes to H3 then what patti does your household belong to?	آپ کا گھر کس پٹیا کا حصہ ہے؟
----	-------------------------------------------------------------	------------------------------

H5	Who heads your patti? (name)	آپ کی پٹیا کا لیڈر کون ہے؟
----	------------------------------	----------------------------

H6	What is the religion of the household?	0	None
	آپ کے خاندان کا مذہب کیا ہے؟	1	Ahl-e-sunna
		2	Ahl-e-hadise
		3	Deowandi
		4	Shia
		5	Ahmedi
		6	Hindu
		7	Christian
		8	Wahabi
		9	Sikh
		10	Parsi
		11	Ismaili

		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

H7	What is the ethnicity of the household?	0	None
	آپ کی قومیت کیا ہے؟	1	Punjabi
		2	Sindhi
		3	Balochi
		4	Pathan
		5	Muhajir
		6	Seraiki
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

H8	What languages are spoken by the household?	1	Urdu
	آپ کے گھر میں کونسی زبان بولی جاتی ہے؟	2	Punjabi
		3	English
		4	Persian
		5	Seraiki
		6	Pushto
		7	Sindhi
		8	Balochi
		9	Hindi
		50	Other (specify)
		100	Unwilling to respond

H9	Are you a Native or a Settler?	1	Native
	کیا آپ یہاں کے آبائی باشندہ ہیں یا انگریزوں کے زمانے سے آباد ہیں؟	2	Settler (canal colony)
		3	Settler at partition (Muhajir)
		4	Migrant after 1947 (get date)
		50	don't know
		100	Unwilling to respond

H10	How long has the household been a resident in the village?	1	Less than 1 year
		2	1-5 years
	آپ اسی گاؤں میں کب سے ہیں؟	3	5-10 years



		4	10-25 years
		5	More than 25 years
		50	Other
		99	Don't know
		100	Unwilling to respond

H11	If you have moved in the last 10 years then where did the household migrate from?		آپ کہاں سے آئیں ہیں؟

H12	What were the reasons for migrating?	1	Better job opportunities
	اسی گاؤں میں کس وجہ سے آئے تھے؟	2	Better living standard
		3	Did not like the people in our old place
		50	Other
		99	Don't know
		100	Unwilling to respond

**Individual member profile**  
*head of the household*

117.a	Age?	محرم		
b	gender?	مذکر		
c	Does he/she have an NIC?			
d	What is his/her level of education? (if under 18 is he/she still in school?)	لیا ان کا سنا نئی کارڈ بنا ہوا ہے؟ ان کی تعلیم کتنی ہے؟		
e	Did he/she vote in 1997	وٹ چالا		
	2001	ہاں؟		
	2002			
	2005			

**Members above 18**

118.a	Age?		
b	Gender?		

d	What is his/her level of education?		
e	Did he/she vote in 1997		
	2001		
	2002		
	2005		

122.a	Age?		
b	Gender?		
c	Does he/she have an NIC?		
d	What is his/her level of education?		
e	Did he/she vote in 1997		
	2001		
	2002		
	2005		

123.a	Age?		
b	Gender?		
c	Does he/she have an NIC?		
d	What is his/her level of education?		
e	Did he/she vote in 1997		
	2001		
	2002		
	2005		

**Children under 18**

124.a	Gender?		
b	Age?		
c	What is her/his educational status?		

c	Does he/she have an NIC?		
d	What is his/her level of education?		
e	Did he/she vote in 1997		
	2001		
	2002		
	2005		

119.a	Age?		
b	Gender?		
c	Does he/she have an NIC?		
d	What is his/her level of education?		
e	Did he/she vote in 1997		
	2001		
	2002		
	2005		

120.a	Age?		
b	Gender?		
c	Does he/she have an NIC?		
d	What is his/her level of education?		
e	Did he/she vote in 1997		
	2001		
	2002		
	2005		

121.a	Age?		
b	Gender?		
c	Does he/she have an NIC?		

125.a	Gender?		
b	Age?		
c	What is her/his educational status?		

126.a	Gender?		
b	Age?		
c	What is her/his educational status?		

127.a	Gender?		
b	Age?		
c	What is her/his educational status?		

128.a	Gender?		
b	Age?		
c	What is her/his educational status?		

