Asset-Based Policy in Rural China
An Innovation in the Retirement Social Insurance Program

Baorong Guo
University of Missouri-St. Louis

Jin Huang
Washington University in St. Louis

Li Zou
Center for Social Development
Washington University in St. Louis

Michael Sherraden
Center for Social Development
Washington University in St. Louis

2007

CSD Working Papers
No. 07-23
Asset-Based Policy in Rural China:
An Innovation in the Retirement Social Insurance Program

In response to the growing rural-urban inequality, China is undertaking a series of policy initiatives to promote rural development. In addition to redistributive policies aiming at social protection, asset-based policy, which integrates social protection and social investment, is another viable option for progressive rural development. In 1998, the Hutubi local government in the Xinjiang Uygur Autonomous Region of China implemented an innovative retirement program which allows account holders to use accounts as legal collateral to borrow small loans and invest in productive assets such as farming supplies and equipment, education, and small businesses. Using the data gathered by the program and in-depth interviews with program participants, this case study closely examines the Hutubi Program. Strengths and limitations of the loan program are discussed, followed by a closer look at the program’s key features that have effectively encouraged asset building in a rural community. The success of the Hutubi Program has implications for asset-based policy development in rural China.

Key words: asset building, rural China, retirement insurance, social investment, IDA

Introduction

Over the past three decades, the world has witnessed enormous economic growth in China, resulting from the “opening-up” policy, which was implemented in the late 1970s. Between 1980 and 2005 alone, the nation’s total GDP increased from ¥450 billion to ¥18.3 trillion (Bo, 2005; Wang, 2006). The issue of urban-rural inequality in the society at large (Wang, 2004), however, has accompanied this rapid growth, with an average urban resident in 2003 earning 3.2 times as much as a rural resident (Roberts, 2007). With an overall Gini coefficient close to 0.5, China is experiencing serious income inequality across the country (Wang, 2006).

This growing economic inequality, resulting from economic development taking priority over a more balanced approach to socioeconomic development, occasioned the call for “building a new socialist countryside,” and has resulted in a series of new initiatives to promote rural development. In addition to income-generating policies specifically targeting rural areas, new redistributive policies have been developed: rural populations can receive an average of ¥120 in tax benefits from the repeal of the agriculture tax (Hu, 2005); rural education (1st to 9th grades) tuition has been transferred from individuals and villages to the central government since 2006 (Wen, 2006a); and local

---

1 This study is part of a multi-method inquiry into the Hutubi Rural Retirement Social Insurance policy innovation conducted jointly by the Center for Social Development (CSD) at the Brown School of Social Work at Washington University in St. Louis and the Chinese Academy of Social Sciences (CASS) in Beijing. The authors express deep gratitude to Professor Yang Tuan and Dr. Zhang Shifei of CASS. Li Zou of CSD facilitated field work for this study. The entire research team is indebted to Mr. Guo Xincai and his staff at the Hutubi Labor and Social Security Office for their exceptional hospitality and generous assistance. Finally, this study is made possible through funding from the Levi-Strauss Foundation (Asia). CSD greatly appreciates Ms. Sharon Tan and Mr. Daniel Lee for their support of CSD’s work.
governments have replaced local communities in supplying stable funding streams for the rural five-guarantee system, which assists elderly individuals with food, clothing, medical care, housing, and burial expenses (Wen, 2006b). In addition, the rural minimum living security system is expected to take shape nationwide by 2007 (Wen, 2007), and funding support for the reform of the rural cooperative medical scheme has doubled in 2007 (Wen, 2007). Social benefits in these policy initiatives take various forms, such as tax reduction, cash assistance, in-kind benefits and social services, all of which are traditional welfare instruments for resource redistribution and social protection. Redistributive policies are essential for achieving the goal of income support and reducing urban-rural inequality. However, from the developmental perspective, welfare policies constructed in terms of consumption are not sufficient by themselves (Midgley, 1999; Sherraden, 1991 & 2005a; Sherraden & Page-Adams, 1995; Yang, 2005; Zhang & Xu, 2006).

