

Introduction¹

Financial inclusion or broad access to finance refers to the timely delivery of financial services to disadvantaged sections of society. Research in the last decade leads us to believe that a well-functioning financial system is linked to faster and equitable growth (Honohan, 2004). Due, in no small part, to the stimulus provided by the United Nations Year of Micro Credit 2005, policy makers across the world have begun to pay closer attention to increasing financial inclusion.

However, in spite of the attention on financial inclusion and the numerous policies devoted to enhancing access to finance, a significant challenge in designing effective policy interventions is the dearth of information regarding access to finance. The problem of information is compounded by the fact that access to finance does not necessarily lead to usage.

In the Indian instance, since 2005, the Reserve Bank of India (RBI) has promulgated a drive for financial inclusion, where banks take the lead to promote the financial inclusion of every household at the district-level by providing all 'unbanked' households with savings accounts. This study proposes to examine the process involved in a household becoming financially included, how this process is perceived by the household in question and whether being financially included results in usage of newly offered financial services and affects financial behaviour, with specific reference to the financial inclusion drive by RBI.

This study is attempt to arrive at a deeper understanding of the process of financial inclusion, the difference between access to financial services and usage, and the significance of inclusion to poor households. With particular reference to the drive for financial inclusion which is a recent policy initiative, this study will be an opportunity to receive some qualitative information regarding the usage of these accounts. As such, the information contained herein should be of particular importance to banks, policy makers and development practitioners alike. For policymakers, it will demonstrate the on-the-ground results of the current policies and provide evidence that will inform future policies. In the case of financial institutions, this information will facilitate the design of appropriate products that are demand-driven. In the case of microfinance institutions, the evidence herein may help them increase outreach and hence, financial viability.

The paper is organised in the following manner. Section 1 establishes the theoretical context for this study through a discussion on the benefits of financial inclusion, the background for the financial inclusion drive in India. Some work on the various financial services that are commonly used by low-income communities is also presented. Then, the paper clarifies the methodological approach of the study is clarified. Section 4 presents and analyses the empirical evidence collected for this study. Section 5 uses these results to formulate some policy recommendations and finally a conclusion is offered.

¹ The items considered were: computer, telephone, refrigerator, husking machine, color television, electric cooking appliances, costly furniture, LPG (gas) connection, light motor vehicle or commercial vehicle, tractor, two or three wheeler, motor van, power driven tiller

Review of Literature

2.1. Defining Financial Inclusion

At the beginning of this paper, we defined financial inclusion as the timely delivery of financial services to disadvantaged sections of society. This simple definition encompasses the two dimensions of financial inclusion (United Nations, 2006). Firstly, financial inclusion refers to a customer having access to a range of formal financial services, from simple ones like credit and savings to more complex ones like insurance and pensions. Secondly, financial inclusion implies that customers have access to more than one provider of financial services so that clients have access to a variety of competitive options.

2.2. Measuring Financial Inclusion

Although financial inclusion emphasizes access to more than just any one financial service, the breadth of financial services in a region or a country is typically measured by the percentage of people in the region who have access to bank accounts (Beck & De la Torr, 2006). This is primarily because a bank account enables poor households to perform important financial functions such as saving money safely outside the house, accessing credit, making loan or premium payments and transferring money within the country. A bank account helps individuals to form relationships with banks leading to access and usage of other financial services (Mohan, 2006). Thus, a bank account determines access for many other financial services (Littlefield et al, 2006).

It is difficult to assess what percentage of the population living in developing countries has access to savings account since information regarding small deposits and borrowings is not readily available. Table 1 demonstrates the striking disparities between access to savings accounts in developed and developing countries with the information we currently have. While in developed nations, almost everyone has access to banking services, in less developed countries, access to banking services is often limited to a small section of the population. Increasingly, access to finance in developing countries is now being posited as a vital public good which is as important and fundamental as access to safe water or primary education (Peachy & Roe, 2006; Beck & de la Torre, 2006; Leeladhar, 2005). In developed countries on the other hand, financial inclusion is generally related to issues about social exclusion and welfare. Further, levels of inequality (as measured by Gini coefficients for the respective countries) are negatively correlated to levels of financial inclusion (Kempson, 2006). Thus, Denmark and Sweden have extremely high levels of financial inclusion. Middle-level Gini coefficient countries like the USA and the UK show an exclusion level of between 9% and 12%. Similarly, high levels of inequality, such as those persisting in South Africa and Tanzania correspond to higher levels of exclusion. It is

important to note that while the figures above pertain to having access to any kind of savings account altogether, one must also consider that section of the population which has access to some kind of savings account but is still removed from banking services that are prevalent in that country. For instance, in Sweden, internet banking is extremely common. Thus, not having access to internet banking may be serious impediment to conducting financial transactions such as making payments. In France, cheques are the most common form of payment and as such, not having access to cheques would pose financial roadblocks.

In the Indian context, financial inclusion, in the Finance Minister's 2006-07 budget speech, was defined as "the process of ensuring access to timely and adequate credit and financial services by vulnerable groups at an affordable cost" (Union Budget, 2007-2008). Although this definition does take in a range of financial services, its wording reveals a bias in policy to place provision of credit services ahead of other financial services. In fact, till recently, the discussion on financial inclusion in policy and academic circles tends to revolve around the extension of institutional credit, specifically to the rural sector (Basu, 2005; Dev, 2006; Mohan, 2006). The focus on credit has meant that policy and practice has thus far ignored the provision of a safe place for savings for rural households

Table 1:
Percentage of Population with a Bank Account

Country/Location	Percentage with an account
Botswana	47
Brazil (urban)	43
Colombia (Bogotá)	39
Djibouti	24.8
Lesotho	17
Mexico City	21.3
Namibia	28.4
South Africa	31.7
Swaziland	35.3
Tanzania	6.4
Denmark	99.1
Sweden	98
Italy	70.4
UK	87.7
USA	91

Country/Location	Percentage with an account
India	59
Bihar	33
Kerala	89
Meghalaya	27
Nagaland	21
Northern Region (Delhi, Haryana and Punjab)	84

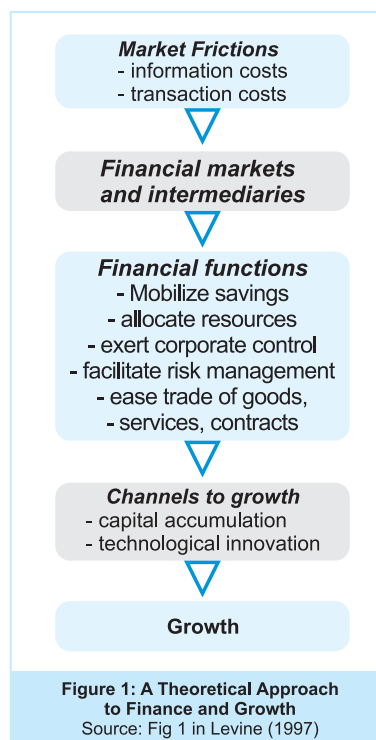
Source: Emerging Market Economics, Ltd. (2005), p. 20, Peachey and Roe (2004), p. 13, United Nations (2006), p. 2, Fedbank Hormis Memorial Foundation Inaugural Address by V. Leeladhar, Deputy Governor, Reserve Bank of India, December 2, 2005

Note: In Botswana, Lesotho, Namibia and Swaziland, this is the percentage who says that they have a savings/transaction account from a bank. In India, this is the percentage of the adult population who have access to either savings or current account. For more detailed numbers, see Appendix 1.

(Ghate, 2007), in spite of evidence that poor people do save². The drive for financial inclusion, initiated by the RBI and described in the next section, is thus significant in that it attempts to extend savings bank accounts to 'unbanked' households.

2.3. Why Is Financial Inclusion Important?

One of the most important empirical relationships revealed in the last decade has been the establishment of the causal link between financial depth and growth (Honohan, 2004). Figure 1 shows a schematic representation of the theoretical basis for the link between financial depth and growth. To the extent that economic growth can lead to reduction in absolute levels of poverty, the fact that a well-developed financial system causes economic growth should be a matter of interest to policymakers around the world.



Thus, the question becomes does a well-developed financial system serve the poor? There is in fact enough empirical and theoretical evidence pointing towards the fact that a well developed financial system can be an effective poverty alleviation tool. The cost of bearing the brunt of market imperfections such as informational asymmetries, transaction costs and contract enforcement costs can be quite significant for small or poor entrepreneurs who may not have access to collateral, credit histories and contacts. Here, broad access to financial services would enable them to finance their project, thus having a positive impact on growth and poverty alleviation (Galor & Zeira, 1993). Beck and de la Torre (2006) also refer to the Schumpeterian process of 'creative destruction' whereby a financial system is able to allocate resources to efficient newcomers. Empirical studies also show that small firms in countries with greater outreach and access face lower financing obstacles and grow at a higher rate (Beck et al, 2006). Access to finance is an important incentive for new ideas and technologies (King and Levine, 1993). A strong financial system also encourages expansion in the market and competition for existing firms. It ensures that poor households and small entrepreneurs need not depend on middlemen. On the other hand, an underdeveloped financial system can be uncompetitive, conservative and inimical to poor or small entrepreneurs (Rajan & Zingales, 2003). There is also

² Based on the 2004-2005 Poverty Line Estimates by the National Sample Survey Organization. Below the poverty line for rural West Bengal is defined as having per capita consumption under Rs. 382.82

other indirect evidence of the link between growth and poverty alleviation. Financial depth has been shown to be an important factor for lower inequality and increases the income of the bottom 80% of the population (Li et al, 1997). Child labour, which is positively correlated to poverty, has been found to be influenced by the financial depth of a country (Dehijia & Gatti, 2002; cited in Honohan, 2004). This could be because poor households in countries that have well-developed financial systems in place are less vulnerable to economic shocks.

Although the causal link between financial depth and growth is well-established, the link between the breadth of financial services and growth is less well-defined (Beck & de la Torre, 2006). The four central functions of finance are: mobilizing savings; allocating capital; monitoring the use of loanable funds by entrepreneurs; and transforming risk by pooling and repackaging it. These functions need to be buttressed by legal, regulatory and informational structures that enhance the quality of the financial system, which cannot be measured simply by looking at the scale or the breadth of the system (Honohan, 2004). Additionally, broad access does not always signify usage.

In a seminal study looking at India's vast banking system, Burgess and Pande (2003) show that the rural bank expansion programme, mandated by the Indian government from 19977 – 1990, can explain approximately half of the fall in poverty levels from 61% in 1967 to 31% in 2000. Further, they find that rural bank expansion was associated with non-agricultural growth. These results demonstrate that increased number of bank branches and the consequent improvement in physical access to banks was critical in reaching out to remote areas. It has been hypothesised that in government-controlled banking systems, formal credit is susceptible to elite capture, undermining efforts to advance rural development. This study shows that the diametric opposite was true in India's experience with social banking.

However, most studies exploring the relationship between growth and finance tend to focus, quite naturally, on explanations of how access to credit can enable low-income households to overcome the 'poverty trap'. What role does a savings account play in the lives of low income households?

2.4. Financial Deepening In India

2.4.1. Social Banking in India: Background

In the 1950s, an extensive network of rural cooperative banks was established with the intention that financial institutions would channel deposits and savings collected from the entire economy towards agriculture and small scale cottage industries. However, this failed to materialize with bank credit going to big corporations who also had majority ownership in many of the banks. As a result, banks were nationalized in 1969 with the following objectives in mind: checking

the control of banks by a few corporations, organising savings from remote and rural regions, using the deposits mustered by banks to achieve equitable growth and concentrating on priority sectors like agriculture and small industry (Basu, 2005). Towards this end, at least 40% of bank lending was required to be made in the Priority Sector and 25% of these loans had to be extended to the weaker sections within the Priority Sector. Other features of nationalised banking included the 'Service Area Approach' wherein a single bank was assigned 15-20 villages and other banks could set up branches there only after obtaining its approval. Similarly, the 1:4 license rule established in 1977 dictated that a bank could open a branch in a banked location only if it opened four branches in unbanked locations.

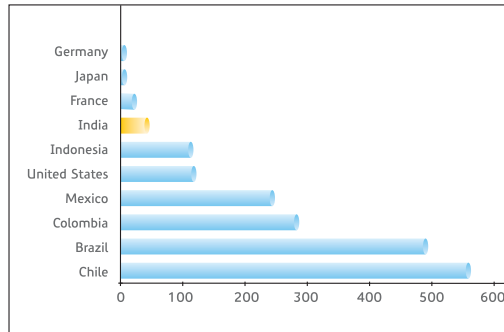
Liberalisation has led to some changes especially with respect to increased competition and deregulation. Interest rates are no longer regulated, although interest rates on loans under Rs. 2 lakhs are still subject to a cap equal to the prime lending rate and short-term deposits are subject to a floor. The service area approach and the 1:4 license rules have been done away with. However, nationalised banks and regional rural banks (RRBs) control over 73% of all commercial banking assets and 52.4% of the assets of all financial institutions. Further, rural areas have yet to see competition in the banking sector. This standpoint on banking, referred to 'social' or 'development' banking appears to be based on the belief that small and poor borrowers are not bankable and that banks will neglect the rural poor and small-scale industries unless compelled by policy to do so (Burgess & Pande, 2003; Leeladhar, 2006; Basu, 2005). In other words, this view is buttressed by the belief that finance can be delivered to the poor only when banks are being controlled or even 'coerced' by the government (Burgess & Pande, 2003).

2.4.2. Indicators of Financial Depth in India

As a result of the bank nationalisation programme and the government's efforts to increase bank branches in rural and remote areas, the distribution of financial services in the country is quite extensive even in comparison to other developing economies (Basu, 2006). There are over 32,000 rural bank branches (and a total of 68,000 rural and urban branches) including public and private sector banks and regional rural banks (RRBs). There are more than 14,000 branches of rural cooperative banks which have together about 98,000 retail outlets of Primary Agricultural Credit Societies (PACS). The post office system, comprising 154,000 post office branches, has about 114 million savings accounts and services 110 million money orders. Looking at the period between 1973 and 1985, bank branches in rural areas grew at average yearly rate of 15.2% which is almost double the growth rate of branches in semi-urban (6.4%), urban (7.8%) and metropolitan (7.5%). Each rural bank serves an average population of 16,000 and including the rural cooperative banks, this falls to about 12,800, which almost the equivalent of Indonesia and Mexico. India's vast network of banks is reflected in its low average area per branch, compared to other countries. Similarly looking at insurance penetration,

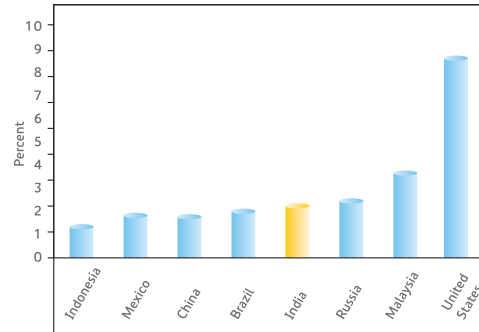
measured as premium as a percentage of GDP, was also marginally higher in India than it was in Brazil, China, Indonesia and Mexico.

Figure 2.1 International Comparisons of Area Covered per Branch (square kilometers)



Source: Basu (2006)

Figure 2.2 Insurance Penetration Across Countries in 2000 (premium/GDP)



2.4.3. Indicators of Financial Inclusion in India

As mentioned before, one of the primary concerns of the banking system in India has been the extension of institutional credit to rural India, in view of the fact that a majority of India's poor live in the countryside. It would appear that while advances have been made since the sixties towards greater inclusion, a substantial majority of India's rural poor do not have access to formal finance. We have already seen that, in spite of the vast banking network, only 30% of Indians have a savings account. Below, we look at some of the access to credit issues.

The table below documents the decreasing share of non-institutional sources of credit, most notably the fall in the share of moneylenders as a source of finance. Troublingly, this trend reversed between 1991 and 2002, with the share of moneylenders rising from 17.5% in 1991 to 26.8%. Clearly, the expansion of financial services in rural areas has fallen short of demand in the last decade (Mohan, 2006).

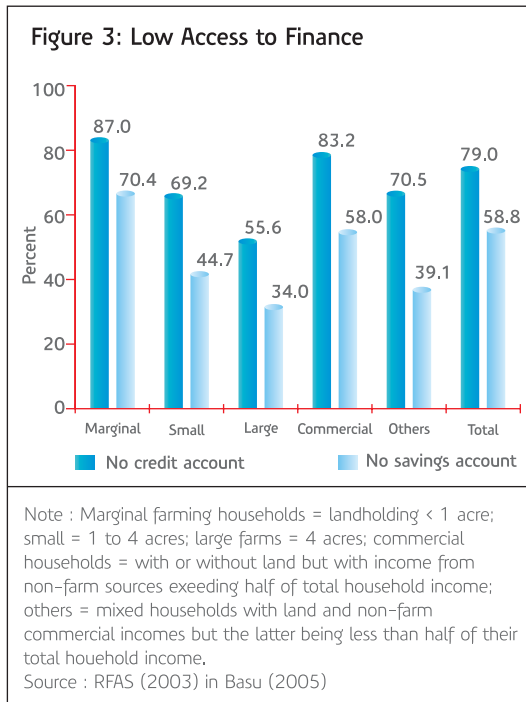
Table 2: Relative Share of Borrowing of Cultivator Households#

Sources of Credit	1951	1961	1971	1981	1991	2002\$
Non-institutional	92.7	81.3	68.3	36.8	30.6	38.9
Money lenders	69.7	49.2	36.1	16.1	17.5	26.8
Institutional	7.3	18.7	31.7	63.2	66.3	61.1
Co-operative societies, etc.	3.3	2.6	2.2	29.8	30	30.2
Commercial banks	0.9	0.6	2.4	28.8	35.2	26.3
Unspecified	-	-	-	-	3.1	-
Total	100	100	100	100	100	100

: Borrowing refers to outstanding cash dues.

\$: AIDIS, NSSO, 59th Round, 2003.

Source: All India Debt and Investment Surveys, Address by Dr. Rakesh Mohan at the Annual Bankers' Conference 2006



In order to explore some of the reasons behind this, we take the help of a recently conducted NCAER-World Bank survey called Rural Finance Access Survey (RFAS2003).

Commercial banks, rather than RRBs, are the most important source of credit for those rural households who have access to credit (Basu, 2005). Cooperatives and post office branches are not a very significant source of finance for rural households. Commercial banks contain over half the deposits, while RRBs only account for 34% of the deposits.

Who has access to credit? Studies across the world have found that one's

level of income and occupation is an important determinant of access to credit and savings (Peachy & Roe, 2006; United Nations, 2006). The RFAS 2003 confirms this by demonstrating that farmers with bigger landholdings benefit more from financial services in comparison to smaller farmers (Basu, 2005). The figure to the left shows that 44% of large farmers have access to credit and 66% of them have a savings account. In sharp contrast, 87% of marginal farmers do not have access to a savings account and 71% cannot access credit. Commercial households, that is, households engaged in some form of micro-enterprise, are also strapped for finance. Thus, the system appears to be skewed in favour of richer rural borrowers.