### Employment

EM1	What was the household's	1	Agriculture
	آپ کے خاندان کی سب سے اہم	2	Government servant
	دریغہ آمدن کیا ہے؟	3	Milkman
a	main source of income?	4	Blacksmith
		5	Washer man
b	secondary source of income?	6	Barber
	اسی کے علاوہ کوئی ہے؟	7	Business owner
c	tertiary source of income?	8	Shopkeeper
	کوئی اور ہے؟	9	Hawker
		10	Trader
		11	Doctor
		12	Lawyer
		13	Financial service provider
		14	Moneylender
		15	Agricultural labour
		16	Day labourer
		17	Monthly labour (permanent)
		18	Monthly labour (contractual)
		19	Domestic help
		20	Migrant worker (domestic)
		21	Migrant worker (abroad)
		22	Army
		23	Goldsmith
		24	Herdsman
		25	Transporters
		50	Other (Specify)
		99	Don't know
		100	Unwilling to respond

EM2	Is the household involved in a siep relationship?	0	No
	کیا آپ کے گھر کا کسی کے ساتھ سب سے	1	Yes
	رشتہ ہے؟	100	Unwilling to respond
EM3	If the household is involved in agricultural labour then what are the terms of the contract with the landlord?		Paid a fixed wage
			Low wage + interest free loan
	اگر آپ کھیت پر مزدوری کرتے ہیں تو		Wage + payment in kind
	آپ کا زمیندار کے ساتھ معاہدہ کیا ہے؟	50	Other (Specify)
		99	Don't know

		100	Unwilling to respond
--	--	-----	----------------------

EM4	If the household is involved in agricultural labour then	0	No
	has there been an increase in wages over the last 10 yrs?	1	Yes - marginally
	پچھلے دس سالوں میں آبیکی تنخواہ میں	2	Yes -significantly
	کوئی اضافہ ہوا ہے؟	99	Don't know
		100	Unwilling to respond

EM5	Has there been an increase in non-farm employment	0	No
	over the last 10 years?	1	Yes - marginally
	کی غیر زرعی نوکری میں کوئی اضافہ	2	Yes -significantly
	ہوا ہے؟	99	Don't know
		100	Unwilling to respond

EM6	Has there been an increase in employment opportunities	0	No
	outside the village over the last 10 years?	1	Yes - marginally
	ایں پچھلے دس سالوں میں گاؤں سے	2	Yes -significantly
	باہر نوکریوں میں اضافہ ہوا ہے؟	99	Don't know
		100	Unwilling to respond

EM7	Do you feel you have multiple job opportunities or do	0	No options
	you feel confined to one form of employment?	1	Options have gone down
	(Get details)	2	Industries have been wiped out (shutting down of traditional activities like pottery)
	کیا آپ کوئی بھی نوکری کر سکتے ہیں یا نہیں؟	3	Have options but they are limited
		4	Have options but they re within the same industry
		5	Have many options
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

EM8	Has there been an increase in	0	No
-----	-------------------------------	---	----

	employment opportunities created by passing-by traffic over the last 10 years?		
	(e.g. the ability to set up tea-shops or repair shops)	1	Yes - marginally
		2	Yes -significantly
	لیا بچلہ کسی سیالوں میں گاڑیوں کی	99	Don't know
	اصول وقت سے نوکریوں میں اضافہ ہوا ہے	100	Unwilling to respond

EM9	Has there been closure of traditional jobs/roles/activities?	0	No
	e.g. Pottery	1	Yes - some have been eliminated
	کیا روایتی پیشوں میں فرق آیا ہے؟	2	Yes - a lot have been eliminated
		99	Don't know
		100	Unwilling to respond

EM10	If yes to EM9 then since when has the erosion of jobs taken place?	1	About 1 year ago
		2	<3 years ago
	کب سے کم ہونا شروع ہوئی	3	<5 years ago
	ہی؟	4	<7 years ago
		5	<10 years ago
		6	About 10 years ago
		7	More than 10 years ago
		99	Don't know
		100	Unwilling to respond

EM11	Do any of the women in the household have a job?	0	No
	کیا گھر کی کوئی عورت نوکری کرتی ہے؟	1	Yes
		100	Unwilling to respond

EM12	If yes to EM11 How long have they had this job?		کب سے نوکری کر رہی ہیں؟
------	-------------------------------------------------	--	-------------------------