New trends in welfare policies show that policy integrating both social protection and social investment is underway to supplement income support policy (Sherraden, 2003). Conventional social welfare policy provides minimum levels of welfare assistance to the poor as a short-term safety net, whereas the new social policy concept aims at the long-term development of the poor through capacity building (Sherraden, 2005a). Asset building precisely represents this capacity-building approach to social policy, and it has received increasing attention worldwide as a promising direction for domestic policy development (Orton & Rowlingson, 2007; Sherraden, 1991 & 2005b). Promoting both social protection and social development, asset-based policy can effectively supplement income support policy, and it also offers a unique tool for China’s rural policy development. In the past few years, discussion of asset-based policy has attracted increasing attention from researchers and policymakers in China2 (Sun, 2005; Tang, 2005; Yang 2005 & 2007; Yang & Sun, 2005; Zhang, 2005).

Asset-based policy encourages individuals and families to accumulate resources through saving and other means, and then use these resources for social and economic development, such as education, homeownership, and small business development (Sherraden, 1991 & 2005a). Both asset theory and empirical evidence suggest that asset building can generate positive economic, social, and psychological effects for individuals (Sherraden, 1991; Williams, 2003; Yadama & Sherraden, 1996; Zhan & Sherraden, 2003). For instance, asset ownership can stimulate development of other assets, provide a foundation for risk taking, and create an orientation toward the future (Sherraden, 1991).

Recognition of the importance of asset building has led to development of asset-based policy in a number of countries. In the United States, policy has guided the introduction of employer-sponsored retirement plans (such as the 401k and 403b) and Individual Retirement Accounts (IRAs) to promote security after retirement; furthermore, Individual Development Account (IDA) demonstration programs have been implemented in more than 40 states to encourage low-income families to build assets (Sherraden & Zou, 2005; Warren & Edwards, 2006). In the United Kingdom, the universal Child Trust Fund, a savings and investment account for children, was initiated in 2005.

---

2 The discussion of asset-based policy in China started at an international conference on “Asset Building and Social Development” at Shandong University of China in September 2004 sponsored by the Center for Social Development at Washington University in St. Louis and Shandong University. In January 2005, the Chinese Academy of Social Science and Tsinghua University respectively organized two international conferences in Beijing to further explore asset-based policy options. With the publication of the Chinese version of his book Assets and the Poor by the Commercial Press, Sherraden was invited as an international expert on social policy to speak at the 21st Century Forum in Beijing in the fall of 2005. In March 2006, the Chinese central government called, for the first time, for creating wealth among all households as one of the tasks for building a harmonious socialist society (the Statement of the Sixth Plenary Session of the 16th Central Committee of the Communist Party of China, 2006).
(Loke & Sherraden, 2006). In Singapore, the Central Provident Fund, a comprehensive social insurance savings plan has become increasingly successful over several generations (Vasoo & Lee, 2003). Asset-based programs, such as the housing provident fund\(^3\) and retirement social insurance, are available for urban citizens in China, whereas rural residents are usually left without such social programs.

Given the promise of both social protection and economic development, asset-based policy appears to be an appealing prospect for rural development. In recent years, the Hutubi Rural Retirement Social Insurance Loan Program, an independently created asset program, has demonstrated successful asset building in a rural community (the Hutubi Rural Retirement Social Insurance Office, 2005; Yang, 2007). Hutubi County, located in the Xinjiang Uygur Autonomous Region of northwest China, has 24 ethnic groups with a total population of 207,200 (Xinjiang Bureau of Statistics, 2005). Initiated in 1998, the Hutubi Program allows participants to borrow money from their social insurance accounts to invest in livestock, farming materials, children’s education, and other development purposes. The success of the Hutubi Program has attracted considerable attention from the Chinese central government and the international academic community (Guo, Huang, Sherraden, & Zou, 2007; Zhang, 2005 & 2006; Zou, 2007).

