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Does People's "Proximity to Financial Institutions" Have an Impact on the Utilization of Financial Service in Rural Areas? A Case Study of a New Branch Office of Opportunity International Savings and Loans Ltd. of Ghana Has Been Selected to Explore the Question

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Does People's "Proximity to Financial Institutions" Have an Impact on the Utilization of Financial Service in Rural Areas? A Case Study of a New Branch Office of Opportunity International Savings and Loans Ltd. of Ghana Has Been Selected to Explore the Question

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Abstract

The purpose of this paper is to examine a hypothesis that runs contrary to the existing literatures — that "proximity" to financial institutions is not necessarily a crucial determinant which affects the utilization of formal financial services by rural people. The author has selected the case of the newly established branch office of Opportunity International Savings and Loans Ltd. (OISL) of Ghana, which has smoothly extended its financial services to rural areas since its inception.

The quantitative analysis confirms the hypothesis by showing that neither lenders nor users regard "proximity" to be a significant determinant of the provision and utilization of loans. They instead regard the following determinants as being significant. Firstly, the financial condition of users is a significant determinant, regardless of their "proximity" to financial institutions. Secondly, OISL's ability to efficiently provide financial services and products that meet the demands of people whose needs are not being met by existing formal and informal financial services. Thirdly, the lender's transformational work has encouraged people to at least open accounts, as many of the interviewees mentioned. Fourthly, "proximity" needs to be understood as the users' "accessibility" to primary roads, rather than their "direct physical distance" from the branch. Although this study is based on the limited area of rural Ghana, both OISL's approach to rural people and the perception of financial service provision have some implications for other FFIs.

Keywords: Microfinance, Proximity, Determinants

1. Introduction

"*Microfinance is a labor intensive industry.*"

"*It is very hard work to visit remote rural areas by public transportation and explain how people can utilize microfinance services to people who often cannot read and write. Only young and energetic people can keep working, as it is rather difficult for elder people to do the same job.*"

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"Since the field work of loan officers is physically and mentally tough, most of them quit their job within five years."

These are the words the author heard from loan officers of microfinance institutions (hereinafter called MFIs) operating in Ghana and Tanzania. The Consultative Group to Assist the Poor (CGAP) states that "(b)ringing financial services to rural clients is one of the biggest challenges in the quest for broad-based financial inclusion" (CGAP 2009a: 3).

Most of the MFIs that operate for a large geographical spread of clients cannot afford the increasing supervisory costs of financial institutions or the compliance costs for clients, coupled with the poor transportation and communication infrastructure in the area (Hishigsuren 2006). They face a greater risk with the number of clients increasing because the information asymmetry is detrimental to the microfinance sector (Braniff 2010). In such a situation, MFIs always face a trade-off between minimizing loan defaults and the supervisory costs.

In contrast, a rural branch manager of FINCA Tanzania mentioned that even though it was very hard work to expand the financial service frontier to rural areas at the beginning, the physical distance could be overcome once MFIs had started to operate in the area. The practical perceptions of "rural" made the author consider whether the "physical distance from financial institutions" is crucial in preventing rural people from utilizing financial services. Therefore, the author attempts to figure out whether proximity to financial institutions is a crucial determinant in the decision of rural people to utilize financial services. If proximity is not significantly related to the actual utilization of financial services, what are the determinants in rural areas? This is the author's basic interest in conducting this study.

This paper attempts to examine the determinants of rural people's financial service utilization, with the emphasis being on "proximity" to financial institutions. The author takes loans and savings as being "financial services", as these are the main financial products that are utilized by people in the case study area. The structure of this paper is as follows: the next section provides the determinants of the demand for financial services in rural Ghana, based on the literature survey; section 3 explains the data collection method and analysis methodology; and section 4 presents the empirical results and discussion, which leads to a conclusion in section 5.