EM13	Is the household significantly dependent on remittances? (domestic or from abroad)	0	No
		1	Yes
	کیا آپ کے گھر کا باہر سے بھیجی جاتی ہوئی	50	Other (Specify)
	آمدنی پر انحصار ہے؟	99	Don't know
		100	Unwilling to respond

EM14	If yes to EM13 then where did the worker migrate to?	باہر کام کرنے والے لوگ کہاں کام کرتے ہیں
------	------------------------------------------------------	------------------------------------------

EM15	If yes to EM13 then when did the worker migrate?	کب باہر گئے تھے؟
------	--------------------------------------------------	------------------

### Debt

D1	What is the amount of loan taken by the household in the last 12 months?	0	None
		1	<3000
	آپ کے خاندان نے کچھ سال میں	2	<5000
	کتنے قرضہ لیا ہے؟	3	<8000
		4	<10000
		5	<12000
		6	<15000
		7	>15000
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

If no loan was taken then skip to the next section.

D2	If a loan was taken then who gave the loan?	1	Bank
	کس سے قرضہ لیا تھا؟	2	Government establishment
		3	Village Influential
		4	Landlord
		5	Landlord's manager
		6	Neighbour
		7	Village moneylender
		50	other (specify)
		100	Unwilling to respond

D3	What are the terms of the loan?	1	repay with no interest
	قرضہ کی شرائط کیا ہیں؟	2	repay with <10% interest
		3	repay with <15% interest
		4	repay with <20% interest
		5	repay with >20% interest
		6	repay with no interest but work in the moneylenders house



		7	repay with no interest but give a portion of the household's produce
		50	other (specify)
		99	don't know
		100	Unwilling to respond

D4	Do you have any other relationship with the person you borrowed from apart from financial?	0	No
		1	We work on his lands
	قریبیہ دینے والے شخص سے آیا	2	We work in his house
	کیا تعلق ہے؟	3	We trade for him
		4	He owns our house
		5	He is the head of our community
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

#### Agricultural households

A1	How much land does the household own?	آپ کا خاندان کتنی زمین کی ملکیت دھتا ہے؟
----	---------------------------------------	------------------------------------------

A2	When did you obtain this land (approximate date)?	اسی زمین کی ملکیت آپ کے پاس کب سے ہے؟
----	---------------------------------------------------	---------------------------------------

A3	Who was the land bought from? (name)	یہ زمین کس سے خریدی تھی؟
----	--------------------------------------	--------------------------

A4	Has the household sold any land? When?	کیا آپ کا خاندان نے کبھی زمین بیچی ہے؟
----	----------------------------------------	----------------------------------------

If yes to A4 then ask A5-A7, otherwise go to A8.

A5	How much land was sold?	کتنی زمین بیچی تھی؟
----	-------------------------	---------------------

A6	Who was the land sold to?	کس کو بیچی تھی؟
----	---------------------------	-----------------

A7	Why was the land sold?	1	Needed the money
	کیوں بیچی تھی؟	2	It was idle land not being cultivated
		3	It was not very fertile land
		4	We decided to move out of

			agriculture
		5	We were forced to sell the land
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

A8	How much land does the household rent in?		اپکا خاندان کتنی زمین ٹھیکے پر لیتا ہے؟
----	-------------------------------------------	--	-----------------------------------------

A9	If the household rents in land what is the nature of the contact?	1	Sharecropping
		2	Fixed rent
		3	Tenancy
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

A10	How much land does the household rent out?		آپکا خاندان کتنی زمین ٹھیکے پر دیتا ہے؟
-----	--------------------------------------------	--	-----------------------------------------

A11	If the household rents out land what is the nature of the contact?	1	Sharecropping
		2	Fixed rent
		3	Tenancy
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

A12	How many acres controlled by the household are cultivated?		آپ اسنی زمین کا کتنا حصہ کاشت کرتے ہیں؟
-----	------------------------------------------------------------	--	-----------------------------------------

A13	How many acres of the land controlled by the household is irrigated by canals?		آپکی زمین کے کتنے ایکڑوں کو کنال کا پانی ملتا ہے؟
-----	--------------------------------------------------------------------------------	--	---------------------------------------------------