This study provides a close examination of the Hutubi Program by using the program administrative data and in-depth interviews. The study begins by describing the operation of the Hutubi Program. It then explores program outcomes, specifically examining the built-in mechanisms for asset building. Finally, implications for developing asset-based policy in rural China are discussed.

The administrative data contain detailed information of 1,262 loans since 1998 (see Table 1 for summary statistics of the administrative data). The in-depth interviews include 23 participants in the Hutubi Program, of whom eight took out loans, nine did not use the loan program, and six were lenders from their accounts to family members or friends in the community.

The Hutubi Program: Operation and Statistics

The Hutubi rural retirement social insurance loan program is part of the rural social insurance scheme started in the early 1990s (Béland & Yu, 2004; China Ministry of Civil Affairs, 1992). China’s Rural Social Insurance Scheme of 1992 allows participants between the ages of 18 and 59\(^4\) to voluntarily participate in rural retirement social insurance by contributing a portion of their income to individual retirement accounts. Individuals are entitled to receive annuities from their savings in the retirement social insurance accounts at age 60. Exceptions for early withdraw are available under special circumstances such as family emergencies. Designated public offices across the nation run the local rural retirement social insurance program. Relying mainly on personal contributions to individual retirement accounts, China's rural social insurance is an asset-building program that differs from the pay-as-you-go social security system common to most welfare states.

---

\(^3\) China’s housing provident fund is an asset-based housing policy targeting urban residents. An account is established for each individual who is employed to save for the purpose of buying a home. An individual’s monthly contribution to this account is matched by his/her employer.

\(^4\) Beginning 2006, Hutubi allows individuals between ages 1 and 59 to voluntarily participate in rural retirement social insurance (the Hutubi Rural Retirement Social Insurance Office, 2005).
Program Operation

Essentially, the Hutubi Program is an innovative addition to the original retirement insurance policy. It allows insurance account holders to use accounts (of their own or others) as legal collateral for small loans (up to 50% of the total amount in the accounts) from the local rural retirement social insurance fund (the Hutubi Rural Retirement Social Insurance Office, 2005). Loans are issued to borrowers mainly for agricultural development, such as purchase of fertilizer, farming equipment, and livestock. A few loans are used for small home businesses, children’s education, and family emergencies. The procedure for loan application is convenient—upon depositing insurance account(s) at the insurance administration office, the borrower will be issued a loan from partnering banks (including the Rural Credit Cooperatives and the Bank of Agriculture). A loan’s interest rate is the same as the bank loan interest rate. The loan term generally varies from 3 months to 3 years. If the loan term exceeds one year, the loan interest must be paid off in the first year of the loan term. A higher (punitive) interest rate will apply if the loan is not repaid on time, and the account(s) will be confiscated if the loan is eventually not returned. The convenience of the loan is attractive to participants. As Mr. Qian, a 45-year-old farmer, commented in an interview with the authors:

“This type of loan is better [than commercial loans]. I do not have to go through a complicated procedure to get a loan. I can bring in my retirement account at anytime, and get the loan on the same day. And my account can be retrieved once I return the loan (Zou, 2007).”

Ms. Hu, the 48-year old wife of Hutubi farmer, had the similar impression:

“The procedure for taking loans out of the retirement insurance is simple and convenient. As long as participants bring in their insurance accounts (either their own or borrowed ones) to the office, they can receive immediate loans (Zou, 2007).”

Because the insurance administration office is not designated as an authorized financial institution, it cannot provide direct financial services and has to partner with commercial banks to implement this loan program. In return, the insurance administration office pays the partnering banks 1.5% of the annual loan (the Hutubi Rural Retirement Social Insurance Office, 2005; Zhang, 2005 & 2006).