Given the absence of formal sources of credit, rural borrowers turn to non-formal sources of credit such as moneylenders. Around 44% of surveyed households reported having borrowed money informally at least once in the preceding year at an average interest rate of 48% per annum (as opposed 12.5% for loans from commercial banks) (Basu, 2005). Informal lending is most significant for marginal farm households, followed by small and commercial households, which would tallies well with the data that shows that marginal farmers are the most deprived of formal credit (Basu, 2005). While evidence indicates that poor households often borrow from both formal and informal sources (United Nations, 2006), in this case, poor households are able to borrow overwhelmingly from informal sources.

2.4.4. Barriers to Access

A recent survey reveals that 81% of the 63,016 household surveyed save (Max New York Life – NCAER, India Financial Protection Survey, 2007). In spite of this, only 59% of the adult

population or 30% of the total population has access to a savings account (see Appendix 1). Why are poor farmers unable to access credit or obtain deposit accounts from the formal financial sector?

One of the big obstacles that poor households employed in the informal sector face has to do with providing legal documents to open any kind of bank accounts, be it savings, credit or current. With reference to small entrepreneurs (but equally applicable to poor people attempting to open a bank account), Hernando de Soto, Chair of the United Nations High Commission on Legal Empowerment for the Poor, stated the problem vividly as follows:

"There are three questions that are always asked: What's your name — identify yourself? Most people in the world cannot identify themselves, at least not legally. Second: What is your address? Most people don't have an official address. And third: What company do you work with? Most people don't have an official company."

(Interview with Opportunity International, 2005, cited in United Nations, 2006)

Poor people, especially women and other marginalized groups, rarely have legal proof of identity, address or employment, which is necessary for opening a bank account. This process becomes even more burdensome for obtaining credit. Thus, organizationally banks do not seem to be set up to deal with poor households.

Basu (2005, 2006) directs our attention to two important roadblocks that rural households face when attempting to take a loan from a bank. Firstly, banks require collateral to make loans. RFAS (2003) shows that a little less than 90% of those who borrowed from banks or RRBs had to put up collateral. In rural areas, the most common form of collateral is land and lack of clear title in rural India would clearly preclude a sizeable proportion of the poor (United Nations, 2006). In any case, banks typically do not collect upon default, thus collateralizing loans has few advantages in addition to the disadvantage of adding costs. Secondly, the survey indicates that bribes, ranging from 10% to 20% of the loan, are common in all formal financial institutions including banks, RRBs and credit cooperatives. The average time taken to process a loan application is almost 33 weeks in a commercial bank. Such cumbersome and costly procedures make it unattractive for households to rely on formal finance.

As the statistics demonstrated earlier, banks have also been unable to open savings accounts for a sizeable majority of poor people. The CGAP (2002) donor brief mentions the following as the four essential features of a savings product: security, low transaction costs, appropriate design and interest rates. One of the reasons why people are not able to save is because their savings

are usually lent out to relatives who may be in need or spent due to emergencies. A savings account can thus play an important role in helping poor people save safely and securely. Poor people require flexible products and services which meet their income and cash flow patterns (United Nations, 2006; Basu 2005). For instance, a loan from a bank would require prompt payment on a monthly basis, whereas a poor person may prefer to make payments on a weekly or daily basis. When it comes to savings products, bank savings accounts may demand high minimum balances (Peachey & Roe, 2006). Similarly, small and micro enterprises, due to the higher risk associated with them, find it more difficult to access credit.

It is important to mention here that evidence from around the world shows that cultural norms, age and gender are important determinants of access to finance as well. A survey of bank managers in Madhya Pradesh shows that a high percentage of managers believed that women borrowers were more trustworthy and less of a default risk (United Nations, 2006). However, a greater percentage still believed that women were simply being used by men to gain loans. Transaction costs for poor people are often high, as explained earlier. The CGAP donor brief points out that rural savings is relatively insensitive to interest rates, but higher interest rates do cause demand to rise.

Finally, households may be dissuaded from using banks regularly since banks are fundamentally not set up to be organizationally and culturally compatible to deal with poor households. Banks are set up to promote banking at specific points, that is, at the bank branches. Specifically, Kempson (2006) refers to the psychological and cultural stumbling blocks which deter people from using banks. Rural households may feel intimidated by banks and develop a belief that banks are for more educated and richer individuals. This self-exclusion by low-income households may be as important a cause for exclusion as direct exclusion by banks. As practice with microfinance has shown, poor households, especially in rural areas, may respond better to 'doorstep' banking, that is banking which takes place off-site at a location which is both convenient and comfortable for users. Basu (2005) points out that currently banks do not have the option to recruit local staff. This would allow bank staff to better interpret client needs and deal with them appropriately.

Poor people around the world are simply looking a product that incorporates the following values: "security; convenience; liquidity; confidentiality; products appropriate for their needs; helpful, friendly, and respectful service; returns; and potential access to loans" (CGAP Interview with Steve Peachy, undated). To address some of the issues in promoting financial inclusion in India, RBI announced a few changes to banks in 2005-2006.

2.4.5. Policy Changes to Increase Financial Inclusion

The Reserve Bank of India's (RBI) Annual Policy Statement of April 2005 first brought the issue of financial inclusion to the notice of banks, saying that 'banking policies tended to exclude rather

than attract vast sections of the population³. 'As a result of a renewed commitment to financial inclusion, three major moves were initiated. The first major step has been putting in place a 'No Frills' basic banking account, which requires a zero or extremely small minimum balance. While the nature and number of transactions generated by this account can be restricted, banks have been asked to make this information known to customers at the time of account opening. Further, banks have been asked to give adequate publicity to these accounts. Along with this, promotion and dissemination of the Kisan Credit Card (KCC), an important means to reduce transaction costs, has also been given due importance. This scheme was introduced in 1998-99 with over 30 million cards issued by 2003; however, RFAS 2003 showed that use of the card was patchy with larger farmers reporting higher use. Secondly, the RBI has reduced some of the transaction costs incurred in opening a bank account by reducing the stringency of the 'Know Your Customer' norms for individuals who do not foresee having more than Rs. 50,000 in all their accounts taken together and whose total borrowing in a year will not exceed Rs. 100,000. Those who do not have proof of identity or residence can use the introduction of an account holder who already has an account for the last six months and for whom the full KYC procedure has been completed. Finally, the RBI has asked banks to charge reasonable amounts for services rendered and to be transparent about the charges from the outset.

In addition, the RBI also announced a drive for financial inclusion throughout the country, where the goal is to provide one 'no frills' bank account to each household. The first pilot project was conducted in Pondicherry district, led by Indian Bank and completed in December 2006. Since then, several drives, typically lasting a year each time, have been completed in different parts of India, the most notable examples being the achievement of 100% financial inclusion being achieved in the entire state of Himachal Pradesh and in Gulburga district, one of the most developmentally backward districts, in Karnataka. As mentioned earlier, this initiative is significant in that much of policy and hence research on financial access in India tends to be focused on credit extension rather than savings.

Research Methodology

The research concentrates on three broad areas:

- I. **Process of Financial Inclusion:** This study documents the process by which households acquire savings accounts. This includes the means by which banks identify 'un-banked' households, the manner in which the account is opened and the marketing and dissemination strategies used by banks to spread awareness about the drive. For

³ A formal source is defined as a commercial bank, government bank, self-help group or a cooperative. Informal sources include family members, friends, neighbors, moneylenders and shopkeepers.

those who continue to remain 'unbanked', this study seeks to understand the reasons behind this exclusion from banking services. Is this exclusion self-induced that is, households do not feel the need for a bank account or has it taken place due to other reasons like institutional negligence or ignorance on the part of households.

- II. How do Households experience Financial Inclusion:** This section of the study looks at how households and banks negotiate the process of becoming 'banked.' In other words, we look at the ways in which the drive for financial inclusion shapes the financial lives of households in a district, if at all. This study reports on household perceptions of banks and bank officials and the convenience, comfort and compatibility of formal finance in their lives vis-à-vis informal and semi-formal forms of finance such as moneylenders, pawnbrokers, microfinance institutions and Self Help Groups etc.
- III. Role of Financial Inclusion in Financial Behaviour:** Finally, the study also examines whether access to a savings account leads to usage of that account and of other formal financial services. Particularly, we are interested in knowing whether or not the drive is relevant to the lives of the households it seeks to service.

While there are currently several districts across India which have implemented the financial inclusion drive, this study examines the drive in Gulbarga district in Karnataka. Gulbarga, in the northern part of Karnataka, is considered to be one of the most backward districts in the state. In fact, in the state-compiled Karnataka Human Development Report 2005 ranks Gulbarga as 26th out of 27 districts in developmental terms. It is also an extremely large district consisting of over 1,300 villages and a population of over 30 lakhs as per the 2001 census. Thus, Gulbarga is intriguing from the point of view of research for two reasons. Firstly, the achievement of 100% financial inclusion in this district becomes hugely challenging for banks and other parties involved. Secondly, the relevance of financial inclusion in a poorer region can have important implications for other poor regions as well. In a developmentally advanced region, it would be fair to say that access issues in terms of roads and modes of transport, educational levels and priorities of bank clients would contribute to making any drive for inclusion more rather than less achievable.

The intention of this study is to focus on low income households since previous studies tell us that this is the section of population which is most deprived of access to formal finance. Thus, all the households examined herein are households deemed Below Poverty Line (BPL), identified by state-issued ration cards which enable them to buy food grains at subsidised prices through the Public Distribution System. This methodology's primary weakness lies in the fact that there is extensive misrepresentation in the classification of households as BPL, given the benefits which accrue to households with BPL status. Thus, many BPL households may, in fact, be Above Poverty Line (APL). However, this method was the most objective method of

identifying low-income households easily and efficiently.

This study uses both quantitative and qualitative techniques. Surveys, in-depth interviews and in-situ observation were used as the primary data collection methods during the study.

A structured questionnaire in the form of a survey was administered to a thousand respondents, spread over fifty villages. This survey collected information on the logistics and level of awareness regarding the drive for financial inclusion, on whether households opened an account and are using it, the availability of finance, both formal and informal, for households at large, the financial habits of respondents and their perceptions of formal and informal banking.

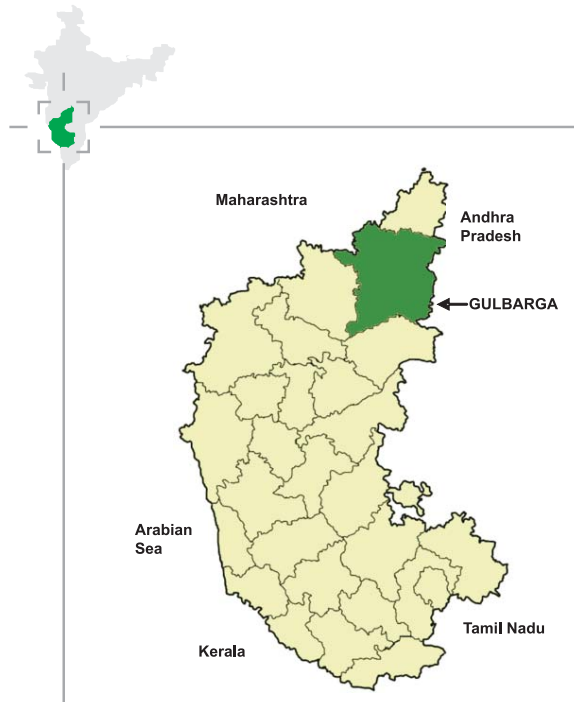
Given the size of Gulbarga, the survey was conducted in two blocks out of the eleven blocks of Gulbarga district in northern Karnataka. Shorapur and Gulbarga blocks have the highest proportion of BPL-households, according to the Karnataka's Rural Household Survey 2003 (available here <http://nitpu3.kar.nic.in/Samanyamahiti>). Twenty-five villages in each block were randomly chosen. The first twenty BPL households encountered in each village were surveyed⁴. In order to ensure that our sample did not suffer from selection bias and enjoyed some level of random selection, the survey was conducted at a minimum four different hamlets of the village. We also ensured that no two respondents lived next door to each other. In other words, every other house was skipped. This format meant that we did not restrict our sample to BPL households of any one community or belonging to one location within the village. In picking BPL households, since ration card lists were not easily available, it was not possible to select twenty households randomly from each village.

In-depth interviews were conducted with a variety of stake-holders including bank officials both at the RBI and the district-level banks in order to understand the meanings that banks attach to this drive and also to know the procedures by which households were included including marketing and operational changes that the drive necessitated. Unstructured interviews were also conducted with households, both banked and unbanked. These interviews were conducted in Gulbarga block alone.

⁴ A medical shock is defined as having spent more than Rs. 500 (44 PPP adjusted 2006 \$U.S.) on any one household member's medical care

Data Analysis

4.1. Gulbarga: Background



Gulbarga district, located in the northern part of Karnataka, used to be a part of Hyderabad state till about 1956. Gulbarga is one of the biggest districts in Karnataka and covers about 8.46% of the total area of the state. It comprises ten blocks namely, Gulbarga, Afzalpur, Chittapur, Shorapur, Shahapur, Jewargi, Yadgir, Aland, Chincholi and Sedam. It has 1378 revenue villages and 337 Gram Panchayats. It has a population of 31.25 lakhs which is 5.93% of the state's population, according to the

2001 census. The percentage of BPL families in the state is 33.85 per cent%. Gulbarga is one of the districts that have implemented the National Rural Employment Guarantee Programme (NREGP). NREGP provides one hundred days of employment to at least member of any household that desires it. Usually, the Village Panchayat Members have the responsibility of processing applications, distributing employment cards and arranging for bank accounts for all individuals who are interested.

The Karnataka state government released a state Human Development Report in 2005, where Human Development Index was computed for every district in the state, based on UNDP HDR 1999 methodology. According to this report, Karnataka's HDI (0.650) places it at seventh amongst all Indian states and higher than the all-Indian level (0.621). Gulbarga district placed 26th out of 27 districts, registering at HDI of 0.564. On each of the health, education and income indicators that make up the aggregate HDI, Gulbarga placed 20th, 25th and 25th, respectively.

Some particulars regarding the Gulbarga and Shorapur, the two blocks relevant to this study are given below.

	Gulbarga	Shorapur
Total Population	245,147	279,536
Literacy Rate	22%	19%
Female to Male Ratio	962	981
No. of BPL Families as of 1-4-2000	19,113	23293
No. of BPL Families as a percentage of all households	52%	45%
Small and Marginal Holdings as a Ratio of Land Holdings	13%	38%

Source: <http://www.kar.nic.in/rdpr>

4.2. The Financial Inclusion Drive: Describing the Process

Before looking at the survey results, this section provides an overview of how the financial inclusion drive was conducted in Gulbarga. This information was collected mainly through interviews with bank officials in Gulbarga and Central Bank officials in Bangalore.

In 2006-07, the RBI announced a drive for financial inclusion to be initiated in every state whereby the State Level Banking Committees and the state lead banks would be responsible for promoting 100% financial inclusion in at least one district in their home state. The State Level Banking Committee (SLBC) is a committee consisting of representatives from all banks in the state, the state government and RBI which meets regularly to coordinate banking activities within the state. The lead bank in a state is that bank which has the maximum number of branches and hence, outreach in that state. The lead bank is also the Convener of the SLBC.

It is noteworthy that each state has implemented the drive with slight variations. Thus, while financial inclusion typically entails opening savings banks accounts for all unbanked households, lead bank officials interviewed both in Chennai and Bangalore underscored the importance of other financial services as well. In both regions, financial inclusion was seen as a phased process, the first phase of which involved opening savings accounts. In Tamil Nadu and Pondicherry, the second phase was envisioned as the extension of credit through the provision of overdraft facilities and the third phase was the provision of insurance products. In Gulbarga, on the other hand, the second phase is currently being implemented as the extension of General Purpose Credit Cards⁵ to BPL households. Some states have been extremely enthusiastic in promoting the drive. For instance, as of August 2007, nine districts in Karnataka were included. Others have been more cautious. In Tamil Nadu, only one district has been included so far. Furthermore, in Gulbarga, No Frills Accounts are currently being opened only for the NREGP scheme, whereas in Pondicherry, at least theoretically, people who want No Frills Account can still hope to get one.

⁵ A medical shock requiring institutional care is defined as having spent more than Rs. 500 (44 PPP adjusted 2006 \$U.S.) on institutional medicine in the last year

While Karnataka's lead bank is Syndicate Bank, the lead bank, in the district of Gulbarga, instrumental in implementing the drive was State Bank of India. The decision to undertake the drive in Gulbarga was taken in July 2006. The actual opening of accounts began in August 2006. On January 18, 2007, the RBI formally declared Gulbarga to be 100% financially included. While the lead bank was not able to provide final figures, newspaper reports indicate that four lakh no-frills accounts with zero-balance were opened (Times of India, 19 January 2007).

How did the lead bank implement this mammoth exercise in one of most vast and developmentally backward districts in Karnataka? The first step in the exercise involved identifying all the households in Gulbarga from whom bank account information could be gleaned. While extensive information was available for rural areas, urban areas proved to be more difficult. This issue was resolved by using lists from the Food and Civil Supplies Department for urban regions. Once these lists were compiled, each of the banks active in Gulbarga district were provided with the lists for their service areas. The lead bank also established relations with the District NGO Federation (DINFED) so that NGOs operating in various parts of Gulbarga could be identified who would help with some of the outreach aspects of the drive. NGOs were responsible for: identifying unbanked households through surveys, helping these households fill application forms for bank accounts at their home, delivering application forms and other materials to the bank, picking up the passbooks for the newly opened no-frills accounts and delivering the passbook to the account holder. NGOs were paid Rs. 18 per new account opened by the bank where the account was held. Every month, each bank would send a report to SBI, delineating how many accounts were opened and whether or not the drive was on target. SBI also promoted the drive through newspaper advertisements and posters regarding the drive. In total, 26 banks and 56 NGOs were involved in this exercise.

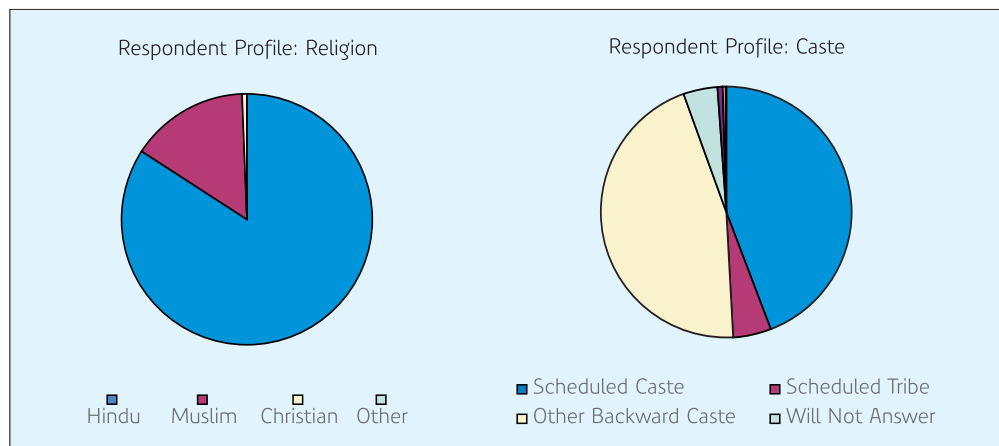
What kind of households received no-frills zero-minimum balance accounts? Originally, the drive was conceived as providing accounts to households with no access to formal finance. Thus, households that had postal savings accounts or whose members were also members of Self Help Groups (SHGs) that were linked to banks did not come under the ambit of the drive. Lead bank officials indicated that this changed during the drive. It was decided that postal savings account would no longer be sufficient to indicate inclusion. The drive for financial inclusion was implemented alongside the NREGP. NREGP was initiated in Gulbarga in early 2006. Once the drive for financial inclusion began, all NREGP accounts opened were also No Frills Accounts with zero minimum balance. 2,21,736 accounts were opened for NREGP, not all of them No Frills (Presentation by P C Jaffer, IAS during Seminar on LED by ILO).