A14	What is the main Rabi (summer) crop grown by the household?	0	None
		1	Wheat
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

A15	What is the average yield per acre?	اسی فصل کی فی ایکڑ پیداوار کتنی ہے؟
-----	-------------------------------------	-------------------------------------

A16	What is the main Kharif (winter) crop grown by the household?	0	None
		1	Sugarcane
	آپ کی خریف کی فصل کیا ہے؟	2	Cotton
		3	Rice
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

A17	What is the average yield, per acre?	اسی فصل کی فی ایکڑ پیداوار کتنی ہے؟
-----	--------------------------------------	-------------------------------------

A18	Does the household make use of any machinery? What is it?	0	No
		1	Yes (specify)
	کیا آپ فصل کا مشین استعمال کرتے ہیں؟	99	Don't know
	مشین کا استعمال کرتے ہیں؟	100	Unwilling to respond

If yes to A18 then ask A19 and A20, otherwise go to A21

A19	Is the machinery owned or rented?	1	Owned
	کیا یہ مشین آپ کی اپنی ہے یا کرایہ پر ہے؟	2	Rented
		99	Don't know
		100	Unwilling to respond

A20	When did the household get this machinery?	1	Within last year
	یہ مشین کب سے استعمال کر رہے ہیں؟	2	1-4 years ago
		3	5 years ago
		4	5-9 years ago
		5	More than 10 years ago
		99	Don't know
		100	Unwilling to respond

A21	Did the use of machinery increase the level of output	0	No
-----	-------------------------------------------------------	---	----

	cultivated?	1	yes - marginally
	کیا مٹی استعمال کرنے سے فی	2	yes - average
	ایکڑ پیداوار میں کوئی فرق پڑا ہے؟	3	yes - substantially
		99	Don't know
		100	Unwilling to respond

A22	Has there been an increase in the size of the market available to the household for selling its produce in over the last 10 years?	0	No
		1	Yes - marginally
		2	Yes - significantly
	جن مندوں میں آپ اپنی پیداوار بیچ سکتے ہیں کیا ان میں اضافہ ہوا ہے؟	99	Don't know
		100	Unwilling to respond

A23	Have you ever been approached by a factory to sell your produce to them?	0	No
		1	Yes (name)
	کیا کسی فیکٹری نے آپ کی پیداوار خریدنے کی خواہش ظاہر کی ہے؟	100	Unwilling to respond

If yes to A23 then as A24-  
A26, otherwise go to A27.

A24	If yes to A23 are the terms of the factory better than what you received earlier?	0	No
		1	yes - marginally
	کیا فیکٹری کی شرائط آپ سے پہلے سے بہتر ہیں؟	2	yes - substantially
		100	Unwilling to respond

A25	Is your trading with the factory through an aarti (middleman) or is it direct?	1	Through an aarti (middleman)
		2	Directly
	کیا آپ اپنی پیداوار آرٹی کو بیچتے ہیں یا	50	Other (specify)
	سید فیکٹری کی بیچتے ہیں؟	100	Unwilling to respond

A26	Has trading with a factory caused you to change your production set-up? If yes then how?	0	No
		1	Yes - Had to mechanize
	فیکٹری کی وجہ سے کیا طائش کے طریقہ کار میں کوئی تبدیلی آئی ہے؟	2	Yes - Had to produce a different variety than before

		50	Other (specify)
		100	Unwilling to respond

A27	Has there been a general increase in productivity over the last 10 years?	0	No
		1	yes - marginally
		2	yes - average
	کیا پچھلے دس سالوں میں اپنی فی ایکڑ پیداوار میں اضافہ ہوا ہے؟	3	yes - substantially
		99	Don't know
		100	Unwilling to respond

### Households involved in business

B1	Does the household own or rent the business premises and where are the premises located?	1	Owned - Within the house
		2	Owned - Inside the Village
	کیا آپ کا خاندان اپنے کاروبار کی عمارت کی ملکیت رکھتا ہے؟	3	Owned - Other Village
	یا کرایہ پر ہے؟	4	Owned - City
		5	Owned - Town
		6	Rented - Within the house
		7	Rented - Inside the Village
		8	Rented - Other Village
		9	Rented - City
		10	Rented - Town
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