Program Statistics

Since its inception, the Hutubi Program has gained increasing popularity among participants. As of early 2006, over 1,200 loans had been issued with an average amount of ¥6,000 per loan, and about 5,100 accounts had been used. According to a recent report of the local office (the Hutubi Rural Retirement Social Insurance Office, 2007), nearly ¥11 million had been loaned since 1998, exceeding 80% of the total retirement insurance fund (¥12.8 million) in 1997. The average loan term was 489 days and almost all the loans (96%) were returned on time. The majority of borrowers reported that loans were used for farming and raising livestock. Borrowers were between the ages of 30 and 49 (n=818, n=66.2%), and nearly 85% (n=1,080) were male. Over 90% of borrowers were Han and less than 8% were minorities: Hui (3.6%), Uygur (1.8%), and Kazakh (2.2%). The

---

5 The percentage that could be borrowed increased to 90% in 2006.
6 As of 2007, this has never occurred.
7 Interviewees’ real names are not revealed in this study.
implementation of the Hutubi Program has brought substantial proceeds to the retirement insurance fund, with an average annual growth rate of 8.13%, higher than the 5% guaranteed by the government.

The Hubuti Program: Accomplishments and Limitations

Based on the Hutubi Program administrative data and in-depth interviews, the following program outcomes were identified:

Access to Financial Services

According to several other participants, accessibility of the loan program is an obvious advantage compared with commercial loans. As one participant noted, “commercial banks did not issue us loans because of our bad economic situation. Therefore, we borrowed from other people’s insurance accounts for loans.” Ms. Zhao, the 50 year-old wife of an elm tree grower, said that she and her family borrowed ¥10,000, ¥10,000, and ¥24,000, respectively, for three consecutive years. The loans were used to purchase a new vehicle and hire staff for her son’s small transportation business. Ms. Zhao was attracted to the program by its convenience:

“If I took a loan from the Rural Credit Cooperatives, five households is the requirement for a lending group. However, if one household defaults, the other four households in the group would not be eligible for loans again. For loans out of the retirement insurance program, as long as farmers have retirement insurance accounts ready, they are eligible to borrow money out of their own retirement accounts. If they borrow using other people’s retirement accounts, they can borrow money immediately after going through a simple authorization procedure with the lenders at the Retirement Insurance Office (Zou, 2007).”

The loan program offers an opportunity for participants to access small loans, which can be evidenced by the administrative data: By the summer of 2007, about 20% of retirement insurance participants had borrowed loans, and 78% of retirement accounts had been used at some point. Nearly 20% of borrowers had used the Hutubi Program more than once (the Hutubi Rural Retirement Social Insurance Office, 2007).

Development of Productive Assets

As mentioned earlier, participants take out loans mainly for purchasing physical assets related to agricultural/pastoral production (92.2%, see table 2). The majority of participants (66.2%) used loans for farming materials, such as seeds, fertilizer, and equipment. Other uses included livestock (21.6%), education (3.2%), electrical farming equipment, small business, and transportation tools (e.g., a truck). A preliminary comparison of the Hutubi participants based on the survey data (Table 3) shows that loan borrowers have more productive assets than non-borrowers (Zhang, 2007).

The in-depth interviews provide similar information. Mr. Haimiti, a Kazakh participant, and his five family members joined the retirement insurance program in 1998 (Zou, 2007). With these five retirement accounts, Mr. Haimiti obtained a loan of ¥5,000 in 2000. He said, “The loan helped me

8 The survey included 427 farmers. The survey data are not completely ready for data analysis as of July 21, 2007
purchase fertilizer and seeds for the 7.4 acres of land I own.” Two years later, he used eight retirement accounts (five from his own family, and three from relatives and friends) for a loan of ¥10,000, with which he purchased two cows. He commented:

“[The loan] was very helpful. It helped us get the [farming] work done. Without the seeds, we could not plant the crop in the ground. Without fertilizers, the crop would not grow well, then we would not have good yield. Thanks to the loans, we could plant the crops and receive good crop yields (Zou, 2007).”