At the end of time period allotted for the drive, each bank comptroller was asked to certify that their target had been achieved. Some comptrollers chose to include the number of accounts in their letter of certification, others chose otherwise.

Our conversation with bank officials show that some of the major obstacles for the lead bank in implementing the drive included having access to household-level information, conflicts between NGOs and banks and motivating banks to be engaged during the drive. While most of the public discourse surrounding this exercise tends to highlight the commercial opportunity for banks to capitalize on acquiring a much bigger client base, the picture on the ground tells a different story. Similarly, while officials in policy-making positions in Bangalore and Chennai tended to focus on the creation of a potentially huge market for banks, officials closer to the field remain skeptical of these claims. While most embrace the precept that these accounts are necessary and useful for low income communities, almost all agree that they cannot be economically viable for banks. In fact, the ledger of these No Frills Accounts in one regional rural bank branch that this author had the opportunity to visit showed that of the four hundred twenty two accounts opened, only twenty contained more than two lines of transactions. Almost all the transactions involved withdrawal of money from check deposits in the accounts. In other words, the balance in these accounts remained zero for most its existence. Given that these accounts are not profitable or even break-even for banks, it is not surprising that they were at odds with the NGOs whom they themselves had employed to open accounts. Banks informed us that they would often reject some of the applications brought in by NGOs claiming that these account holders were past account holders of the bank who had allowed their account to lapse voluntarily.

4.3. Describing Survey Respondents

We briefly describe the 498 respondents in Gulbarga block to whom the survey was administered. As mentioned before, all households were BPL households, identified by their ration card. The respondents were largely Hindu. A caste break-up revealed that the respondents were equally divided between the Scheduled Caste category and Other Backward Castes. The average number of members in each household was six, with about 3.4 adult members on average.



The education levels amongst the respondents were extremely low. 20% of the households have only one literate family member, 25% have two and 13% have none. In other words, a little over 80% have at least one literate member. The picture is less optimistic than what the numbers describe. Literate numbers in families tend to be the younger members of the family, typically children, who have very little control over decision-making in the household, especially in financial matters. The heads of the households interviewed were overwhelmingly illiterate with 73% reporting they had never been to school.

About 67% of the families live in semi-pucca houses and a third live in kaccha houses. Given the rural focus of our study, it comes as no surprise that over 90% of our respondents live in self-owned dwellings. Land ownership was also significant in our survey with about 54% of our respondents owning on average 3.4 acres of land. The major source of livelihood for our respondents was agriculture. Typically, respondents had more than one source of income, with own agriculture, agricultural labour and sharecropping topping the list.

4.4. Evidence from the Survey

We present partial evidence below from the survey only from one block that the survey was conducted in. Essentially, this represents only half the data collected.

4.4.1. Perception of Financial Inclusion Drive

Firstly, let us address the issue of how the financial inclusion drive was conducted on the ground. Level of knowledge about the drive, as revealed in by the survey, was extremely limited. Only 19% of the sample knew that banks were opening zero-minimum balance accounts and a miniscule 4% reported that a survey had taken place in their village where they were whether or not they had a bank account. The informant about the drive was overwhelmingly (or in 87% of the cases) the

"Do you know that banks are opening zero minimum balance accounts for everyone?"	
Yes	19%
No	81%

"How did you come to know that Banks were opening zero minimum balance savings accounts?"	
Bank Officials	1%
SHG Members	1%
NGOs	2%
Neighbours	4%
Village Panchayat Members	87%
Farmer Clubs	
Posters	
Newspaper Advertisements	
Village meetings	
Others	3%
Does Not Know	1%

Village Panchayats , not NGOs or bank officials as one would expect.

Secondly, the connection between the implementation of the NREGP and the financial inclusion is extremely significant. In fact, the survey finds that it was only a subset of those who had availed of the NREGP assistance who had knowledge about the zero minimum balance account. In other words, not a single respondent who had not received assistance under the NREGP knew of the drive. In fact, all those who opened the account also answered in the affirmative to whether or not they received assistance under NREGP. 34% of the respondents or 168 respondents received assistance and out of this subset, 148 first-time account-holder respondents opened 186 accounts since the beginning of the drive.

The table below delineates below some of the reasons why the rest of the sample did not open accounts. Here the top reason was a perceived inability to save on the part of poor households.

"Why have you not opened an account in the last year?"	
Already had an account	18%
Did not need account	13%
Did not have documentation	1%
Did not know about banks opening accounts for people	8%
Was never approached to open account	1%
Did not know anyone who could provide an introduction to the bank	1%
Insufficient Income for saving	56%
Does Not Know	3%
Blank	1%

However, even amongst this group (adjusting for those who already have a bank account), opinions were almost divided as to the desire to open accounts, with 45% expressing a desire to open accounts and 50% expressing a distaste for bank accounts. What are some of reasons why households want an account? The top reason by far was to save money (48%) and the second one was to receive government assistance (15%). For households that do not want a bank account, the reason was once again the perceived inability to save (81%).

Close to 90% of those who opened accounts maintained that the reason for opening the account was to receive some for of government assistance.

"What were the reasons that you opened the account?"		
	No. of Respondents	%
For Saving Money	7	5%
For Safekeeping	4	3%
For receiving remittances	8	5%
To request loans	5	3%
Receive Govt payments from NREGP	94	64%
Receive non NREGP Govt payments	35	24%
Improves Social Status	2	1%
To get an overdraft	0	0%
Don't Really use the Account	1	1%
Other (specify)	3	2%

Note: Sum of responses adds to greater than 100% because some respondents chose multiple answers

This connection would explain why most respondents have heard of opening of bank accounts from Village Panchayat members rather than from NGOs since it is the Village Panchayat which is responsible for opening accounts under NREGP. Similarly, 84% reported that they received help opening the account and once again, Gram Panchayat officials topped the list of those who helped respondents open account.

"Did somebody help you open the account?"	
Yes	84%
No	14%
Left Blank	3%

"Who helped you?"	
Bank Officials	23%
Gram Panchayat officials	67%
NGO	0%
Relative	2%
Neighbour	5%
Government Official	1%
Other	1%
Blank	2%

As mentioned before, some households opened more than 1 account in the time period we are looking at. On average, houses which did open accounts opened 1.3 accounts.

	No. of Households	%
HH which opened 1 account	11	80%
HH which opened 2 accounts	9	14%
HH which opened 3 accounts	21	5%
HH which opened 4 accounts	71	1%
	148	100%

The average minimum balance in these accounts was Rs. 113, that is the amount required to put in their account to open their account. To put this in perspective, one days worth of pay under the NREGA is about Rs. 80 and one day's pay for agricultural labour in this region is typically Rs. 50 for men and Rs. 20 for women. Only 64 of the accounts (or 34% of the total accounts opened) were explicitly identified by account holders as zero minimum balance accounts. 100% of the accountholders did not believe they could write cheques for their accounts. In over 50% of the cases, it took between a week and fifteen days between application and account opening.

Minimum Balance (in Rs.) No. of Accounts	
0	64
2 - 10	10
50-100	59
101- 200	7
201 - 300	5
300 - 400	1
400 - 500	12
> 500	6
Will Not Answer	1
Does Not Know	2
Blank	19
Does Not Know	186

"How long did it take after account application to open the account?"	
Same Day	8%
A week	35%
Fortnight	23%
One mOnth	15%
More than a month	17%
Does Not know	1%
Blank	2%

In terms of opening accounts, the financial inclusion drive aims to open accounts at the doorstep for unbanked households. In fact, while a majority of the households applied for the accounts at their homes, 39% also applied for these accounts at banks. It is not clear whether or not the latter had the opportunity to open accounts at home. Passbook delivery at home and pickup at banks by new account holders are equally common.

Where did you apply for the account?		
	No. of Respondents	%
At or near your home	68	46%
At the bank office	57	39%
Other	14	9%
Does Not Know	1	1%
Blank	8	5%

How did you receive the passbook to this account?		
	No. of Respondents	%
Account holder picked it up at the bank	55	37%
Account holder picked it up elsewhere	16	11%
Passbook delivered at doorstep	55	37%
Never Received Passbook	6	4%
Other (specify)	15	10%
Blank	1	1%

Should we assume that apart from the 64 accounts identified by accountholders as being zero minimum balance, none of the others were beneficiaries of the drive? Since information regarding No Frills Accounts is sparse, even amongst those who know of it, it is difficult to tell whether or not these new accounts were meant to be No Frills Accounts or not. However, the sample we present above is for first time account

holders, a majority of whom received assistance under NREGA. Thus, if these accounts were opened during the duration of the drive, a majority of them should have been No Frills Accounts. Furthermore, there is some anecdotal evidence to show that when individuals open accounts they are asked to put some money in the account as a token, even in the case of No Frills Accounts.

4.4.2. Savings Behaviour

Questions about savings behaviour elicited the fact that 87% of households in our survey save. Of those who save, majority save on a weekly basis.

"Do you save regularly?"	
Yes	87 %
No	13 %

"How regularly do you save?"	
Daily	13%
Weekly	54%
Fortnightly	17%
Monthly	12%
Less than Monthly	3%
At the time of Harvest	1%

The primary reasons for which poor households save are firstly, to face uncertainties in the future related to health and employment and secondly, for the future. While 'future' is not a very concrete idea (especially since education and wedding expense can also be thought of as future expenses), conversations with households revealed a concern for the future of their children as an important motivation to save. This shows that households value savings, not simply for a stated purpose, but also intrinsically as something that will be of use to them in the future.

"Why do you save?"	
To face uncertainties related to health and employment	86%
To invest in business	1%
To invest in education	26%
For the future	74%
To repay loans	8%
For wedding expenses	3%
Other (specify)	3%
Does Not Know	
Blank	5%

Note: Sum of responses adds to greater than 100% because some respondents chose multiple answers

Informal savings mechanisms, such as savings at home in a tinbox or in a purse were significant in our survey. 66% of the households saved in a tinbox and 85% saved cash elsewhere in the house. 67% of households reported having a formal or semi-formal savings account such as bank accounts, post office savings accounts, savings with an MFI, an SHG or a neighbourhood group or chit funds. The percentage of households with each of these formal and semi-formal savings accounts is given below. About 160 (32%) respondents did not have access to any formal or informal savings accounts, in spite of the drive.

No. of accounts	Bank Account		Post Office Savings Account		SHG Savings		Chit funds	
0	283	57%	458	92%	311	62%	492	99%
1	179	36%	34	7%	179	36%	6	1%
2	28	6%	5	1%	5	1%	0	0%
3	5	1%	1	0%	2	0%	0	0%
4	3	1%	0	0%	0	0%	0	0%
5	0	0%	0	0%	1	0%	0	0%
Sum	498		498		498		498	

This table demonstrates that in our respondents, the prevalence of bank accounts is lower than the prevalence of SHG savings groups. We will restrict discussion henceforth to the accounts highlighted in the table above, that is, to Bank Accounts and to SHG groups, since they are the two most common forms of savings accounts. About 75 of the bank accounts were older than 3 years and those respondents have been taken out of the analysis presented below since the goal of our study is to look at new users of bank accounts rather than old users.

Total No. of Accounts				
Time Since Account Opening	Bank Accounts		SHG	
	No. of Accounts	% of Accounts	No. of Accounts	% of Accounts
Less than 1yr ago	173	52%	28	15%
One year ago	11	3%	14	7%
More than 3yrs ago	75	22%	134	72%

What the table above shows is that even though SHG and Bank Accounts are almost evenly present in our sample size, SHG membership clearly has a longer standing tradition, based on the fact that over 50% of the account was opened only within the last year. Meanwhile, over three quarters of the SHG accounts were opened over three years ago.

While bank accounts were the most common savings account that our respondents owned, our data shows that these accounts were primarily used to receiving government assistance. 95% of households surveyed

indicated that they do not make regular savings in this account. The top reason being that these accounts are used to receive government assistance, closely followed by the perceived lack of ability to save. On the other hand, SHG group members overwhelmingly save at least Rs. 10 every week.

While the data presented above is incomplete, it does provide some food for thought and direction for future research. We discuss both below.

"Why don't you make regular deposits?"	
Insufficient Income to make regular deposits	44%
Make regular deposits in other savings accounts	3%
Make regular deposits into other savings instruments like savings cash at home or buying jewellery	1%
Use account only to receive Govt assistance	52%
Other	1%

4.5. Discussion of Results


While financial inclusion is no doubt a laudable goal, the results from this study demonstrate the expense and the enormous logistical difficulties of managing an inclusion drive in a district as vast as Gulbarga. While conversations with bank officials show their commitment to following RBI guidelines, they also reveal widespread skepticism regarding the efficacy of these guidelines. Thus, the drive has not wholly adhered to the spirit behind offering unbanked households bank accounts.

There is a need to do a cost benefit analysis of these accounts. Is it really a commercial opportunity for banks? Given the low usage of these No Frills Accounts, one would intuit that this is not the case. If the benefits to households from owning a bank account are greater than the costs, there is certainly a case to be made for them, even if it is not economically viable for banks. However, our data reveals that the relevance of these accounts in the financial lives of households is extremely minimal.

The data presented above reveals that only those who received assistance under NREGP knew about the accounts and had in fact opened any No Frills Accounts. Does this mean that no other No Frills Accounts were opened? It is possible that other accounts were opened. But as we see from our study, while households understand the significance of saving to face future economic shocks and indeed, do save for such unforeseen events, households do not save in their bank accounts. Given the lack of usage and understanding of a bank account, it is possible that households that previously opened accounts under the drive, do not remember doing so at the present time. Gulbarga suffers from low levels of education and economic development. Given these circumstances, financial literacy training is a must to go along with the provision of a bank account.

Regarding the implementation of the drive, there are several inconsistencies that emerge. For instance, newspaper advertisements in a largely illiterate district may not be the best way to disseminate information regarding the financial inclusion drive. Our study shows that several families were able to open more than one No Frills Account. While this number was not significant, it is still worth mentioning. Information regarding the drive has not seemed to have filtered down to the target population. As in the last paragraph, this may not be because banks didn't try, it may simply be that bank accounts are not relevant to the lives of unbanked households and thus, they did not pay attention.

Furthermore, the data demonstrates that all the accounts opened were opened in order to receive assistance under NREGP, rather than under the financial inclusion drive. While NREGP accounts are also No Frills Accounts with zero minimum balance in principle and banks incorporate it within the aegis of the financial inclusion drive, these accounts are clearly earmarked for



receiving government assistance, rather than aiding non-bank clients to develop banking habits. It comes as not surprise that the drive has not inculcated any significant relationships between banks and their new clients.

Banks have been asked to open bank accounts for households who are excluded from all possible avenues of bank linkage including SHG bank linkage. It is important to consider why these households are not part of SHGs and what this implies about their risk profile⁶. Conversations with households that do not have SHG members reveal that the primary reason for not joining is the inability to save the requisite Rs. 10 on a weekly basis. In other words, bank accounts are being extended to families that do have savings habit. While these families need a safe place to save as well, a bank account, given its cost to the bank and low returns from zero minimum balance account, may not appropriate for them.

This data also reveals a few inconsistencies that are unexpected at first glance. Many households indicate that one of the reasons they have no bank accounts is because they do not make enough money to save. In spite of this, when asked if they want a bank account, a significant number indicate that one of the reasons to own a bank account is to be able to save money. Similarly, an overwhelmingly majority of households indicate that they save on a weekly basis. What causes this seeming dissonance in opinions? Informal conversations with respondents reveal that these households think of bank accounts as places to save larger amounts of money, while they tend to save smaller amounts to the tune of Rs. 10-20 per week.

What this study shows is that low income households can and do save small amounts either in their house or in Self Help Groups. Households that were most successful in saving were families that were part of SHGs. The average cost of traveling to a bank in Gulbarga block was about Rs. 22. Most families belonging to SHGs save approximately Rs. 10-15 every week. Thus, using this as a proxy for all families, even if households do save in banks, we find that for households which require a micro-savings product, a bank account may not always be the most cost effective solution.

Conclusion

This study was an attempt to understand the process behind the recent financial inclusion drive in India in the specific context of Gulbarga district in Karnataka. We attempted to document the manner by which households become financially included and how this changes their financial behaviour.

This study finds that the financial inclusion drive, while implemented with a great deal of enthusiasm by banks and bank officials, does not resonate with low-income households. While the actual drive itself suffers from several inconsistencies, the usage of accounts opened is abysmally low. One issue with the drive include the changing nature of what financial inclusion meant. For instance, at the beginning of the drive, holders of post office accounts came under the ambit of the included. But by the end of the drive, they were pushed under the excluded category. Similarly, while accounts were ostensibly zero minimum balance, account holders were asked to deposit some token sum of money in their bank account. Coupled with the fact that bank officials do not see this as a commercial opportunity, the financial inclusion drive is unlikely to yield positive returns without the addition of other components to this programme like financial training etc.

In this context, it is important to mention several other ways that inclusion can be broached. The Business Correspondent model which has not been explored in great detail on the ground is one way to extend banking services to the unbanked so that banking arrives at their doorstep in a more usable form. Given the significance of NREGP payments in this study, it is worthwhile to mention an effort in the neighbouring state of Andhra Pradesh which uses FINO smart cards to deliver government assistance to the beneficiaries. There are no bank accounts involved here. While this is slightly tangential to what is under discussion, the FINO smart card provides an important way to overcome infrastructure problems that small bank branches in rural areas may face in having to cater to the demand for bank accounts that the NREGP has created.

Finally, this paper mentioned earlier that access to finance is seen as so intrinsic to economic development that in developing countries, the tendency has been to think of a bank account as a basic right, comparable to drinking water, health etc. The evidence just shared clearly exposes the fallacy of this idea. While access to finance may be a critical factor for many households to hoist themselves out of poverty, it is not necessary that access must come from a relationship with a bank. This study shows that there is unmet demand for a micro-savings product. However, it would be inappropriate to interpret that bank accounts are the optimal way to provide this facility to low income households.

Bibliography

Basu, Priya (2005). "A Financial System for India's Poor." *Economic and Political Weekly*, September 10, 2005. pp. 4008 – 4012

Basu, Priya (2006). *Improving Access to Finance for India's Rural Poor* Washington, D.C.: The World Bank

Beck, Thorsten and de la Torre, Augusto (2006). "The Basic Analytics of Access to Financial Services" Mimeo

Burgess, Robin & Pande, Rohini (2003) "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment" CMPO Working Paper Series No. 04/104

Das, V (2006). "Financial Inclusion Initiatives" Inaugural Address for delivered at the 'National Conference on Financial Inclusion and Beyond: Issues and Opportunities for India '. September 19–20, 2006 ,Cochin

Dev, Mahendra S (2006). "Financial Inclusion: Issues and Challenges". *Economic and Political Weekly*. October 14, 2006. pp. 4310 – 4313

Ghate, Prabhu. "Consumer Protection in India Microfinance: Lessons from Andhra Pradesh and the Microfinance Bill." *Economic and Political Weekly*, March 31, 2007

Honohan, Patrick (2004). *Financial Development, Growth and Poverty: How Close Are the Links?* In Charles Goodhart, ed. *Financial Development and Economic Growth: Explaining the Links*. London: Palgrave

King, Robert G., and Ross Levine. 1993a. *Finance and Growth: Schumpeter Might Be Right.* *Quarterly Journal of Economics* 108(3):717–37.