B2	Does the household own or lease the machinery used?	0	No machinery used
	کاروبار میں استعمال کی جانے والی مشینیں کرایہ پر ہے یا اپنی؟	1	Own
		2	Lease
		3	Own and lease
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

B3	Does the household own or lease the tools used?	0	No tools used
	آلات اپنے آپ سے یا کرایہ پر؟	1	Own
		2	Lease
		3	Own and lease

		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

B4	Has the scope of the business changed since the building of the motorway (10 years ago)?	1	Significantly decreased
		2	Moderately decreased
	کیا موٹروے کے بننے کے بعد یہ کاروبار	3	No change
	کا روبر میں شریک آیا ہے؟	4	Moderately increased
		5	Significantly increased
		99	Don't know
		100	Unwilling to respond

B5	Has there been an increase in the size of the market (no. of clients) in which the household can sell its good/ services over the last 10 years?	0	No
		1	Yes - Marginally
		2	Yes - Significantly
	کیا پچھلے دس سالوں میں کاروبار کے	99	Don't know
	فرقہ میں اضافہ آیا ہے؟	100	Unwilling to respond

B6	Has there been an increase in competition faced by the business over the last 10 years?	0	No
		1	Yes - Marginally
	کیا پچھلے دس سالوں میں کوئی	2	Yes - Significantly
	مقابلہ میں کاروبار کوڑے ہوئے	99	Don't know
	ہے؟	100	Unwilling to respond

B7	If yes to B6 then where is the competition coming from?	1	New businesses emerging within the village
	یہ نئے مقابلہ کے کاروبار کہاں		
	سے آ رہے ہیں؟	2	Imports from nearby towns, villages and cities
		3	New businesses migrating to the village
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

#### Expenditure profile

EP1	What was the household's average monthly expenditure over the last three months? (in	ایک گھر کا ماہانہ خرچہ کتنا ہے؟ (پچھلے تین ماہ میں)
-----	--------------------------------------------------------------------------------------	--------------------------------------------------------

	Rs)		
--	-----	--	--

EP2	Has there been a reduction in average food prices over the last 10 years?	0	No
		1	Yes
	how do I get them to adjust for inflation?	99	Don't know
		100	Unwilling to respond

EP3	During the last one week, roughly, how many times did the family consume the following?	بچھلے ہفتے میں آپ کے خاندان نے	یہ اشیائیں کتنی کھائی تھیں؟
a	Meat	گوشت	
b	Eggs	انڈے	
c	Sweet	میٹھی اشیاء	
d	Rice	بریادل	
e	Roghani bread	روغنی نان	
f	Plain roti	داوٹی	
g	Milk products	دودھ کی اشیاء	
h	Vegetables	سبزی	
i	Pulses	دال	

EP4	During the last month, on how many days did all the members of the household have all meals?	0	0
		1	<5
	بچھلے ماہ میں آپ کے خاندان نے	2	<10
		3	<15
	کتنے دن پیٹ بھر کر کھانا	4	<20
		5	<25
	کھایا تھا؟	6	<30
		7	Everyday
		99	Don't know

	100	Unwilling to respond
--	-----	----------------------

EP5	What quantity of the following is consumed?		براشاء کتنی مقدار میں استعمال کیے؟
a	Wheat flour (annually) آٹا		
b	Maize flour (annually) مکئی کا آٹا		
c	Cooking oil (monthly) پکانے کا تیل		

EP6	If the income of the household was increased by Rs. 100 per month how much would be spent on food?	0	0
		1	<10
		2	<20
		3	<30
		4	<40
		5	<50
		6	<60
		7	<70
		8	<80
		9	<90
		10	More than 90
		99	Don't know
		100	Unwilling to respond

EP7	What percentage of yearly food consumption comes from the following sources? (write code)		ایک سال میں کھانے کا کتنا فیصد آپ نے
a	Purchases from the market	0	0
	مارکیٹ سے خریدنا	1	10%
b	Self grown	2	20%
	خود اگاتے ہیں	3	30%
c	From share-cropping	4	40%
	حصہ بٹائی کی صورت میں حاصل کیا	5	50%
d	In-kind wage	6	60%
	علی کی صورت میں ملا	7	70%
e	Other (specify)	8	80%
		9	90%
f	Siep (unequal reciprocal patron-client relation)	10	100%