It was estimated by the Hutubi retirement insurance office that loans invested on production have increased participants’ annual per capita income by ¥300-400 (the Hutubi Rural Retirement Social Insurance Office, 2007).

Augmentation of Retirement Social Insurance Fund

In the short history of China’s rural social retirement plan, the number of participants has declined sharply from over 80 million in 1998 to 54 million in 2003 (Peng & Song, 2002; State Council of the People’s Republic of China, 2004). Hutubi’s participant roll, however, remained at 8,6009 over this same time period. Even more strikingly, the insurance fund grew from ¥170 million in 1998 to ¥245 million in 2006, an annual growth rate of 8.13% that exceeded the 5% promised by the government (See Table 4). Over the same period of time, the average savings in each account increased by 57% from ¥1,798 to ¥2,627.

Maximization of the Use of Assets

Although retirement social insurance cannot be withdrawn until the participant reaches age 60, the Hutubi Program allows participants to maximize the use of their retirement assets before they reach this age. Moreover, participants and their family members can use and reuse assets through loaning activities. By 2006, the total amount of loan had reached ¥11 million, or 84% of the total insurance fund. In other words, over 80% of retirement assets were used for various household investments. A closer look at individual loan activities reveals that the average loan term is 484 days with a median of 326 days. A borrowing cycle of approximately one year suggests that, in theory, participants can use retirement assets once a year for investment. Based on the administrative data, it is estimated that over 200 participants have used the Hutubi Program more than once. Some participants even used loans twice a year. The in-depth interviews reveal that some participants used the Hutubi Program 2-3 times in three consecutive years.

Promotion of Community Development

In addition to helping improve household economic situations, the Hutubi Program also promotes community development. The rural retirement insurance fund, if deposited in commercial banks as savings, is likely to flow out of rural areas to urban areas where it may generate more capital gains (Zhang, 2005). As a result of market discrimination, savings accumulated by rural residents in most cases cannot be used for rural community development. This is believed to be one of the important factors causing urban-rural inequality. The Hutubi Program made a breakthrough outside the market

---

9 The retirement insurance program has been suspended nationwide since 1998. This is why the total number of retirement insurance participants in Hutubi did not increase.
to retain savings in rural areas. Participants can make use of own assets for local community socioeconomic development. In fact, the Hutubi Program was originally used by the local government as a policy tool to develop local livestock husbandry (the Hutubi Rural Retirement Social Insurance Office, 2007).

Despite its success, however, the Hutubi Program has limitations. First, the failure of a participant to repay loans will result in confiscation of his retirement account, adversely impacting retirement assets (Guo, Huang, Sherraden, & Zou, 2007). Although it has never happened thus far, some individuals do have this concern: “If I cannot return the loan, I will lose money for retirement insurance, which is mostly undesirable,” noted one individual. Nearly 40% of participants are worried about not being able to repay loans (Zhang, 2007). Second, only those who are retirement insurance account holders can benefit from this loan program. At present, only 28% of the rural population in Hutubi participates in retirement insurance, and therefore is eligible for the loan program. In other words, the majority of farmers who are in need of loan services are unable to use this loan program.

The Hutubi Program: Key Features for Asset Building

The Hutubi retirement social insurance program has many important features that offer opportunities to participants to build productive assets and improve long-term wellbeing. We emphasize several features of this program that have been especially effective:

Initial Subsidy to Open the Account

In 1998 when the retirement social insurance program was launched, most villages in Hutubi offered a one-time initial subsidy as an incentive to encourage farmers in their villages to participate in the program. According to a participant who purchased five retirement social insurance accounts (for himself, his wife, two of his children, and his eldest daughter-in-law), “each insurance account costs ¥600. With a 25% (¥150) subsidy from Daquan Village, each of us ended up having ¥750 in the retirement social insurance account” (Zou, 2007). The initial subsidy significantly stimulated farmers’ interest to participate in the program and to make an investment in their family’s future security.