Kempson, Elaine (2006). "Policy level response to financial exclusion in developed economies: lessons for developing countries" Paper for Access to Finance: Building Inclusive Financial Systems May 30–31 2006 World Bank, Washington DC

Leeladhar, V (2005). "Taking Banking Services to the Common Man – Financial Inclusion" Commemorative Lecture by Deputy Governor Reserve bank of India at the Fedbank Hormis Memorial Foundation at Ernakulam on December 2, 2005

Li, Hongyi, Lyn Squire and Heng-fu Zou, 1998. "Explaining International and Intertemporal Variations in Income Inequality", *Economic Journal*, 108(1): 26–43.

Littlefield, Elizabeth; Helms, Brigit; Porteous, David (2006). "Financial Inclusion 2015: Four Scenarios for the Future of Microfinance" CGAP Focus Note No 39

Max New York Life – NCAER India Financial Protection Survey (2007). "How Indian Earns, Spends and Saves"

Mohan, Rakesh (2006). "Economic Growth, Financial Deepening and Financial Inclusion" Address by Dr. Rakesh Mohan at the Annual Bankers' Conference 2006, at Hyderabad on November 3, 2006

Peachey, S. and Roe, A. (2006). "Access to Finance: A Study for the World Savings Banks Institute"

Rajan, R. and Zingales, L. (2003). Savings Capitalism from the Capitalists, Crown Business, New York.

RBI Circular No. RBI/2005-06/233 RPCD.RF.BC.54/07.38.01/2005-06 dated 13.12.2005.http://www.iibf.org.in/financeq/docs/RBI_circular_13.12.2005_Fin_Inclusion.doc Accessed on 8.5.07

United Nations (2006). Building Inclusive Financial Sectors for Development New York

Union Budget 2006-07. Available at: <http://www.banknetindia.com/banking/budget79.htm>

World Bank (2005). "Measuring Financial Access: Outlining the Scope of Current Data Collection Efforts." The World Bank Financial Sector Vice Presidency.

Targeting Efficiency: How well can we identify the poor?

Abhijit Banerjee, Esther Duflo,
Raghabendra Chattopadhyay
and Jeremy Shapiro

Abstract

In this study, we evaluate how well various systems for identifying and targeting assistance to the poorest of the poor actually identify the poorest. Firstly, we consider the methods used to identify households eligible for participation in assistance programs administered by the Indian government. Secondly, we evaluate Participatory Rural Appraisals (PRAs) as a mechanism to identify exceptionally poor households. Finally, we investigate whether additional verification of information gathered in PRA's (through a particular process used by an NGO) can refine the identified sub-population to include the very poorest. For each method of targeting, we examine whether the households identified by that process are more disadvantaged according to several measures of economic well-being than households which were not identified (land holding, consumption per capita, education, etc). We conclude that PRAs and PRAs coupled with additional verification successfully identify a population which is measurably poorer in various respects, while the standard government procedures do very poorly in this respect, and seems to identify households which are not observably different than those who were not identified in this sample.

This study was prepared by the Center of Microfinance, Institute for Financial Management and Research, Chennai. We thank Bandhan, in particular Mr. Ghosh and Ramaprasad Mohanto, for their tireless support and collaboration, Jyoti Prasad Mukhopadhyay and Sudha Kant for their research assistance, Prasad Chakraborty for his work collecting data, CGAP and the Ford Foundation for funding, and, especially, Annie Duflo and the Center for Microfinance for their outstanding support of this project.



Introduction

Nearly all poverty alleviation programs target a particular sub-population. This feature is most readily apparent in programs designed to aid those who have suffered a particular tragedy, such as grants to widows of debt-ridden Maharashtra farmers, but is also generally true of large, broad based development interventions. At first blush, this may seem unremarkable and not to warrant particular consideration. But effective identification of the target population is crucial to the success of aid programs. If, for instance, households which are adequately nourished are identified as eligible for subsidized food, the program is unlikely to significantly reduce malnutrition.

When the targeted population is not distinguished by a well-defined, observable trait, however, identification of the intended population may be complicated. Evidence suggests that the targeting efficiency of aid programs is less than perfect. A report by the Indian National Sample Survey Organization found that 18% of the wealthiest 20% of the rural population (ranked by monthly per capita expenditure) held Below Poverty Line (BPL) rationing cards. That targeting inefficiency has real consequences is apparent from a 2006 story in *The Hindu* which reported on street protests carried out by families who had been denied their ration cards.

In this study, we evaluate the targeting efficiency of various assistance programs operated by the government of India. We find that the methods used to identify eligible households do not particularly target the poorest of the poor. In our sample, those who receive government assistance do not appear worse off, according to our measures of poverty, than households which do not.

We also evaluate the targeting efficiency of a process used by Bandhan, a Kolkata-based micro finance institution, to identify households eligible to participate in one of their programs designed to assist the poorest of the poor. This program offers eligible households grants consisting of income generating assets (livestock, inventory, etc.) as well as training and assistance operating a small-scale enterprise. The goal is to assist destitute households to establish a regular income source.

Our results indicate that Bandhan's process successfully targeted a group which appears poorer in various respects, particularly land ownership, assets and credit access. Along other dimensions of poverty, such as expenditure, the results are less crisp; it does not appear that per capita consumption among the identified group is less than among those not identified as eligible. This may be in part due to the fact that these families are smaller, so that their total expenditure (not per capita) is made smaller.

While we focus on this particular intervention, our study has broader relevance since the

Financial Inclusion in Gulbarga: Finding Usage in ACCESS

identification process employed in this setting included a Participatory Rural Appraisal (PRA). PRA's are widely practiced by NGOs, both within India and internationally, when conducting development interventions. Increasingly, PRA methodologies are used to identify beneficiaries for assistance programs. Consequently, it is important that the information collected from a PRA accurately reflects the conditions within the village where it was conducted.

There is some evidence suggesting that certain types of information can accurately be obtained using PRAs (see Chambers (1994) for an overview of various results). Specifically in West Bengal, Chattopadhyay and Duflo (2001) collected information on the infrastructure (water systems, etc.) of various villages using PRAs. The infrastructure was subsequently inspected to verify the information from the PRA, revealing that this information was highly accurate. In this study we assess the reliability with which PRAs can accurately rank village residents according to economic status.

Specifically, we evaluate how well our measures of poverty accord with the evaluation of poverty established by the PRA. This analysis reveals that those ranked as most poor in the PRA are in fact poorer than others in very observable dimensions such as land and asset ownership. They also have less access to credit. This suggests that the PRA can generate a reasonably good indicator of economic well-being and can serve as the basis for targeting.

Data and Data Collection

In order to improve their targeting process, Bandhan requested that we do a study to assess how effectively they were identifying the poorest households in each village, or the "Ultra Poor." To accomplish this we conducted a detailed survey among those not identified as Ultra Poor in several villages as well as among those identified as Ultra Poor. This allows us to compare the economic situation of those identified as eligible to receive grants and those who were not identified.

Firstly the surveying team conducted a census of all households in the village. Each household was classified on a 1–5 scale along several characteristics, such as land holdings, quality of house, ownership of assets, education status, employment status, access to credit, etc. This census utilized similar classification criteria as the government administered BPL census, which is intended to identify the population living below the poverty line and determine who is eligible for certain government assistance programs.

Due to the limited scale of this survey, the sampling frame was restricted to the poorer population within the village. To be considered for our survey, a household must meet one of the following requirements: own less than 1 acre of irrigated land or less than 2 acres of non-irrigated land, not live in a pucca house (i.e. one made of brick, stone or concrete), own less than 4 articles of clothing, and own none or only one durable household good¹.

Of 1,757 households enumerated in the economic census, 605 satisfied the criteria above. From this restricted list, a random sample of households was selected and administered a survey similar to that given to households identified as eligible for grants by Bandhan. This survey was conducted among 178 households in five villages; eight of these households were under consideration by Bandhan and were subsequently verified as eligible to receive a grant. Of the remaining 170 households, 121 appeared in the list of households from the PRA conducted by Bandhan. The other 49 households were not enumerated by the PRA. While it is of independent interest that the PRA process fails to enumerate some households, for the purposes of this study we restrict our analysis to the households appearing in the PRA list. Our final dataset contains these 121 households as well as 92 households identified as Ultra Poor by Bandhan.

Table 1 provides summary statistics for our entire sample as well as separately according to whether households were identified as Ultra Poor by Bandhan or whether they fall below the official poverty line for Rural West Bengal². As might be expected given the mandate of

¹ The items considered were: computer, telephone, refrigerator, husking machine, color television, electric cooking appliances, costly furniture, LPG (gas) connection, light motor vehicle or commercial vehicle, tractor, two or three wheeler, motor van, power driven tiller

² Based on the 2004–2005 Poverty Line Estimates by the National Sample Survey Organization. Below the poverty line for rural West Bengal is defined as having per capita consumption under Rs. 382.82

Financial Inclusion in Gulbarga: Finding Usage in ACCESS

Bandhan's identification process and the sampling design of the additional survey, this is a relatively poor population. The mean per capita monthly average expenditure is Rs. 426 (\$1.25 per member per day in PPP adjusted 2006 U.S. dollars). Average expenditure on food and fuel is Rs. 303 (\$0.89 per member per day in PPP adjusted 2006 U.S. dollars). For both measures of consumption, approximately half the sample population spends less than one dollar a day and nearly all the population spends less than two dollars a day.

Other variables conform to what one would expect in this sample. Mean land holdings are 5.65 katthas (approximately 0.113 acres). In addition 21% of the sample is landless. While 46% of households have obtained loans, only 8% obtained credit from a formal source³.

As well as being poor, this population lacks education; average completed years of education per household member is 1.24 years and 23% of households have school aged children (5-14 years old) out of school.

This is also a vulnerable population; only 66% report that everyone in the household regularly eats two meals a day, approximately half of those surveyed report having experienced a medical shock in the last year, 21% suffered a medical shock⁴ requiring institutional care⁵ and 41% suffered an economic shock⁶. Moreover, to the extent that receipt of assistance is an indication of need, this is a needy population; two thirds report receiving assistance from one of the government programs listed in the questionnaire (such as Below Poverty Line (BPL) rationing, subsidized housing, participation in employment generating schemes, etc.). Figures for the most common assistance programs are reported separately in Table 1.

On average, those identified as Ultra Poor have less land, fewer assets, less education and are more likely to be landless and have children out of school. Mechanically, those living below the official poverty line spend less than those who do not. They are also 15% less likely to report having experienced a medical shock requiring institutional care, a difference which is statistically significant at the 1% confidence level. Since this is defined as having spent more than Rs. 500 on institutional medical care this may partly result in their lower expenditure. When comparing the Ultra Poor to those below the poverty line, it is apparent that the Ultra Poor spend more per capita but they have less land, are more likely to be landless, have less access to formal sources of credit, are less educated and are more likely to lack able bodied adult household members (particularly male members).

³ A formal source is defined as a commercial bank, government bank, self-help group or a cooperative. Informal sources include family members, friends, neighbors, moneylenders and shopkeepers.

⁴ A medical shock is defined as having spent more than Rs. 500 (44 PPP adjusted 2006 \$U.S.) on any one household member's medical care

⁵ A medical shock requiring institutional care is defined as having spent more than Rs. 500 (44 PPP adjusted 2006 \$U.S.) on institutional medicine in the last year

⁶ An economic shock is defined as any of the following occurring in the past year: house was severely damaged, livestock became ill, livestock died, conflict/dispute/legal case, or theft

Targeting Efficiency of Government Aid Programs

Since our survey inquired about receipt of assistance from various government poverty alleviation programs, we are able to assess to what extent this aid was directed to the poorest segment of the population. One limitation of this exercise is that, by design, all households in our sample are drawn from the bottom of India's economic spectrum. Even so, if these government programs aim to benefit the very poorest we should expect that either the poorest within our sample overwhelmingly receive this aid or that all households in our sample do. As is evident from Table 1 the latter case does not appear true; for instance only 29% receive BPL rationing and 10% have an Antodaya card.

Targeting for many government aid programs is based on the BPL census, conducted by the government to identify those households living below the poverty line. This census, however, has been criticized for systematic exclusion of extremely poor households. Moreover, there are concerns that the final lists of BPL households are directly manipulated to include non-poor households (Mukherjee, 2005). Jalan and Murgai (2007) find that many households who are below the poverty line according to consumption measures are incorrectly classified by the BPL census.

To assess the efficiency of this targeting process in these villages, we contrast the features of those who participate in government programs and those who do not. Specifically, we compare various expenditure measures, land holdings, house size, whether members eat two meals a day, access to credit, self-classification of financial condition and an index of asset holdings based on principal component analysis of durable goods and livestock holdings. By regressing various poverty indicators on a dummy indicating participation in a particular government program, and village dummies, we compare the mean of the poverty indicator between those that receive aid and those that do not.

In particular, we perform this comparison for four government aid programs: BPL and Antodaya rationing programs, the Indira housing program and employment generating schemes. The BPL and Antodaya programs provide a card which entitles households to purchase subsidized food and fuel at ration shops. BPL cards are intended for those living below the poverty line while Antodaya cards are intended to go to exceptionally poor households. The Indira housing program (Indira Awaas Yojana) evolved into its present form by 1996, and the goal of this program is to improve housing for the disadvantaged rural population. To this end grants are distributed to build or repair homes and, in some cases, loans are facilitated for these purposes. Preference for the Indira housing program is supposed to be given to those identified as below the poverty line by the government BPL census (Jalan and Murgai, 2007). Preference may also be given to

Financial Inclusion in Gulbarga: Finding Usage in ACCESS

widows of servicemen. While a national program, local governments (District Panchayat, Gram Sabha and DRDA) bear some responsibility for the implementation of this program.

The National Rural Employment Guarantee Act (NREGA) was launched in 2005. The mission of NREGA is to provide "at least one hundred days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work and for matters connected therewith or incidental thereto."⁷ Participation in the program requires registration with the Gram Panchayat (local official) to obtain a job card. Holders of this card become eligible to apply for jobs allocated under the program.

According to our results, the population which receives assistance from these programs is not statistically different, with respect to our poverty indicators, from the population which does not. Table 2 presents the results. For receipt of BPL rationing we are unable to reject that the means between the two groups are equal for any of the indicators of poverty. Moreover, some of the coefficients take the opposite sign than would be expected. The same is true when comparing households which have Antodaya cards with those that do not.

Only with respect to per capita non food expenditure do beneficiaries of the Indira housing program appear statistically different (at the 10% confidence level) from their peers. However, no other measure is significantly different and, as in the other cases, several coefficients have the "wrong" sign.

Interestingly, there is at least the suggestion that households which have received work from an employment generating scheme are poorer than others. The coefficient on participation in this program enters with the predicted negative sign when any of the expenditure measures are taken as the left hand side variable, although no coefficient is significant at the 10% level. The results also suggest that these households own an average of 4.7 katthas (0.09 acres) less land, a difference which is significant at the 10% level. These results may be driven by the fact that there is also a component of self-selection in employment generating programs. Since benefits require work, only households who are poor enough to lack more attractive work opportunities will take up these programs. Mukherjee (2005) notes the potential of self-selecting programs to overcome barriers, whether political or practical, to effective targeting.

Perhaps owing to the failures of censuses to identify poor households, many organizations have turned to other methods. A particularly popular method used for ascertaining the economic status of households is the Participatory Rural Appraisal (PRA). Indeed, Mukherjee (2005)

⁷The National Rural Employment Guarantee Act of 2005. Retrieved from: The Gazette of India, New Delhi, Wednesday, September 7 2005 pp:1. <http://rural.nic.in/rajaswa.pdf>

draws on information gathered in PRA's to evaluate the targeting efficiency of the BPL census. The PRA process was pioneered in the 1980's and 90's, largely by government and non-government organizations in Kenya and India. By 1997, the practice had spread globally; PRA activities had been conducted in over 30 countries, both developing and developed, by the end of 1996. In India, PRA methods have been used by numerous NGO's as well as by several government agencies⁸ International organizations, including USAID, Save the Children and Care International among others, also employ PRA methods in conducting their operations⁹. In light of the targeting process used by Bandhan, we evaluate the accuracy with which PRAs can identify especially poor households. Firstly, however, we provide an overview of Bandhan's assistance program and the specifics of the process used to identify beneficiaries.

⁸ Chambers, 1997. p.114, 248

⁹ Burde, Dana. Save the Children's Afghan Refugee Education Program in Balochistan, Pakistan, 1995- 2005 2 Report, 2005 <http://www.savethechildren.org/publications/technical-resources/education/pakistan-afghan-refugees-education-project-report-9-26-05.pdf>; http://www.usaid.gov/regions/afr/success_stories/ghana.html; <http://www.care.org/careswork/projects/ETH051.asp>

Analysis of Bandhan's Identification Process

4.1 Overview of Bandhan's "Targeting the Ultra Poor"

It has been noted in various studies on the impact of microfinance that the benefits accruing to borrowers tend to be less apparent among the poorest of the poor (Morduch 1999, Rabbani, et al. 2006). Morduch (1999) remarks that this result lends credence to the argument that "poorer households should be served by other interventions than credit." One potentially constructive "other" intervention would be one which prepares the poorest of the poor to successfully participate in regular microfinance programs, which is precisely the aim of this project.

In theory a production oriented loan, for example for the purchase of livestock, should generate the income stream to meet loan payments and thus could be extended to clients without an independent income source. In practice, however, micro credit institutions may be reluctant to extend loans to the poorest of the poor. For one thing, this population is likely to have pressing consumption needs and the loan may not be used for productive purposes. Moreover an adverse shock is more likely to lead to default for a borrower who has no regular income; thus the bank may exclude the poorest from their client pool or, if the bank utilizes joint liability, other borrowers may be reluctant to form a borrowing group with this population.

This intervention aims to alleviate these constraints by helping the poorest of the poor establish a reliable income stream. To that end, Consultative Group to Assist the Poor (CGAP) has provided \$30,000 as grants for the purchase of income generating assets to be distributed to households identified as "Ultra Poor." Grants of \$100 are being distributed to 300 beneficiaries residing in rural villages in Murshidabad, India (a district north of Kolkata) by Bandhan. The design of this program was based on the pioneering work of BRAC, a Bangladeshi development organization. For several years, BRAC has been distributing grants through its "Challenging the Frontiers of Poverty Reduction-Targeting the Ultra Poor (CFPR-TUP)" program with the aim of helping the absolute poorest graduate to microfinance¹⁰. Working in close consultation with BRAC, Bandhan developed the criteria to identify the Ultra Poor. BRAC has also provided technical support for program implementation throughout the process.

The initial phase of the intervention consists of Bandhan identifying those eligible for the grants; the poorest of the poor within each village. To date, the identification process has occurred in 54 villages, with an average of 24 households identified as Ultra Poor in each village.