		99	Don't know
		100	Unwilling to respond

#### Nature of dwelling

N1	How many rooms are there in the house?	آپ کے گھر میں کتنے کمرے ہیں؟
----	----------------------------------------	------------------------------

N2	Is the house owned or rented?	1	Self-owned
	گھر آپ کا ہے یا کرایہ پر ہے؟	2	Rented
		3	Rent-free
		4	Informal arrangement (specify)
		5	Squatters
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

N3	If house is self-owned, ask date of obtaining ownership.	یہ گھر کب ملا تھا؟
----	----------------------------------------------------------	--------------------

N4	If rented, rent-free arrangement or squatter, ask about ownership of land on which house is built.	1	Government
		2	Landlord (specify name)
	کس کا ہے؟	3	Moneylender (specify name)
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

N5	Observed physical structure of the house?	1	Pucca (bricks)
		2	Semi-pucca (part brick and part mud)
		3	Kaccha (mud)
		50	Other (specify)

N6	Observed physical condition of the house	1	Seriously dilapidated
		2	Major repairs needed
		3	Minor repairs/ reasonable

			structure
		4	Sound structure
		50	Other (specify)

N7	Where is the household's toilet facility?	0	None (in the fields)
	غسل خانہ کہاں ہے؟	1	Outside the house
		2	Inside the house
		50	Other (specify)
		100	Unwilling to respond

N8	What source of lighting does the household use?	1	Electricity
	گھر کو روشنی کیسے کرتے ہیں؟	2	Kerosene
		3	LPG cylinder
		4	Mustard oil
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

N9	What source of cooking fuel does the household use?	1	Natural gas
	کھانا پکانے کے لیے آگ کی	2	Kerosene
		3	LPG cylinder
	طرز جلاتے ہیں؟	4	Wood
		5	Charcoal
		6	Gas/biogas
		7	Electricity
		8	Dung cake
		50	Other (specify)
		99	Don't know
		100	Unwilling to respond

N10	Does the household have an electricity connection?	0	No
	بجلی ہے؟	1	Yes
		100	Unwilling to respond

N11	If yes to N10 then rate the regularity of the supply.	1	Lowest
	بجلی کی منتقلی کیسے آتی ہے؟	2	
	جگہ پر ہے؟	3	

		4	
		5	Highest

N12	Does the household have a natural gas connection?	0	No
	سوئی گیس ہے؟	1	Yes
		100	Unwilling to respond

N13	If yes to N13, rate the regularity of the supply.	1	Lowest
	مستقل آتی ہے یا آتی جاتی ہے؟	2	
		3	
		4	
		5	Highest

#### Assets

In what quantity does the household own the following?		آپ کے گھر کتنے یا سی کتنے
Cattle and buffaloes/cows	بیل ہیں؟	
Sheep/goats	بکری ہیں؟	
Poultry	مسرغیاں	
Horses	گھوڑے	
Donkeys	کدواں؟	
Other livestock		

Does the household own a watch/clock?		گھڑی ہے
Is it new or second-hand?		
	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a car?		گاڑی؟
Is it new or second-hand?	1	New

	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>motorcycle</b> ?		موٹر سیکل؟
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it?		

Does the household own a <b>bicycle</b> ?		سیکل
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>tractor</b> ?		ٹریلر
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>car</b> ?		کار
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own any <b>other mode of transport</b> ?		کوئی اور
(Specify)		
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>radio</b> ?		رادیو

Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household get a <b>newspaper</b> ?	0	No
اخبار	1	Yes
If no to a. then do you have access to a newspaper?	0	No
	1	Yes

Does the household own a <b>television</b> ?		
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>VCR/DVD</b> player?		
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>refrigerator or freezer</b> ?		
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it?		

Does the household own an <b>electric or gas</b> cooker?		
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>sewing</b> or		سلاخی کی مشین
-------------------------------------------	--	---------------

knitting machine?		لوٹنے کی مشین
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>water or treadle pump</b> (electric)?		پانی کا پمپ
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>fan or cooler?</b>		پنکھا
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>washing machine?</b>		
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>telephone?</b>		
Is it new or second-hand?	1	New
	2	Second-hand
How many years ago did you buy it or receive it?		

Does the household own a <b>mobile phone?</b>		
Is it new or second-hand?	1	New

	2	Second-hand
How many years ago did you buy it or receive it?		