Annuity Payouts in Retirement

Every participant who owns a retirement social insurance account is entitled to receive a monthly annuity payout when (s)he reaches age 60. The disbursement rate defined by the Hutubi local government is roughly 2.8% of the total one-time investment contributed by the participant at the time of opening a retirement social insurance account (Hutubi County Retirement Social Insurance Office, 2006). The up-front marketing of the financial return in this program was a selling point for several participants interviewed (Zou, 2007).

Building Multiple Types of Assets

Participants have the opportunity to use their retirement social insurance accounts as collateral to take out loans to build various types of assets. Agricultural equipment or inputs needed for growing crops and raising livestock are the primary assets in which participants have invested. This is not surprising given that agriculture is the key industry in the Hutubi area. Other than agricultural assets,
participating farmers have the flexibility of taking out loans to invest in education, small businesses, and housing. The Hutubi Program allows a range of asset-building uses of the loans by providing a conversion mechanism for between different types of asset (e.g., from retirement savings to productive assets).

**Ability to Borrow and Invest**

The most innovative aspect of the Hutubi Program is that it allows farmers to borrow against savings in their retirement social insurance accounts and invest in productive assets before they reach the cut-off retirement age of 60. This innovation is described by government officials in Hutubi County as a process of bringing the “dead money” to life (Zou, 2007). All participants can take out loans out of their own—and with approval, out of others—retirement social insurance accounts to make an investment. Loan repayment is usually made a year after the investment is made, depending on specific terms of different loan types.

**Beyond Microfinance: Inclusion of the Poor in Mainstream Financial Services**

The Hutubi retirement social insurance program is an example of a local effort to expand rural people’s access to mainstream financial services. A large proportion of the rural population in China does not have access to the full spectrum of financial services that urban residents can receive from major financial institutions. Over the past decade, the Hutubi local government has collaborated with local branches of the Agriculture Bank of China, the Bank of China, and the Rural Credit Cooperatives in the implementation process of the retirement social insurance program and the additional loan program (Zou, 2007). Although the financial services the Hutubi Program and the partner financial institutions have offered to participants are relatively limited, mainly credit and retirement insurance, this joint effort is a notable step towards bringing the 900 million rural Chinese into mainstream financial services.

**Inclusion and Progressiveness**

Ideal features of asset building in social policy are inclusion and lifelong asset building (Sherraden, 1991). Inclusion means reaching the entire population and progressiveness means providing greater assistance to individuals and families with disadvantaged backgrounds (Sherraden, 1991). The Hutubi Program formerly allowed only legal residents of age 18 or above to participate in the retirement social insurance program, but starting in early 2006, the age limit was removed, which means that all legal Hutubi County residents became eligible to participate in the retirement social insurance program, including newborns (Zou, 2007). This new policy has significant implications for inclusive, lifelong asset-based social policy in China.

**Policy Implications**

Undoubtedly, the success of the Hutubi Program has important implications for asset-based policy development in rural China. First, it reveals that rural residents have a demonstrable need for financial tools that facilitate asset building. Both the administrative data and in-depth interviews indicated that education, homeownership, and small business development are of equal importance to an individual as saving for later life. Asset-based policy can help respond to these social development and social protection challenges by recognizing that (1) the need for building assets is
universal among individuals; (2) social and economic development cannot focus exclusively on short-term consumption; and (3) many resources are required for long-term development, oftentimes exceeding an individual’s income flow. Given these characteristics, traditional welfare policies that target specific populations (usually the poor), employ means-tested eligibility, and use only income transfers often do not address long-term development. We do not mean to suggest that traditional welfare policies are misguided—indeed, we believe they are essential. But income support alone is often not sufficient if the goals are long-term development and social protection.