¹⁰ BRAC website <http://www.brac.net/cfpr.htm>

Following identification, half of the potential beneficiaries are randomly selected to receive assets. These households are contacted by Bandhan to select an enterprise they would like to undertake; generally households choose to use the grant to purchase livestock, either cows or goats, for the production of milk or meat. Rather than transferring cash, Bandhan procures the asset and distributes it to the beneficiaries. The grants are also used to finance other inputs, such as fodder and sheds to house the animals. In addition to disbursing the grants, Bandhan meets weekly with the beneficiaries to check on the status of the enterprise and to provide training. This training is both specific to the enterprise (e.g. methods of animal husbandry) and to teach general skills, such as numeracy.

Eighteen months after receipt of the asset, the beneficiaries will be eligible for micro-finance provided by Bandhan.

4.2 Details of the Identification Process

To make the concept of "Ultra Poor" operational and define the targeted population, Bandhan used a set of criteria adapted from those used by BRAC in their CFPR-TUP program. Firstly, an eligible household must have an able-bodied female member. The rationale for this requirement is that the program is intended particularly to benefit women¹¹ and any benefit accruing from the grant requires that the beneficiary be capable of undertaking some enterprise. The second mandatory requirement is that the household not be associated with any micro finance institution (in keeping with the aim of targeting those who lack credit access) or receive sufficient support through a government aid program. "Sufficient support" was determined on a case-by-case basis by Bandhan; while many of the households they identified as Ultra Poor participate in some government aid program, they determined that this assistance was not sufficient to alleviate the poverty of the household. In addition to these two criteria, eligible households should meet three of the following five criteria: the primary source of income should be informal labor or begging, land holdings below 20 decimals (10 katthas, 0.2 acres), no ownership of productive assets other than land, no able bodied male in the household and having school-aged children working rather than attending school.

To identify those households satisfying this definition of Ultra Poor, Bandhan utilizes a multi-phase process. The initial task is to identify the poorer hamlets in the region. Since Bandhan has operations in Murshidabad, this is accomplished by consulting with local branch managers who are familiar with the economic conditions in these villages.

In the second phase, Bandhan conducts Participatory Rural Appraisals (PRAs) in selected villages to identify the subset of the population most likely to be Ultra Poor. To ensure that the PRA

¹¹ While the majority of beneficiaries are female, some men were identified as eligible under special circumstances such as physical disability

includes a sufficient number of participants, Bandhan employees enter the village on the day prior to the PRA; they meet with teachers and other local figures to build rapport with the residents, announce that the PRA will occur on the following day and encourage participation. Bandhan aims for 12–15 PRA participants, but often the figure is as high as 20. Moreover, they encourage household members from various religions, castes and social groups to attend.

In this particular context, the PRA consists of social mapping and wealth ranking, following a sophisticated process to identify the poor. Firstly the main road and any prominent hamlets landmarks (temples, mosques, rivers, etc.) are etched into the ground, usually in front of a central house in the hamlet. Subsequently the participants enumerate each household residing in the hamlet and mark the location of the households on the hamlet map. For each household, the name of the household head is recorded on an index card.

In the wealth ranking stage, the index cards are sorted into piles corresponding to socio-economic status. To accomplish this, Bandhan's employees select one of the index cards and inquire about that household's occupation, assets, land holdings and general economic well being. They then take another card and ask how this household compares to the prior household. A third card is selected, classified as similar in wealth to one or the other of the prior households and then whether it is better off or worse off than that household. This process is continued until all the cards have been sorted into piles, usually 5 of them, corresponding to poverty status (the fifth pile representing the poorest group). Often a large percentage of the cards end up in the fifth pile, in which case these households are sorted in a similar manner into two or more piles.

PRA participants are involved in determining what criteria constitute a disadvantaged household, relative to their neighbors, within that particular area. Additionally, the relative socio-economic status of a given household, which determines into which pile they will be sorted, is established through the discussion of participants. Based on the belief that a lively discussion among many people will generate the most precise definition of (relative) poverty and facilitate accurate wealth ranking, Bandhan attempts to include the voices of many villagers in the discussions. Anecdotally, however, it is sometimes the case that a few prominent voices dominate the PRA process and largely determine the ranking of households. A potential concern is that these persons may misrepresent the socio-economic status of certain households (for example friends, relatives or households favored by that individual) in the expectation that the households identified as most disadvantaged will receive some assistance. Although Bandhan does not reveal the details of the intervention at the time of the PRA¹² there may be an implicit association of PRAs with future development programs.

¹² The stated intent of the PRA is simply to assess the economic situation of the villages for research purposes

Following the PRA, Bandhan selects the households assigned to the lowest few ranks (progressively taking higher categories until they have approximately 30 households). In the second phase of their identification process a Bandhan employee visits these households to conduct a short questionnaire. The questionnaire pertains to the criteria for Ultra Poor classification; inquiring about the presence of an able-bodied woman, presence and ability to work of a male household head, land holdings, assets, NGO membership, etc. Based on the information collected in this survey, Bandhan narrows its list of potentially Ultra Poor households to 10-15.

In the final stage of the process, the project coordinator, who is primarily responsible for administration of this program, visits the households. He verifies the questionnaire through visual inspection and conversations with the household members. Final identification is made by the project coordinator, according to the established criteria and his subjective evaluation of the households' economic situation.

4.3 Analysis of the PRA Process

Using data collected from the PRA's carried out by Bandhan, we are able to investigate the extent to which the use of a PRA can improve targeting by identifying the sub-population of interest. For each household in our sample, we observe the wealth rank (corresponding to the pile of index cards into which that household name was sorted) determined by the PRA. These ranks range from 1 to 6, representing categories classified as "very rich", "rich", "average", "poor", "very poor" and "exceptionally poor." A lower rank corresponds to richer households. In Table 3 we investigate how those identified in the PRA as "very poor" or "exceptionally poor" (PRA rank of 5 or 6) compare to those with a PRA rank below 5. Specifically we regress our indicators of poverty on a dummy indicating PRA rank of 5 or 6 and a set of village dummies.

Those assigned a high PRA rank appear poorer than others in several important respects. Firstly, these households tend to have substantially less land than others. On average, very or exceptionally poor households own 6.3 katthas (0.13 acres) less land. The coefficient is statistically significant at the 1% confidence level and the magnitude of the point estimate is substantial; this difference represents 74% of mean land holdings among those not identified as Ultra Poor (8.5 katthas).

Figure 1, which plots the cumulative distribution functions (cdfs) of land holdings separately for those ranked very or exceptionally poor in the PRA and those given a lower rank, confirms these results. The distribution of those given a PRA rank of 1-4 appears to stochastically dominate the distribution of households ranked 5 or 6, meaning that for a given level of land holdings a higher percentage of those ranked 5 or 6 own less than that quantity of land than the corresponding percentage for those ranked 1-4. The advantage of this comparison relative to the regression analysis is that it reveals differences between the two groups that are unaffected

by a few exceptionally large landowners; focusing on the population with low values of land holdings, the figure reveals that those ranked 5 or 6 tend to own even less than others.

We also find that these households are poorer in terms of asset holdings: when our index of durable goods and livestock is taken as the left hand variable the coefficient on the PRA rank dummy is negative and significant at the 1% confidence level. While these households do not appear to be any less likely to have taken loans, they are 12% less likely to have obtained these loans from a formal source, a difference which is also significant at the 1% confidence level. The table also indicates that these households are 17% less likely to report regularly eating two meals a day. This coefficient is significant at a 5% confidence level. While not statistically different from zero, our point estimates suggest that this group lives in smaller homes, is more likely to be under the official poverty line and to self-classify their financial situation as worse than their lower ranked neighbors. Oddly, however, when we consider our various measures of expenditure, the coefficients take the unexpected, positive, sign. None of these coefficients are distinguishable from zero but the point estimates are still perplexing.

Differences in per capita expenditure, however, are not entirely informative when the outcome of interest is not expenditure itself but the economic well-being implied by an expenditure level (Olken 2003). One issue is with equivalence scales; certain household members, such as children, may require only a fraction of the expenditure required by others, such as adults, to achieve the same level of well-being, such as nutritional status. Furthermore, per capita variables do not account for economies of scale (it may be cheaper per capita to feed or clothe a large family) and public goods (a radio, for example, benefits all members although the per capita cost is higher in a small household). In light of these considerations, we re-run the regressions while controlling for household size, and present these results in Table 4. For the expenditure variables, none of the coefficients on the PRA rank dummy are statistically different from zero. However, when considering food and fuel expenditures and total expenditures less institutional medical expenditures the coefficient now takes the expected negative sign, although the estimates are not significant at the 10% confidence level. When total expenditures or non-food expenditures are taken as the left hand side variable, the coefficients remain positive but are drastically smaller. These results suggest that when averaging across households of all sizes those ranked very or exceptionally poor appear to spend more per capita. When comparing two households with the same number of members, however, the households ranked poorer appear to spend less per capita (with respect to food and fuel expenditures and total expenditures less institutional medical expenditures).

As a robustness check, we also controlled for total household members when considering other indicators of poverty which should not necessarily be impacted by household size (land holdings, credit access, etc.). When considering these other variables the estimated differences between those ranked very or extremely poor and those ranked richer do not change appreciably.

These expenditure patterns are illustrated visually in Figures 2, 3, 4 and 5 which show the cdfs for total, food, non-food and total less institutional medical expenditure per capita expenditure for the two groups. The divergence of the cdfs for higher levels of expenditure when considering non-food expenditures suggests that that higher expenditure and higher PRA rank could both be driven by an omitted variable. For example, an economic shock to the household could simultaneously increase expenditures and also cause villagers to view the afflicted household as less fortunate. In Table 5 we investigate this hypothesis.

Using a linear probability model specification, we regress a dummy indicating PRA status of 5 or 6 on land holdings, per capita consumption and a set of variables which may cause villagers to perceive a household as especially poor¹³. Since PRA rank is relative to other households in the same geographic area, these specifications contain a set of village dummies. Also, in light of the importance of household size, we condition on the number of household members. In all specifications the coefficient on per capita total monthly expenditure is statistically indistinguishable from zero. For land holdings the coefficient takes the predicted negative sign and is statistically significant. The table shows that having suffered a shock is not a significant determinant of high PRA status; the coefficients on having experienced a medical shock in the last year (i.e. having spent more than Rs. 500 on any member's medical care), having experienced a medical shock requiring institutional care (i.e. having spent more than Rs. 500 on institutional medical care) and on having experienced an economic shock (house was severely damaged, livestock became ill, livestock died, conflict/dispute/legal case or theft) are all indistinguishable from zero. Nor are households which have been identified by the government as in need of aid, indicated by participation in some government aid program, more likely to be seen as particularly poor by their neighbors. We do find that education is correlated with PRA status; an additional year of schooling per capita makes households 5% less likely to be ranked very or exceptionally poor and a household with a child out of school is 16% more likely to be so ranked. Both of these coefficients are significant at the 5% confidence level. The presence of disabled household members also appears important in determination of PRA rank. In particular we find that households with a disabled female member are 37% more likely to have been cast in the bottom piles during the PRA. It is possible that this feature of high ranked households would contribute to higher expenditure; treating these disabilities may raise expenditures and, if the disabled member is unable to contribute to household chores, expenditure on services may rise. Another result from this exercise is that the presence of an able-bodied adult (older than 14) male makes households 30% less likely to be assigned the highest PRA ranks¹⁴.

4.4 Analysis of Bandhan's Verification Process

In addition to conducting PRA's, Bandhan visited and interviewed households several times to identify those to be classified as Ultra Poor. In this section, we analyze how the additional verification narrowed the targeted population and how those identified as Ultra Poor differ from those not so identified.

The final column in Table 1 offers some insight into this question. It is apparent that households identified as Ultra Poor have less land. On average they have 6.65 katthas (0.13 acres) less and they are 12.6 percentage points more likely to be landless, differences which are both statistically different from zero at or above a 5%

¹³ We also did this exercise using OLS and PRA rank in levels (1-6), the results are similar

¹⁴ This coefficient is similar in magnitude using over 18 years as the definition of adult

confidence level. In terms of assets, the Ultra Poor are in fact poorer on average; they live in smaller homes and own fewer durable goods and livestock, these differences are also significant at or above a 5% confidence level. Like those classified as poor in the PRA, the Ultra Poor are less likely to have obtained credit from a formal source, by 9 percentage points, but are no less likely to have obtained loans. They classify themselves as poorer and are less likely to report eating two meals a day, but these differences are not statistically different. The Ultra Poor are also less educated, the average member of an Ultra Poor household has completed 0.7 less years of schooling, significant at the 1% level. It is 6 percentage points more likely that an Ultra Poor household contains a disabled female member. While there is no statistical difference with respect to disabled male members, Ultra Poor households are 34 percentage points more likely to lack an able-bodied adult male (using 18 years and above as the definition of adult). Although the differences are not generally statistically different from zero, the table indicates that Ultra Poor households report higher expenditure than other households. Another noteworthy feature of Ultra Poor households is that only half include an able bodied adult male member whereas nearly 90% of not Ultra Poor households do, a difference which is statistically significant at the 1% confidence level..

To increase the precision of our comparison, we control for village specific characteristics. Table 6 shows regressions of various indicators of poverty on a dummy indicating whether the household was identified as Ultra Poor by Bandhan as well as a set of village dummies. In general, this exercise confirms what can be gleaned from the summary statistics; Ultra Poor households have about 6 fewer Katthas (0.12 fewer acres) of land, live in smaller houses, own fewer assets, are 7% less likely to obtain formal credit and 13% less likely to report regularly eating two meals a day. All of these results are statistically significant at or above a 10% confidence level. Figure 6 depicts the land holding cdfs for the two groups. It suggests that the distribution of the Ultra Poor is stochastically dominated by that of the not Ultra Poor.

For the most part, our analysis of the PRA itself and of Bandhan's identification process as a whole have similar implications. Both those ranked as very or exceptionally poor in the PRA as well as those identified as Ultra Poor tend to have less land, fewer assets and limited credit access relative to others. Moreover, they tend to be less educated households, to lack an able bodied adult male and to report food insecurity. This is not particularly surprising, since Bandhan selects households with a high PRA rank to visit for subsequent verification. In this section, we attempt to disentangle which characteristics of Ultra Poor households are determined by the PRA and which are determined by Bandhan's subsequent verification process.

To accomplish this we restrict our sample only to those households which were ranked as very or exceptionally poor in the PRA, leaving us with 110 observations. Of these 110 households Bandhan identified 85 as Ultra Poor and the remaining 25 as not Ultra Poor. Table 7 Panel A compares the Ultra Poor households to the others. The point estimates, while not statistically

significant, suggest that the Ultra Poor have higher expenditure even when compared only to others ranked very or exceptionally poor. In Panel B we control for household size which results in smaller, but still positive coefficients. In terms of assets, credit access, food security and self-classification of financial situation we can not make a clear distinction between the Ultra Poor and others. The most salient result is that Ultra Poor households own less land, 3.2 katthas less on average. The economic magnitude of this coefficient is quite large since it represents 128% of mean land holdings within this very or exceptionally poor group. Although not statistically significant, the point estimates indicate that they are more likely to be landless. The Ultra Poor also live in smaller homes on average.

Along some dimensions, Bandhan's verification process does not appear to identify a population which is very different from that identified by the PRA. However, according to indicators of poverty which are easily observed by household visits, such as land and house size, Bandhan did successfully narrow the population identified by the PRA to the poorest within the group.

A noteworthy difference between the implications of Table 6 and the summary statistics is that the regression framework suggests that the Ultra Poor spend more than others and that these differences are statistically different from zero. In particular, our results suggest that the average Ultra Poor household spends Rs. 67 more per household member per month than not identified households and Rs. 35 more per household member per month on food and fuel. The point estimates are considerable in magnitude since Rs. 35 represent 12% of the mean per capita monthly food and fuel expenditure. Figures 7, 8, 9 and 10 illustrate these differences graphically, showing the cdfs of total, food and fuel, non-food and total less institutional medical monthly per capita expenditure for the Ultra Poor and the not Ultra Poor. Given that per capita consumption is a widely used and important indicator of poverty, we are keenly interested in ascertaining what drives these results.

Figure 8 suggests that there are a few Ultra Poor households reporting rather high food and fuel expenditures. To assess the extent to which outliers might impact our results we dropped the top 2% of our sample ranked by per capita monthly food and fuel expenditure (this represents 5 observations, all of which were Ultra Poor households). Using this restricted sample we regressed per capita monthly food and fuel expenditure on a dummy for having been identified as Ultra Poor and village dummies, the coefficient on the Ultra Poor dummy drops from 35.6 to 12.4 and is no longer statistically significant (p value 0.46).

Since they tend to own much less land, it may be that the Ultra Poor spend more on food because they do not produce anything for home consumption and the non ultra poor may underestimate the value of what they produce at home¹⁵. Since we lack complete information

¹⁵ Although the questions in our survey were meant to include all consumption rather than just expenditure, it is possible that our variables do not accurately reflect consumption, perhaps due to misinterpretation of the question or difficulty estimating the value of home production

on home production we are unable to test this conjecture directly. We do, however, investigate this concern by restricting our sample only to those households with 15 or less katthas (0.3 acres) of land (this causes us to drop 21 observations or 10% of our sample). We run the same regressions for the expenditure variables as in Table 6, the results in Table 8 show that the differences in total and non food expenditure between the Ultra Poor and not Ultra Poor are amplified when considering only these households. In terms of food and fuel expenditure, the estimate of the difference between the two groups is essentially the same. This suggests that home production of food is not the primary reason for these differences.

We also ran these regressions using the disaggregated components of per capita monthly food and fuel expenditure. When considering each item separately the coefficient on having been identified as Ultra Poor generally remains positive, as is shown in Table 9. These coefficients, however, are imprecisely estimated; the only variables for which we can detect a statistically significant difference are "Other food" and "Fuel and Light." The latter finding in particular, coupled with the observation that Ultra Poor households tend to have fewer members, suggests that there may be economies of scale driving our previous results; if a home is to be lit or a meal cooked regardless of how many people reside in that home, then per capita fuel and light expenditure will appear larger in a smaller household.

In Table 10 we re-ran the regression from Table 6, controlling for total number of household members. The estimated differences in expenditure between the Ultra Poor and not Ultra Poor are substantially lower in this specification, ranging from 46% lower for food and fuel expenditure and to 79% lower for total expenditure less institutional medical expenditure. None of these coefficients were statistically different from zero. We perform the same robustness check as when analyzing the PRA and find that the coefficients do not appreciably change when considering variables that should not necessarily be impacted by household size.

A final factor which may cause us to observe Ultra Poor households spending more than non Ultra poor households is if Ultra Poor households have experienced economic shocks (e.g. need to repair hose damage or pay medical bills). This will be particularly true if having experienced such a shock makes a household more likely to be identified as Ultra Poor. Closer inspection of the expenditures enumerated by the households revealed that this phenomenon may occur; several of the most costly single expenditures were for institutional medical care (hospitalizations, etc.) in the last year. Moreover, the largest of these expenditures were reported by those identified as Ultra Poor; the maximum such expenditure reported by a not identified household is Rs. 10,000 (\$255) whereas identified households reported expenditures of Rs. 10,000, 12,000, 16,000, 35,000 and 60,000 (\$255-1,538).