Second, the Hutubi Program suggests that asset-based policy is feasible in rural China. As mentioned earlier, asset-based policy aims to achieve both social protection and social investment. Based on the existing policy framework of retirement insurance with the goal of achieving economic protection for later life, the Hutubi Program supplies a new tool—a loan—to bridge social protection and social investment. To assist the development of asset-based policy in rural China, the Hutubi Program provides an important model; it introduced a new tool by means of an existing social policy. Future asset-based policy development might also do well to use existing policies as a platform.

Third, the Hutubi Program suggests several criteria to be considered for successful development of asset-based policy in rural China. First, asset-based policy should be comprehensive in terms of its goal. Participants have various needs for personal and household development. Policy with a comprehensive goal of asset building can be consistent with multiple investments by an individual across the life span. In addition, asset-based policy should be universal and inclusive. Due to the self-selected nature of the rural retirement social scheme, the Hutubi loan program at present is self-selected as well. Nonetheless, the program has the potential to move toward greater inclusiveness. For example, someday it might be possible to open an account for every child at birth. Finally, asset-based policy should demonstrate effectiveness. Specifically, policy mechanisms should allow assets to be used to maximum capacity. This is of particular importance for the poor, who control limited economic resources. The Hutubi loan program has demonstrated effectiveness in offering a convenient mechanism for asset conversion, so that assets use can be maximized for life goals at various stages.

To conclude, as a demonstration of asset-based policy, research findings indicate that the Hutubi Program has been successful in helping participants achieve individual and family development. These successes have been covered by the news media in China (e.g., Zhao, 2006; Liu & Li, 2005; Xinjiang Daily, 2006), and as a result, there is increasing awareness of the concept of asset building in China. Influenced by the Hutubi model, other rural areas of China are taking initiatives to develop similar programs. Sichuan, Inner Mongolia, Anhui, and Jiangxi Provinces have started experiments with the rural retirement insurance loan program in 2006.

In addition, growing enthusiasm about the potential of asset-based policy has led to a proposal for asset building to be a core theme of China’s social policy (Tang, 2005; Yang & Sun, 2005). For instance, there is a proposal to include asset building in the social safety net (Zhang & Tang, 2005). Experiments allowing farmers to exchange their landownership for other forms of assets (e.g., stakes of businesses) are underway in some places (e.g., Chongqin). Although it is too soon to predict where these developments will lead, it is possible that asset building may become an important policy tool to promote socioeconomic development in China.
References


Xinjiang Bureau of Statistics.


Appendix

Table 1. Loan information by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of cases</th>
<th>Total loan amount (¥)</th>
<th>Total amount of interest (¥)</th>
<th>Increase rate (%)</th>
<th>Number of retirement social insurance accounts used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>24</td>
<td>142,100</td>
<td>22,724.40</td>
<td>16.00</td>
<td>102</td>
</tr>
<tr>
<td>2002</td>
<td>656</td>
<td>3,468,100</td>
<td>542,284.60</td>
<td>15.60</td>
<td>3,691</td>
</tr>
<tr>
<td>2003</td>
<td>92</td>
<td>715,100</td>
<td>47,399.10</td>
<td>6.60</td>
<td>258</td>
</tr>
<tr>
<td>2004</td>
<td>85</td>
<td>500,700</td>
<td>25,596.20</td>
<td>5.10</td>
<td>378</td>
</tr>
<tr>
<td>2005</td>
<td>147</td>
<td>1,027,160</td>
<td>45,977.40</td>
<td>4.50</td>
<td>743</td>
</tr>
<tr>
<td>2006</td>
<td>258</td>
<td>1,596,400</td>
<td>N/A</td>
<td>N/A</td>
<td>1,306</td>
</tr>
<tr>
<td>Total*</td>
<td>1262</td>
<td>5,853,160</td>
<td>683,981.70</td>
<td>11.70</td>
<td>5,172</td>
</tr>
</tbody>
</table>

* Not including 2006

Table 2. The use of loan

<table>
<thead>
<tr>
<th>Use of loan</th>
<th>Number of program participants</th>
<th>Number of accounts as collateral</th>
<th>Percentage (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farming</td>
<td>1,058</td>
<td>4,477</td>
<td>66.19</td>
</tr>
<tr>
<td>Livestock</td>
<td>713</td>
<td>1,462</td>
<td>21.61</td>
</tr>
<tr>
<td>Other (electrical farming equipment, small business, and transportation tools)</td>
<td>55</td>
<td>294</td>
<td>4.35</td>
</tr>
<tr>
<td>Children’s tuition</td>
<td>45</td>
<td>213</td>
<td>3.15</td>
</tr>
<tr>
<td>Loan for consumption</td>
<td>66</td>
<td>318</td>
<td>4.70</td>
</tr>
<tr>
<td>Total</td>
<td>1,937</td>
<td>6,764</td>
<td>77.79**</td>
</tr>
</tbody>
</table>

* Source: The Hutubi Rural Retirement Social Insurance Office, 2007 (this is a summary from 2002 to 2007).

Table 3. Ownership of productive assets and the use of loans (N=427)

<table>
<thead>
<tr>
<th>Ownership of productive assets</th>
<th>Retirement social insurance participants without participating in the loan program</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loan borrowers (%)</td>
<td>Account lenders (%)</td>
</tr>
<tr>
<td>Vehicle</td>
<td>9.4*</td>
<td>6.8</td>
</tr>
<tr>
<td>Large farming equipment</td>
<td>13.2</td>
<td>12.0</td>
</tr>
<tr>
<td>Small farming equipment</td>
<td>93.4</td>
<td>82.7</td>
</tr>
<tr>
<td>Cows</td>
<td>14.2</td>
<td>12.8</td>
</tr>
<tr>
<td>Sheep</td>
<td>28.3</td>
<td>18.0</td>
</tr>
</tbody>
</table>


* Percentages are based on the total frequency of each column.
Table 4. Retirement social insurance fund by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of participants</th>
<th>Total amount in retirement social insurance fund (in thousands ¥)</th>
<th>Average savings per account (¥)</th>
<th>Annual interest gain (in thousands ¥)</th>
<th>Annual growth rate of retirement social insurance fund (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>9443</td>
<td>1697.91</td>
<td>1798.06</td>
<td>122.00</td>
<td>8.27</td>
</tr>
<tr>
<td>1999</td>
<td>8883</td>
<td>1717.48</td>
<td>1933.45</td>
<td>103.29</td>
<td>6.96</td>
</tr>
<tr>
<td>2000</td>
<td>8746</td>
<td>1791.12</td>
<td>2047.93</td>
<td>102.17</td>
<td>6.68</td>
</tr>
<tr>
<td>2001</td>
<td>8704</td>
<td>1899.68</td>
<td>2182.54</td>
<td>120.20</td>
<td>7.53</td>
</tr>
<tr>
<td>2002</td>
<td>8674</td>
<td>1975.91</td>
<td>2277.97</td>
<td>89.90</td>
<td>5.41</td>
</tr>
<tr>
<td>2003</td>
<td>8652</td>
<td>2077.33</td>
<td>2400.98</td>
<td>116.75</td>
<td>6.75</td>
</tr>
<tr>
<td>2004</td>
<td>8638</td>
<td>2206.11</td>
<td>2553.96</td>
<td>145.27</td>
<td>8.07</td>
</tr>
<tr>
<td>2005</td>
<td>8606</td>
<td>2351.72</td>
<td>2732.65</td>
<td>167.07</td>
<td>8.93</td>
</tr>
<tr>
<td>2006</td>
<td>8675</td>
<td>2452.96</td>
<td>2827.62</td>
<td>156.58</td>
<td>7.66</td>
</tr>
</tbody>
</table>