This concern is what motivated us to look separately at per capita monthly average expenditure less institutional medical expenditure in the preceding analysis. We now turn to directly



investigating whether such shocks make a household more likely to be identified as Ultra Poor.

We do not find, however, that suffering a medical or economic shock makes a household particularly likely to be identified as Ultra Poor. The variables which appear to determine identification as Ultra Poor are generally the same as those which determine PRA rank (see table 11). With the exception of having a child out of school, which is not statistically significant at the 10% level in this case, the coefficients are also of very similar magnitude as when considering the determinates of PRA status. We also investigate the determinates of identification as Ultra Poor conditional on PRA rank by performing similar analysis on the sample of households ranked as very or exceptionally poor in the PRA. Table 12 shows that for these households, the only significant determinate of identification as Ultra Poor is the presence of an able bodied adult male, which makes identification as Ultra Poor 26% less likely.

As another measure of the effectiveness of Bandhan's identification process, we consider who they "left out." Specifically, we calculate how many of the households not identified as Ultra Poor in our sample have per capita expenditure or land holdings below the median value among those who were identified within that particular village, that is we look at how many of the not identified are "poorer" than the median identified household in their village. Table 13 presents these results. It turns out that many of the households which Bandhan did not identify are poorer than the median identified household; 61% of the not identified households spent less on food than the median identified household in their village, for total expenditure the figure is 55% and for land holdings it is 39%. 21% satisfy all these criteria.

Conclusions

Targeting a sub-population can be challenging, particularly when the target group is defined by a broad, ill-defined characteristic such as "extreme poverty." Various mechanisms can be employed to learn who the poorest of the poor actually are. Censuses to record household characteristics are one such method. However, this approach suffers from the fact that many indicators of poverty are not easily observable. This pitfall can be partially overcome by interviewing household members, but individual interviews may not necessarily elucidate accurate measures of unobservable characteristics.

Another method is to conduct group discussions, such as a PRA, which rely not only on the responses of a specific household but also the input of their neighbors to ascertain which households are most disadvantaged.

In this paper, we consider the relative performance of each of these mechanisms with respect to identifying the poorest of the poor. We examine various government assistance programs which utilize a census as part of their targeting process. Our results suggest that these programs do not overwhelmingly reach the very poorest which may be due to deficiencies in the identification process.

We next evaluate a particular identification process employed by Bandhan, a micro finance institution, to target the poorest of the poor. This process included both a PRA and household surveys to verify and supplement the information collected in the PRA. We do this by comparing characteristics of households ranked as especially poor in the PRA by their neighbors to other households within the village. The comparison indicates that the ranking from the PRA accurately identifies a poorer sub-population along various important dimensions of poverty, most notably with respect to land holdings, assets and credit access.

Finally, we consider what further gains can be made by following a PRA with household visits and surveys. We find that the additional steps taken by Bandhan narrows the identified population to those who are more disadvantaged in crucial respects, particularly land holdings.

References

"Residents block road, demand new below poverty line ration cards." **The Hindu**. Monday, Oct 23, 2006. <http://www.hindu.com/2006/10/23/stories/2006102303020300.htm>

Chambers, Robert. "Participatory Rural Appraisal (PRA): Analysis of Experience." *World Development*. Vol. 22, No. 9, 1994, 1253-1268.

Chambers, Robert. *Whose Reality Counts? Putting the first last* London: ITDG Publishing, 1997.

Jyotsna Jalan and Rinku Murgai "An Effective "Targeting Shortcut"? An Assessment of the 2002 Below-Poverty Line Census Method" July, 2007. http://www.ihdindia.org/ourcontrol/rinku_murgai.doc

Morduch, Jonathan. "The Microfinance Promise." *Journal of Economic Literature*. Vol. 37, No. 4, December 1999, 1569-1614.

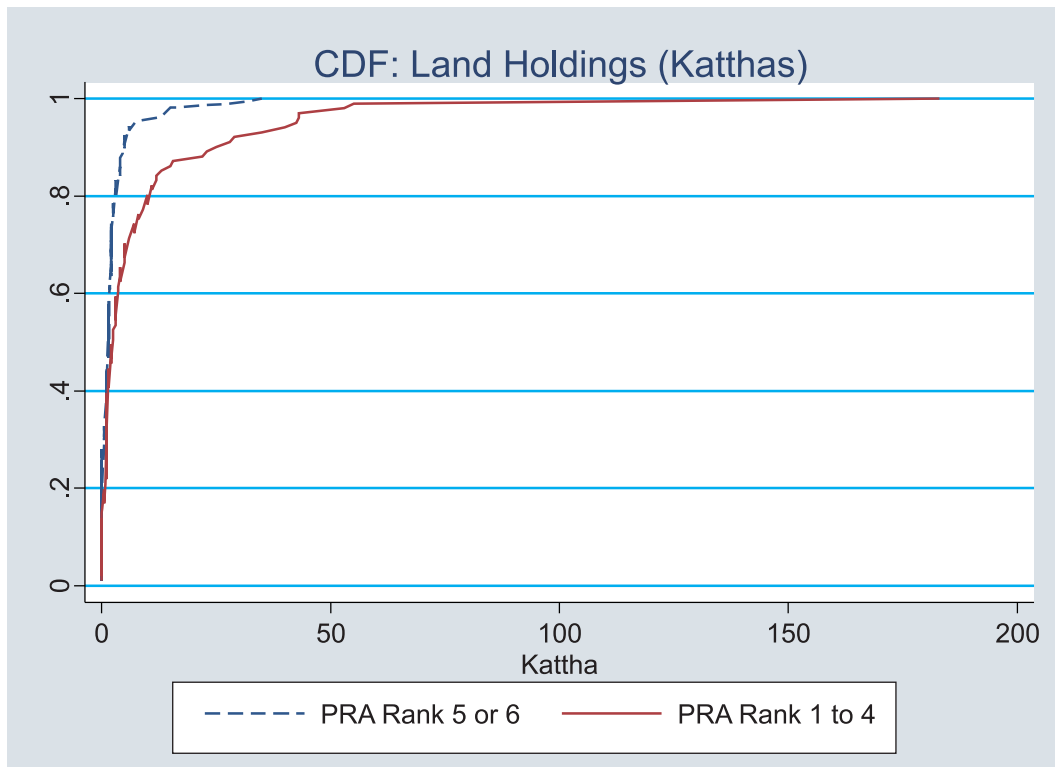
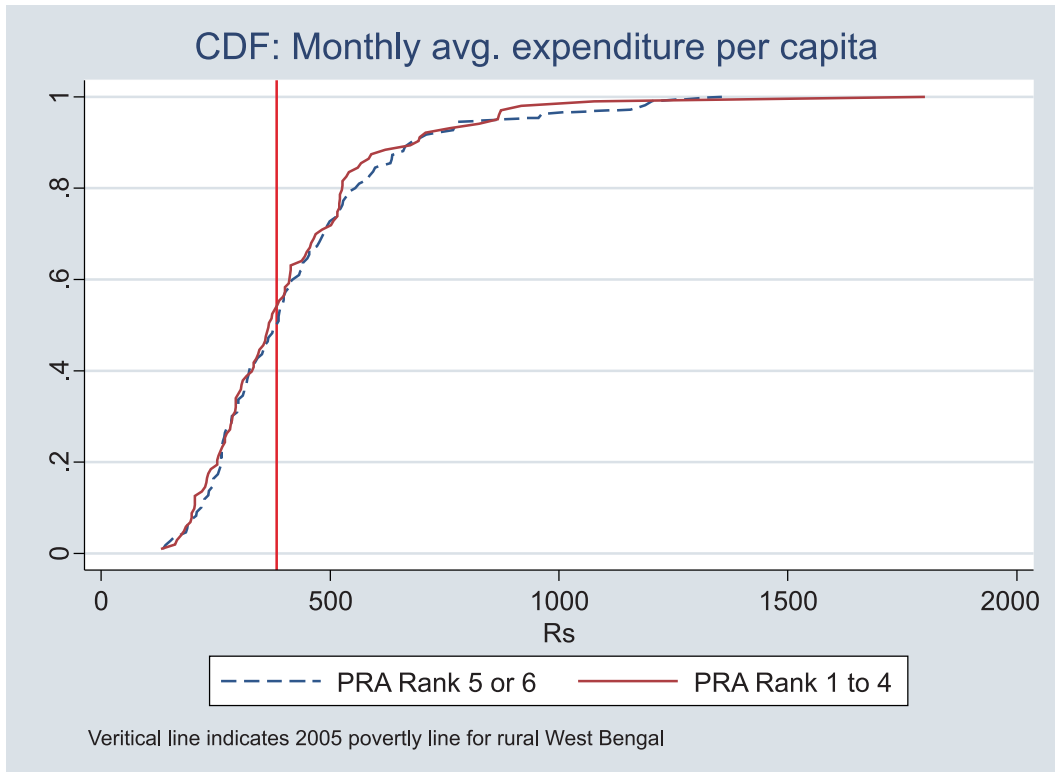
Mukherjee, Neela "Political Corruption in India's Below the Poverty Line (BPL) Exercise: Grassroots' Perspectives on BPL: Good Practice in People's Participation from Bhalki Village, West Bengal" 2003, *Development Tracks RTC*, New Delhi. http://www.eldis.org/fulltext/Political_Corruption_India.pdf

National Sample Survey Organisation (NSSO), Ministry of Statistics and Programme Implementation. Report No. 510 "Public Distribution System and Other Sources of Household Consumption, 2004-05." Summary at: http://mospi.nic.in/press_note_510-Final.htm

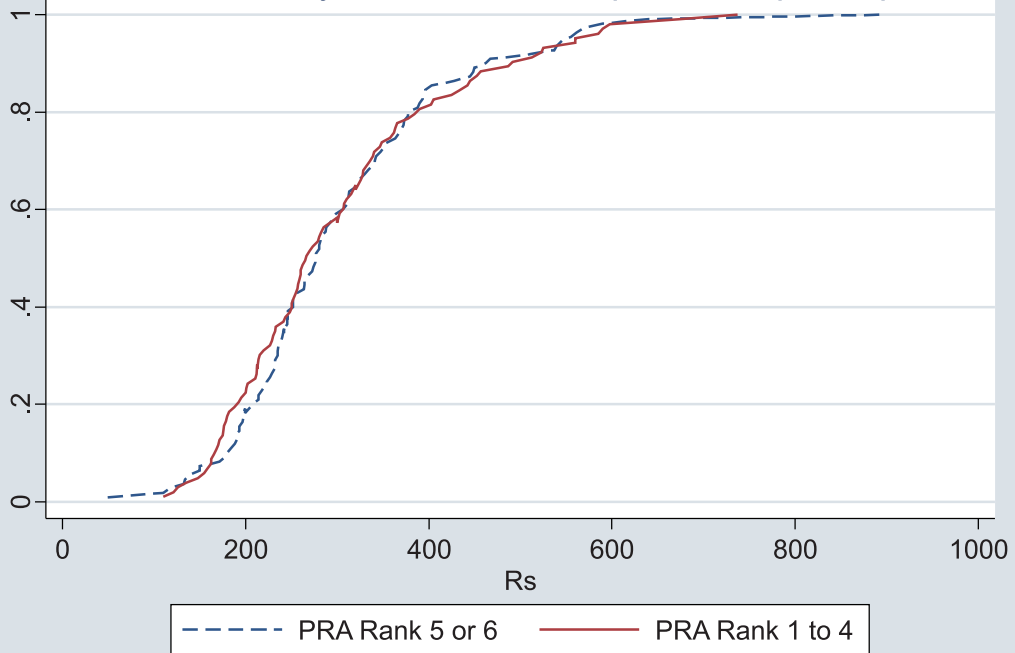
Olken, Ben. "Revealed Community Equivalence Scales" *Journal of Public Economics* 89 (2-3), February 2005, 545-566

Rabbani, Prakash and Sulaiman. "Impact Assessment of CFPR/TUP: A Descriptive Analysis Based on 2002-2005 Panel Data." CFPR/TUP Working Paper Series No. 12. July 2006.

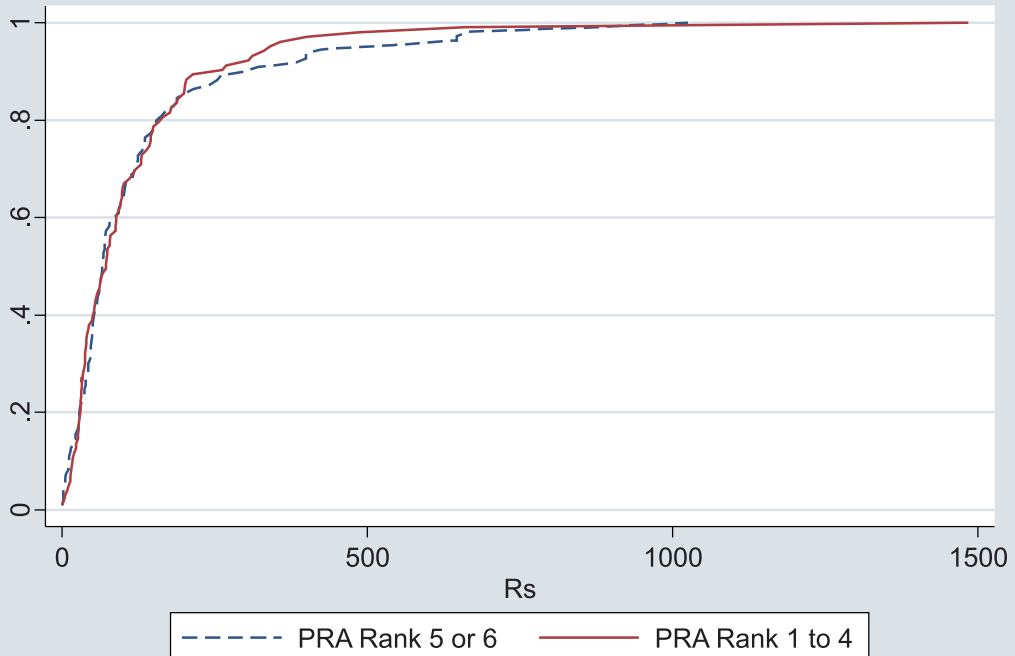
Financial Inclusion in Gulbarga: Finding Usage in ACCESS

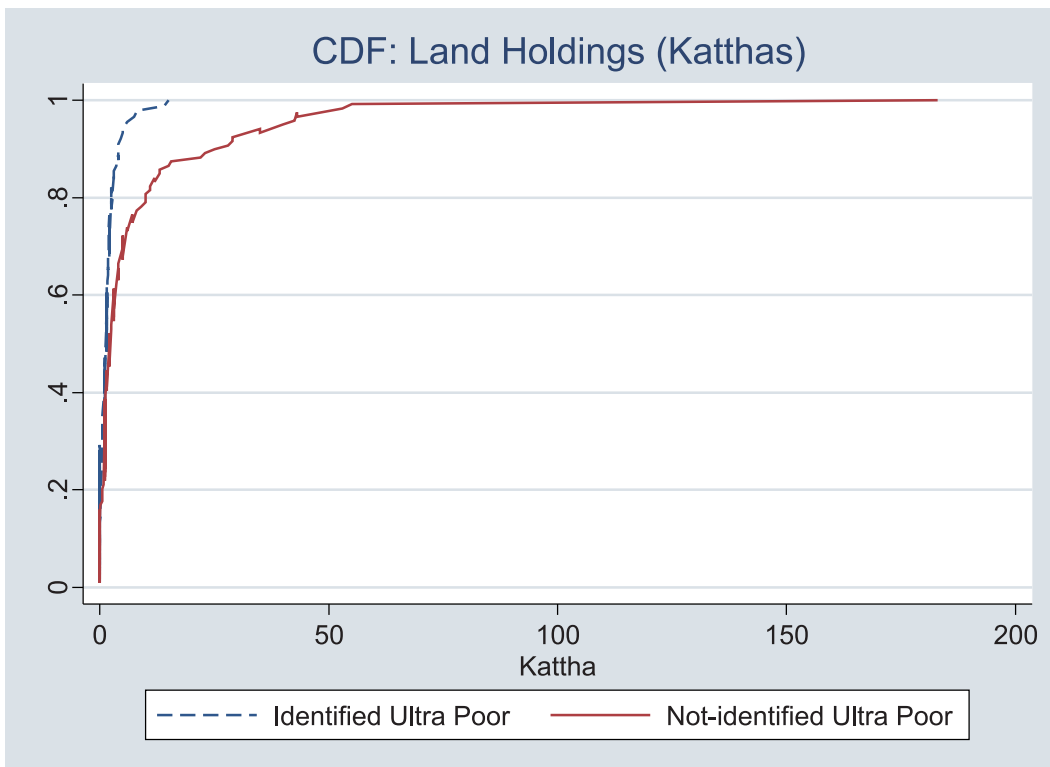
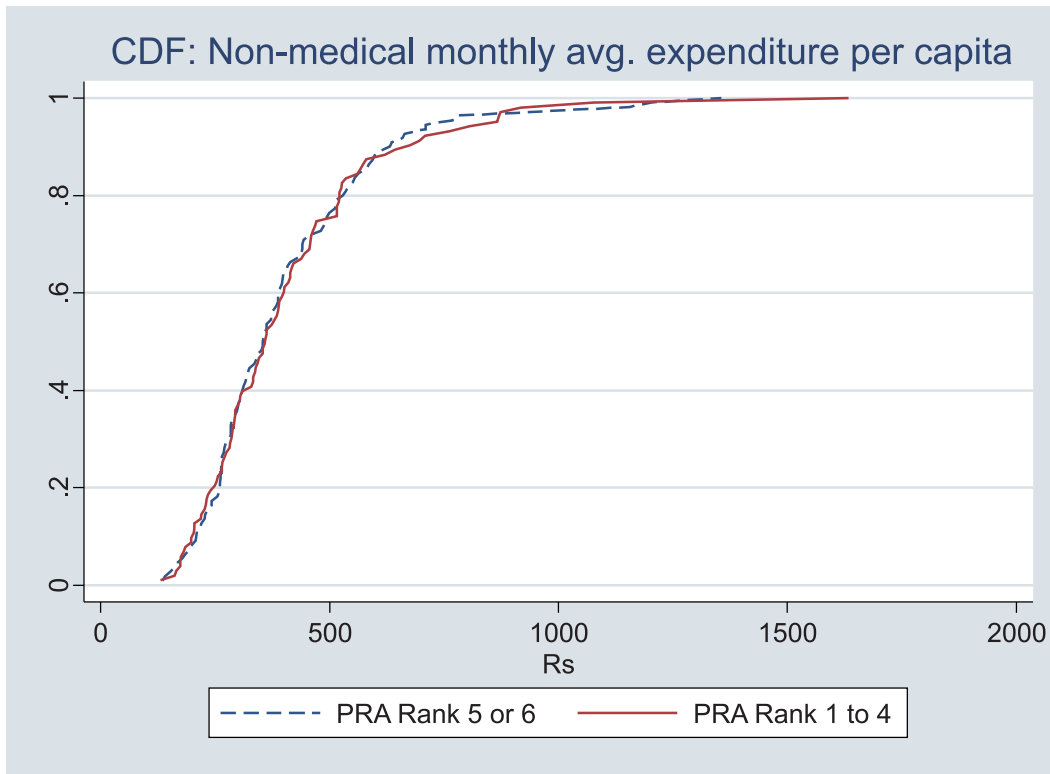


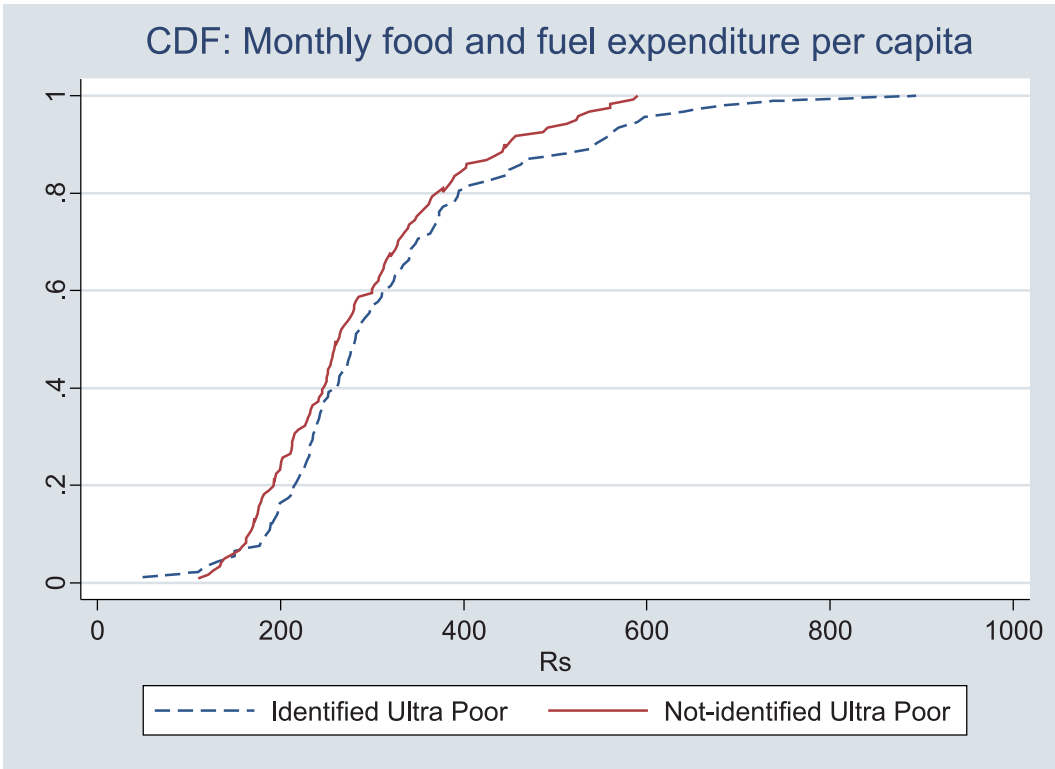
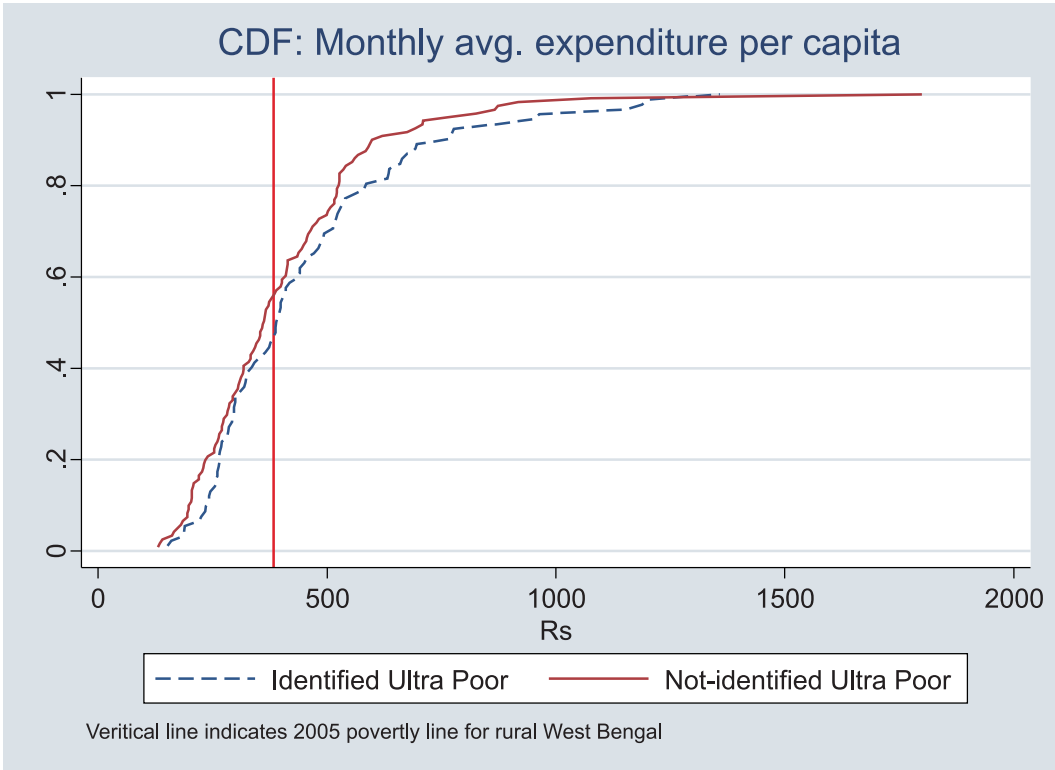
CDF: Monthly food and fuel expenditure per capita



CDF: Monthly avg not food expenditure per capita







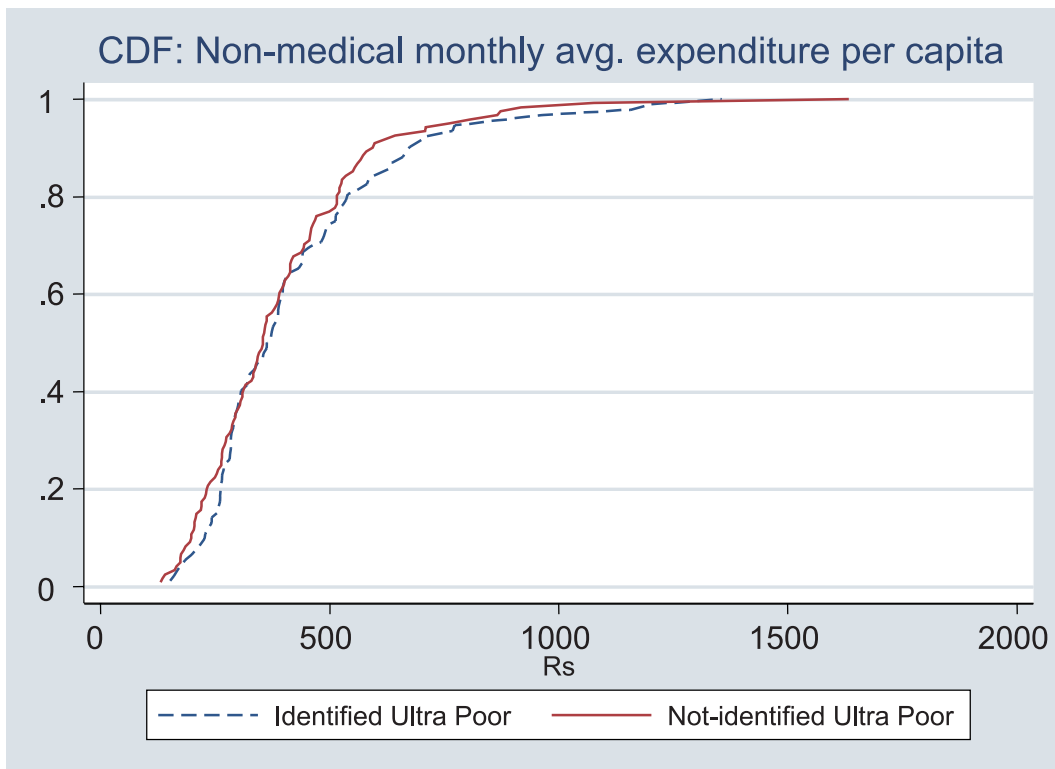
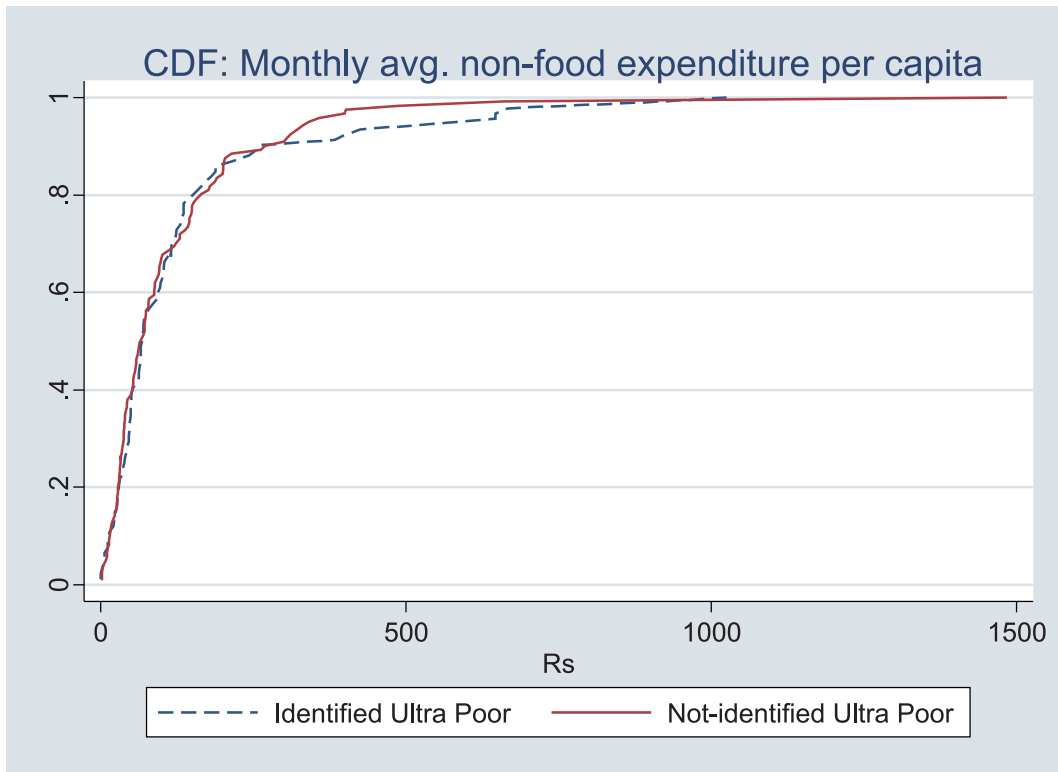


Table 1

	Summary Statistics						Difference (BPL- Not BPL)	Difference (Ultra Poor- BPL)
	Entire Sample	Not Ultra Poor	Ultra Poor	Difference (Ultra Poor - Not Ultra Poor)	BPL	Not BPL		
Ranking from PRA	4.56 (1.39)	3.75 (1.25)	5.62 (0.69)	1.87 (0.144)**	4.63 (1.45)	4.50 (1.34)	-0.13 (0.19)	1.12 (0.10)**
Number of household members	4.29 (1.70)	4.69 (1.54)	3.77 (1.77)	-0.91 (0.227)**	3.65 (1.68)	4.90 (1.49)	1.25 (0.218)**	-1.13 (0.16)**
Per capita monthly avg. expenditure	425.65 (229.79)	405.24 (218.63)	452.48 (242.27)	47.24 (31.69)	586.78 (230.82)	271.90 (63.06)	-314.88 (22.955)**	180.58 (15.46)**
Per capita monthly food/fuel expenditure	302.69 (127.68)	288.99 (111.09)	320.70 (145.36)	31.71 (17.568)+	385.73 (127.85)	223.46 (58.62)	-162.27 (13.527)**	97.24 (10.41)**
Per capita monthly non-food expenditure	122.96 (174.67)	116.25 (167.28)	131.78 (184.50)	15.53 (24.20)	201.05 (222.25)	48.44 (36.15)	-152.61 (21.578)**	83.34 (14.13)**
Per Capita monthly avg. expenditure minus institutional medical expenditure	406.43 (215.21)	394.01 (208.20)	422.75 (224.20)	28.74 (29.77)	551.18 (223.09)	268.31 (63.40)	-282.88 (22.252)**	154.44 (15.20)**
Per capita daily avg. expenditure (PPP adjusted 2006)	1.25 (0.68)	1.19 (0.64)	1.33 (0.71)	0.14 (0.09)	1.73 (0.68)	0.80 (0.19)	-0.93 (0.068)**	0.53 (0.05)**
Per capita daily food/fuel expenditure (PPP adjusted 2006)	0.89 (0.38)	0.85 (0.33)	0.95 (0.43)	0.09 (0.052)+	1.14 (0.38)	0.66 (0.17)	-0.48 (0.040)**	0.29 (0.03)**
Below official poverty line (for rural West Bengal, 2005)	51.17% (0.50)	55.37% (0.50)	45.65% (0.50)	-9.70% (0.07)				
Land Holdings (Katthas)	5.65 (15.49)	8.49 (19.92)	1.84 (2.54)	-6.65 (2.126)**	6.07 (19.74)	5.25 (10.02)	-0.82 (2.15)	-3.40 (0.90)**
Landless	21.13% (0.41)	15.70% (0.37)	28.26% (0.45)	12.60% (0.056)*	22.12% (0.42)	20.18% (0.40)	-1.90% (0.06)	8.08% (0.05)+
Number of rooms in house	1.29 (0.52)	1.40 (0.60)	1.15 (0.36)	-0.25 (0.071)**	1.25 (0.48)	1.33 (0.56)	0.08 (0.07)	-0.18 (0.05)**
Principal component analysis for durable goods and livestock	1.60 (1.13)	1.75 (1.22)	1.42 (0.96)	-0.33 (0.154)*	1.67 (1.25)	1.54 (0.99)	-0.13 (0.15)	-0.12 (0.11)
Household has outstanding loan	45.54% (0.50)	42.98% (0.50)	48.91% (0.50)	5.90% (0.07)	45.19% (0.50)	45.87% (0.50)	0.70% (0.07)	3.04% (0.05)
Household has outstanding loan from formal source	8.45% (0.28)	12.40% (0.33)	3.26% (0.18)	-9.10% (0.038)*	8.65% (0.28)	8.26% (0.28)	-0.40% (0.04)	-5.00% (0.02)*
Self classification of financial situation (1-10 scale)	2.38 (1.54)	2.50 (1.55)	2.21 (1.52)	-0.30 (0.21)	2.59 (1.69)	2.17 (1.35)	-0.41 (0.210)+	0.03 (0.16)
Average years of schooling per household member	1.24 (1.75)	1.55 (1.89)	0.82 (1.46)	-0.73 (0.238)**	1.29 (1.77)	1.18 (1.74)	-0.11 (0.24)	-0.36 (0.17)*
There is a HH member 5-14 years old not attending school	23.00% (0.42)	22.31% (0.42)	23.91% (0.43)	1.60% (0.06)	18.27% (0.39)	27.52% (0.45)	9.30% (0.06)	-3.61% (0.05)
Regularly eat two meals a day	66.20% (0.47)	69.42% (0.46)	61.96% (0.49)	-7.50% (0.07)	71.15% (0.46)	61.47% (0.49)	-9.70% (0.07)	0.49% (0.05)
Household gets BPL rationing	29.38% (0.46)	31.93% (0.47)	26.09% (0.44)	-5.80% (0.06)	28.16% (0.45)	30.56% (0.46)	2.40% (0.06)	-4.51% (0.05)
Households has Antodaya card	10.19% (0.30)	9.48% (0.29)	11.11% (0.32)	1.60% (0.04)	8.00% (0.27)	12.26% (0.33)	4.30% (0.04)	-1.15% (0.04)
Received work from employment generating scheme	49.77% (0.50)	56.20% (0.50)	41.30% (0.50)	-14.90% (0.069)*	45.19% (0.50)	54.13% (0.50)	8.90% (0.07)	-12.82% (0.05)*
House from Indira Housing Plan	8.96% (0.29)	5.00% (0.22)	14.13% (0.35)	9.10% (0.039)*	9.62% (0.30)	8.33% (0.28)	-1.30% (0.04)	5.85% (0.03)
Receives some form of government aid	68.54% (0.47)	71.07% (0.46)	65.22% (0.48)	-5.90% (0.06)	64.42% (0.48)	72.48% (0.45)	8.10% (0.06)	-7.26% (0.05)
Household suffered health shock	52.58% (0.50)	55.37% (0.50)	48.91% (0.50)	-6.50% (0.07)	57.69% (0.50)	47.71% (0.50)	-10.00% (0.07)	1.21% (0.05)
Household suffered health shock requiring institutional care	21.13% (0.41)	23.14% (0.42)	18.48% (0.39)	-4.70% (0.06)	28.85% (0.46)	13.76% (0.35)	-15.10% (0.055)**	4.72% (0.04)
Household suffered economic shock	41.31% (0.49)	40.50% (0.49)	42.39% (0.50)	1.90% (0.07)	42.31% (0.50)	40.37% (0.49)	-1.90% (0.07)	2.02% (0.05)
HH member with disability(physical or mental)	22.07% (0.42)	22.31% (0.42)	21.74% (0.41)	-0.60% (0.06)	20.19% (0.40)	23.85% (0.43)	3.70% (0.06)	-2.11% (0.05)
Adult(15+) female with disability(physical or mental)	5.16% (0.22)	2.48% (0.16)	8.70% (0.28)	6.20% (0.030)*	6.73% (0.25)	3.67% (0.19)	-3.10% (0.03)	5.03% (0.02)*
Adult(15+) male with disability(physical or mental)	15.96% (0.37)	16.53% (0.37)	15.22% (0.36)	-1.30% (0.05)	13.46% (0.34)	18.35% (0.39)	4.90% (0.05)	-3.13% (0.04)
Child(<15) with disability(physical or mental)	3.76% (0.19)	5.79% (0.23)	1.09% (0.10)	-4.70% (0.026)+	1.92% (0.14)	5.50% (0.23)	3.60% (0.03)	-4.42% (0.02)*
Able bodied male adult (15+)	74.18% (0.44)	87.60% (0.33)	56.52% (0.50)	-31.10% (0.057)**	71.15% (0.46)	77.06% (0.42)	5.90% (0.06)	-20.54% (0.05)**
Able bodied female adult (15+)	96.24% (0.19)	96.69% (0.18)	95.65% (0.21)	-1.00% (0.03)	93.27% (0.25)	99.08% (0.10)	5.80% (0.026)*	-3.43% (0.02)*

Notes: This table presents means of the variables given in each row for the entire sample, separately for the Ultra Poor and not Ultra Poor. Column 4 indicates the difference in means between the Ultra Poor and not Ultra Poor. Standard deviations are given in parenthesis.

+ significant at 10%; * significant at 5%; ** significant at 1%

Table 2 Characteristics of recipients of government aid

	Per capita monthly expenditure	Per capita monthly food expenditure	Per capita monthly non institutional medical expenditure (Kadibas)	Land Holdings (Kadibas)	Number of rooms in house	Regularly eat two meals a day	Self classification of financial situation (1-10 scale)	Household has outstanding formal loan	Household has outstanding formal source	Household official poverty line analysis for durable goods and livestock	Able bodied female (15+)
Household gets BPL rationing	-4.433 (35.44)	10.359 (10.20)	-14.822 (27.16)	1.340 (33.22)	-2.543 (2.36)	-0.038 (0.07)	-0.11 (0.24)	-0.001 (0.06)	0.008 (0.04)	-0.12 (0.17)	0.1 (0.07)
Observations	211	211	211	206	211	211	211	211	211	211	211
R-squared	0.03	0.08	0.02	0.03	0.08	0.00	0.04	0.01	0.1	0.07	0.03
Households has Arodaya card	-18.124 (50.52)	6.611 (28.74)	-24.735 (38.04)	-12.283 (48.69)	-1.637 (3.56)	0.166 (0.11)	0.194 (0.36)	-0.154 (0.12)	-0.022 (0.06)	0.147 (0.26)	-0.064 (0.16)
Observations	206	206	206	201	206	206	206	206	206	206	206
R-squared	0.06	0.09	0.03	0.04	0.07	0.00	0.05	0.02	0.09	0.08	0.02
House from Indira Housing Plan	-40.63 (55.77)	31.519 (30.18)	-72.448 (42.591)+	-19.612 (52.34)	-0.786 (3.79)	0.113 (0.11)	0.251 (0.37)	0.188 (0.12)	0.071 (0.06)	-0.032 (0.12)	-0.149 (0.26)
Observations	212	212	212	207	212	212	212	212	212	212	212
R-squared	0.04	0.09	0.03	0.03	0.08	0.04	0.03	0.02	0.09	0.07	0.05
Received work from employment generating scheme	-34.538 (30.20)	-28.531 (21.19)	-6.007 (30.13)	-34.165 (36.74)	-4.661 (2.606)+	0 (0.06)	-0.43 (0.26)	0.08 (0.09)	0.008 (0.05)	0.129 (0.06)	0.104 (0.06)
Observations	213	213	213	208	213	213	213	213	213	213	213
R-squared	0.04	0.09	0.02	0.04	0.08	0.00	0.04	0.01	0.09	0.08	0.03

Standard errors in parentheses
 + significant at 10%; * significant at 5%; ** significant at 1%.
 Notes: Each panel shows a separate set of regressions where the variables in the row panel is taken as the independent variables and the variable indicated in the column is the dependent variable.
 Regressions include village dummies

Table 3

Analysis of PRA process

	Per capita monthly avg. expenditure	Per capita monthly non-foodfuel expenditure	Per capita monthly food expenditure	Per capita monthly non-institutional medical expenditure	Per capita monthly institutional medical expenditure	Per Capita Land Holdings (Kathas)	Per Capita Land Holdings (Kathas)	Landless	Number of rooms in house	Regularly eat two meals a day	Self classification of financial situation (1-10 scale)	Household has outstanding loan	Household has outstanding loan from formal source	Household has outstanding loan from rural West Bengal, 2005	Below official poverty line for rural West Bengal, 2005	Principal component analysis for durable goods and livestock
PRA Rate of Very Poor or Exceptionally Poor	24.019 (33.44)	15.254 (25.57)	9.724 (18.14)	6.263 (31.40)	5.279 (2.187)**	-0.388 (0.402)*	-0.032 (0.06)	-0.054 (0.28)	-0.171 (0.268)**	-0.275 (0.22)	0.283 (0.07)	-0.115 (0.033)**	-0.06 (0.07)	-0.06 (0.07)	-0.428 (0.163)**	
Observations	213	213	213	213	208	208	213	213	213	213	213	213	213	213	213	
R-squared	0.24	0.08	0.02	0.23	0.11	0.25	0.14	0.26	0.26	0.26	0.04	0.21	0.13	0.27	0.25	

Standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: Regressions of various indicators of poverty on a dummy for the household having a PRA status equal to 5 or 6. Each column represents a distinct left hand side variable. Zero-one outcome variables are estimated with a linear probability model. Regressions include village dummies

Table 4

Analysis of PRA process conditional on household size

	Per capita monthly avg. expenditure	Per capita monthly non-foodfuel expenditure	Per capita monthly food expenditure	Per capita monthly non-institutional medical expenditure	Per capita monthly institutional medical expenditure	Per Capita Land Holdings (Kathas)	Per Capita Land Holdings (Kathas)	Landless	Number of rooms in house	Regularly eat two meals a day	Self classification of financial situation (1-10 scale)	Household has outstanding loan	Household has outstanding loan from formal source	Household has outstanding loan from rural West Bengal, 2005	Below official poverty line for rural West Bengal, 2005	Principal component analysis for durable goods and livestock
PRA Rank of 5 or 6	1.43 (32.20)	-4.733 (17.54)	6.163 (26.60)	-23.06 (26.71)	-23.06 (26.71)	-5.759 (2.210)**	-1.028 (0.408)*	0.027 (0.06)	-0.011 (0.08)	-0.166 (0.069)**	-0.288 (0.23)	0.093 (0.06)	-0.103 (0.039)**	0.003 (0.07)	-0.258 (0.151)+	
Number of household members	-45.739 (9.289)**	-23.869 (5.059)**	-21.177 (7.365)**	-46.78 (8.572)**	-46.78 (8.572)**	0.628 (0.042)	-0.072 (0.119)	-0.008 (0.017)	0.072 (0.022)**	0.01 (0.02)	-0.022 (0.009)	0.016 (0.011)+	0.019 (0.011)+	0.104 (0.020)**	0.202 (0.044)**	
Observations	213	213	213	213	208	208	213	213	213	213	213	213	213	213	213	
R-squared	0.14	0.17	0.06	0.16	0.12	0.09	0.14	0.11	0.11	0.06	0.04	0.02	0.14	0.18	0.21	

Standard errors in parentheses
+ significant at 10%; * significant at 5%; ** significant at 1%

Notes: Regressions of various indicators of poverty on a dummy for the household having a PRA status equal to 5 or 6. Each column represents a distinct left hand side variable. Zero-one outcome variables are estimated with a linear probability model. Regressions include village dummies

Table 6

Analysis of identification process

	Per capita monthly avg. expenditure	Per capita monthly foodfuel expenditure	Per capita monthly non-food expenditure	Per Capita monthly avg. institutional expenditure	Land Holdings (Kathas)	Per Capita Land Holdings (Kathas)	Landless	Number of rooms in house	Regularly eat two meals a day	Self classification of financial situation (1-10 scale)	Household has outstanding formal loan	Household has outstanding loan from formal source	Below official poverty line (for rural West Bengal, 2005)	Principal component analysis for durable goods and livestock
entitled as Ultra Poor	07.166 (34.210)+	35.682 (18.548)+	31.483 (26.41)	-43.748 (32.23)	-8.289 (2.262)**	-0.868 (0.416)*	0.008 (0.00)	-0.218 (0.076)**	-0.133 (0.077)+	-0.26 (0.23)	0.105 (0.08)	-0.008 (0.040)+	-0.115 (0.07)	-0.442 (0.168)**
Observations	213	213	213	213	208	208	213	213	213	213	213	213	213	213
Squared	0.05	0.1	0.02	0.04	0.11	0.08	0.14	0.00	0.05	0.04	0.02	0.1	0.08	0.05

Standard errors in parentheses
 significant at 10%; * significant at 5%; ** significant at 1%
 sites: Regressions of various indicators of poverty on a dummy indicating whether the household was identified as Ultra Poor by Bandhan. Each column represents a distinct left hand side variable. Zero-one
 income variables are estimated with a linear probability model.
 regressions include village dummies

Table 6

	Per capita monthly avg. expenditure	Per capita monthly foodfuel expenditure	Per capita monthly non-food expenditure	Per Capita monthly avg. expenditure minus institutional medical expenditure	Land Holdings (Kathas)	Per Capita Land Holdings (Kathas)	Landless	Number of rooms in house	Regularly eat two meals a day	Self classification of financial situation (1-10 scale)	Household has outstanding formal loan	Household has outstanding formal loan from source	Below official poverty line (for rural West Bengal, 2005)	Principal component analysis for durable goods and livestock
Identified as Ultra Poor	07.166 (34.276)+	30.662 (18.548)+	31.963 (26.41)	43.740 (32.23)	-0.289 (2.262)**	-0.068 (0.416)*	0.068 (0.06)	-0.219 (0.076)**	-0.133 (0.077)+	-0.20 (0.23)	0.106 (0.08)	-0.068 (0.040)+	-0.115 (0.07)	-0.442 (0.168)**
Observations	213	213	213	213	208	208	213	213	213	213	213	213	213	213
R-squared	0.06	0.1	0.02	0.04	0.11	0.08	0.14	0.00	0.05	0.04	0.02	0.1	0.08	0.05

Standard errors in parentheses
+ significant at 10%; * significant at 5%; ** significant at 1%

Notes: Regressions of various indicators of poverty on a dummy indicating whether the household was identified as Ultra Poor by Bandhan. Each column represents a distinct left hand side variable. Zero-one outcome variables are estimated with a linear probability model. Regressions include village dummies.

Table 7
Analysis of identification process: Sample restricted to households with PRA rank of 5 or 6

	Per capita monthly avg. expenditure	Per capita monthly food expenditure	Per capita monthly non-food expenditure	Per capita monthly avg. institutional medical expenditure	Land Holdings (Kathas)	Per Capita Land Holdings (Kathas)	Landless	Panel A	Number of rooms in house	Regularly eat two meals a day	Self classification of financial situation (1-10 scale)	Household has outstanding formal loan	Household has outstanding loan from formal source	Below official poverty line (for rural West Bengal, 2005)	Principal component analysis for durable goods and livestock
Identified as Ultra Poor	50.804 (54.86)	16.721 (30.31)	42.884 (42.83)	40.060 (51.03)	-3.183 (1.170)**	-0.702 (0.330)**	0.073 (0.11)	-0.382 (0.116)**	110	0.007 (0.12)	-0.032 (0.36)	0.078 (0.12)	0.032 (0.04)	-0.125 (0.12)	-0.141 (0.25)
Observations	110	110	110	110	107	107	110	110	110	110	110	110	110	110	110
R-squared	0.08	0.00	0.05	0.00	0.1	0.07	0.13	0.13	0.13	0.07	0.05	0.03	0.05	0.09	0.05
Identified as Ultra Poor	42.308 (52.05)	7.457 (28.88)	34.869 (42.33)	19.291 (46.43)	-3.116 (1.192)*	-0.806 (0.331)*	0.068 (0.11)	-0.358 (0.114)**	110	0.008 (0.12)	-0.078 (0.36)	0.06 (0.12)	0.035 (0.04)	-0.078 (0.11)	-0.054 (0.23)
Number of household members	-43.281 (11.768)**	-23.204 (8.537)**	-20.077 (9.565)**	-51.121 (10.516)**	0.115 (0.27)	-0.185 (0.075)**	-0.018 (0.02)	0.058 (0.026)**	110	0.001 (0.03)	-0.113 (0.08)	0.037 (0.03)	0.009 (0.01)	0.118 (0.025)**	0.163 (0.053)**
Observations	110	110	110	110	107	107	110	110	110	110	110	110	110	110	110
R-squared	0.19	0.19	0.09	0.23	0.1	0.13	0.13	0.13	0.17	0.07	0.07	0.05	0.06	0.25	0.16

Standard errors in parentheses

+ significant at 10%; * significant at 5%; ** significant at 1%

Notes: Regressions of various indicators of poverty on a dummy indicating whether the household was identified as Ultra Poor by Bandhan. Each column represents a distinct left hand side variable. Zero-one outcome variables are estimated with a linear probability model. Regressions include village dummies

Table 8

	Per capita monthly avg. expenditure	Per capita monthly food/fuel expenditure	Per capita monthly non- food expenditure	Per Capita monthly avg. expenditure minus institutional medical expenditure
Identified as Ultra Poor	79.334 (33.092)*	37.638 (19.565)+	41.696 (23.963)+	56.075 (31.456)+
Observations	192	192	192	192
R-squared	0.06	0.08	0.02	0.05

Standard errors in parentheses

+ significant at 10%; * significant at 5%; ** significant at 1%

Notes: Regressions of various indicators of poverty on a dummy indicating whether the household was identified as Ultra Poor by Bandhan.

Regressions include village dummies

Table 9

Differences in disaggregated components of expenditure		Per capita monthly expenditure on									
		Cereals	Dairy	Oil	Vegetables	Fruit and Nuts	Egg, Fish, Meat	Other food (sipce, sugar, salt, beverage) etc.	Pan, Tobacco, Fuel and Light		
Identified as Ultra Poor		11.551 (8.76)	-2.167 (1.47)	5.643 (4.25)	2.06 (5.67)	1.294 (1.07)	4.16 (3.17)	6.587 (3.314)*	1.187 (3.87)		5.068 (1.775)**
Observations		213	213	213	213	213	213	213	213		213
R-squared		0.06	0.02	0.08	0.06	0.02	0.01	0.06	0.02		0.09

Standard errors in parentheses
+ significant at 10%; * significant at 5%; ** significant at 1%

Notes: Regressions of various measures of expenditure on a dummy indicating whether the household was identified as Ultra Poor by Bandhan. Regressions include village dummies

Table 10

Analysis of identification process conditional on household size

	Per capita monthly avg. expenditure	Per capita monthly food expenditure	Per capita monthly non-institutional expenditure	Land Holdings (Kathas)	Per Capita Land Holdings (Kathas)	Landless	Number of rooms in house	Regularly eat two meals a day	Self classification of financial situation (1-10 scale)	Household has outstanding loan from formal source	Household has outstanding loan	Below official poverty line (for rural West Bengal, 2005)	Principal component analysis for durable goods and livestock
Identified as Ultra Poor	35.14 (33.30)	10.110 (10.14)	9.327 (9.05)	-5.032 (2.315)*	-1.037 (0.427)*	0.032 (0.06)	-0.174 (0.076)*	-0.125 (0.072)*	-0.277 (0.24)	0.118 (0.04)	0.118 (0.04)	-0.041 (0.07)	-0.237 (0.16)
Number of household members	-43.780 (0.319)**	-22.637 (6.076)**	-47.068 (8.635)**	0.651 (0.661)**	-0.068 (0.12)	-0.068 (0.071)	0.082 (0.021)**	0.011 (0.02)	-0.023 (0.066)	0.022 (0.017)*	0.022 (0.017)*	0.102 (0.029)**	0.261 (0.044)**
Observations	213	213	213	208	208	213	213	213	213	213	213	213	213
R-squared	0.14	0.18	0.16	0.11	0.09	0.14	0.13	0.05	0.04	0.02	0.12	0.18	0.21

Standard errors in parentheses

+ significant at 10%, * significant at 5%, ** significant at 1%

Notes: Regressions of various indicators of poverty on a dummy indicating whether the household was identified as Ultra Poor by Bandhan. Each column represents a distinct left hand side variable. Zero-one outcome variables are estimated with a linear probability model.

Regressions include village dummies

Table 11

	Determinates of Identification as Ultra Poor									
	Dependent variable: Identified as Ultra Poor					Dependent variable: Identified as Ultra Poor				
Per capita monthly avg. expenditure	0.000221 (0.00)	0.000205 (0.00)	0.000188 (0.00)	0.000198 (0.00)	0.000209 (0.00)	0.000219 (0.00)	0.000197 (0.00)	0.000199 (0.00)	0.000199 (0.00)	0.000199 (0.00)
Land Holdings (Kathas)	-0.01 (0.002119)**	-0.01 (0.002112)**	-0.01 (0.002110)**	-0.01 (0.002115)**	0.00 (0.00)	-0.01 (0.002003)**	-0.01 (0.002104)**	-0.01 (0.002069)**	-0.01 (0.002155)**	-0.01 (0.002155)**
Number of household members	-0.04 (0.020667)*	-0.05 (0.020653)*	-0.05 (0.020449)*	-0.05 (0.021263)*	-0.04 (0.020237)*	-0.05 (0.020943)*	-0.06 (0.020666)*	-0.06 (0.020109)*	-0.06 (0.020449)*	-0.06 (0.020449)*
Adult(15+) male with disability(physical or mental)										0.03 (0.09)
Adult(15+) female with disability(physical or mental)										0.36 (0.135644)**
Able bodied female adult (15+)										-0.02 (0.16)
Able bodied male adult (15+)										-0.34 (0.073758)**
Receives some form of government aid										0.03 (0.07)
Average years of schooling per household member										-0.04 (0.018633)*
There is a HH member 5-14 years old not attending school										0.02 (0.06)
Household suffered economic shock										0.03 (0.07)
Household suffered health shock requiring institutional care										-0.02 (0.08)
Household suffered health shock										-0.04 (0.07)
Observations	208	208	208	208	208	208	208	208	208	208
R-squared	0.23	0.23	0.23	0.23	0.26	0.23	0.23	0.25	0.23	0.23

Standard errors in parentheses
+ significant at 10%; * significant at 5%; ** significant at 1%

Notes: The table shows a linear probability model specification where the dependent variable is a zero one indicator for having been identified as Ultra Poor. Regressions include village dummies

Table 12

	Determinates of Identification as Ultra Poor: Sample restricted to households with PRA rank of 5 or 6							
	Dependent variable: Identified as Ultra Poor							
Per capita monthly avg. expenditure	0.000152 (0.00)	0.00014 (0.00)	0.000103 (0.00)	0.000151 (0.00)	0.000131 (0.00)	0.000127 (0.00)	0.000137 (0.00)	0.000127 (0.00)
Land Holdings (Kathas)	-0.02 (0.007913)*	-0.02 (0.006033)*	-0.02 (0.007869)*	-0.02 (0.007861)*	-0.02 (0.007900)*	-0.02 (0.007913)**	-0.02 (0.007923)*	-0.02 (0.007875)*
Number of household members	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.01 (0.02)	-0.02 (0.02)	0.01 (0.02)	-0.02 (0.02)	-0.02 (0.02)
Adult(15+) male with disability(physical or mental)								
Adult(15+) female with disability(physical or mental)								0.19 (0.14)
Able bodied female adult (15+)							-0.04 (0.18)	
Able bodied male adult (15+)						-0.26 (0.095608)**		
Receives some form of government aid					0.03 (0.09)			
Average years of schooling per household member					-0.02 (0.03)			
There is a HH member 5-14 years old not attending school				-0.14 (0.09)				
Household suffered economic shock					0.07 (0.08)			
Household suffered health shock requiring institutional care		-0.04 (0.10)						
Household suffered health shock	-0.04 (0.08)							
Observations	107	107	107	107	107	107	107	107
R-squared	0.21	0.21	0.21	0.23	0.21	0.28	0.21	0.22

Standard errors in parentheses
+ significant at 10%; * significant at 5%; ** significant at 1%

Notes: The table shows a linear probability model specification where the dependent variable is a zero one indicator for having been identified as Ultra Poor. Regressions include village dummies

Table 13

Village	How many were "left out" of the Ultra Poor group?				
	Total not identified as Ultra Poor	Total with less food&fuel expenditure than median household in that village	Total with less total expenditure than median identified household in that village	Total with less land than median identified household in that village	Total with less in terms of all 3 categories
Balarampur	11	7	7	5	4
Binkar	24	15	16	14	7
Chardiar	33	18	13	7	2
Charsungai	30	20	14	10	6
Khirdipur	23	14	17	11	6
Entire sample	121	74	67	47	25

Of those not identified as Ultra Poor.