2. Determinants of the Demand for Financial Services in Rural Ghana

The issue of whether the demand for financial services in rural areas is met or not has been examined in the context of the "determining factors approach". (Bendig et al. 2009, Awunyo-Vitor et al. 2012, Doan et al. 2010). Bendig et al. 2009 studied the relevance of the demographic characteristics, assets endowments, economic activities, risk assessment, shock experience and residential places, etc. for the household's choice of savings, loans and insurance, based on the household survey

conducted in two villages of the Aikuma/Odoben/Brakwa districts of the Central Region in Ghana. Awunya et al. 2012 examined whether formal and informal credit are utilized by the maize producers of Ashanti and Crong Ahafo Regions of Ghana — substitutable or complementary — and investigated several determinants that influence the producers' demand for formal and informal credit. The author has added a similar analysis that was conducted in Vietnam in order to provide a wider view of the determinants. Doan et al. 2010 examined the factors that affect the demand for formal and informal credit by the heads of household in peri-urban areas of Ho Chi Mihn City in Vietnam and clarified the different behaviors of people living in the urban and peri-urban parts.

The approach adopted by these empirical studies was to look at the relationship between the demand for financial services as a dependent variable, and physical and human capital endowments as explanatory variables. The following variables were examined as explanatory variables of credits and/or savings utilization. As a dependent variable, Bendig et al. 2009 utilized satisfied demand, proxied by the actual use of services. Doan et al. 2010 took a binary variable that represented whether households borrowed or not, and Awunyo-Vitor et.al. 2012 adopted a binary variable that represented whether a respondent's demand for credit is based on a survey questionnaire or not.

The examined variables are summarized in Table 1.

"Proximity to formal FIs (VA1)" or, in other words, the shorter the distance to the nearest FFI, the better access people will have. This is considered to have a positive impact on people's access to FFIs; hence, it leads to the utilization of financial services. However, the reviewed studies reveal both a positive and negative correlation between the proximity and the demand for loans and savings. In the Ashanti and Brong Ahafo Region and Central Region of Ghana, proximity has a positive impact on credit utilization, but also a negative impact on savings, reflecting rural people's stronger reliance on informal financial services. In rural Vietnam, the impact of proximity has an ambiguous aspect on each of the areas. In the rural part of the country, people can easily borrow money from informal sources, based on having both a stronger social relationship and interpersonal trust in credit transactions (Doan et al. 2010: 17). Regarding "Gender (Female) (VA2)", females fund it difficult to utilize formal credit and savings in rural Ghana, whereas no gender bias was found in the case of peri-urban Vietnam. In the Ashanti Region of Ghana, female maize farmers are less likely to demand formal credit compared with male farmers, which reflects the fact that women control few assets and cultivate small acreages. Hence, they cannot provide the collateral that is requested by FFIs (Awunyo-Vitor et. al. 2012: 109). The opposite was the case when it came to "age (VA3)". In rural Ghana, people's age (up to 61 years old) was found to have a positive impact on the demand for credit and insurance, as experience of financial matters increases with age (Bendig et al. 2009: 24). In Vietnam, households with older heads required less credit. "Education (VA4)" shows the opposite results as well. In rural Ghana, education enhanced people's financial literacy, as it helps people to understand formal credit, savings and insurance, and demand for them, as is the case with other developing countries. In contrast, the

Table 1 Determinants of Demand for Formal Financial Services

Explanatory variables	Bendig et al. (Ghana)	Awunyo-Vitor et al. (Ghana)	Doan et al. (Vietnam)
Targeted financial services	Formal credit, savings and insurance	Formal and informal credit	Formal and informal credit
Examined area	Rural	Rural	Peri-urban, rural
No. of samples	350	590	411
VA1: Proximity to formal FIs	○ Formal credit × Formal savings × Formal Insurance	○ Formal credit	× Formal credit ○ Informal credit
VA2: Gender (Female)	× Formal credit × Formal savings	× Formal credit	○ Formal credit (no gender bias)
VA3: Age	○ Formal credit × Formal savings ○ Formal insurance	No data	× Formal credit (old and unmarried)
VA4: Education	○ Formal credit ○ Formal savings ○ Formal insurance	○ Formal credit × Informal credit	× Formal credit (no relevance) → contrary to other study
VA5: Assets	○ Formal credit ○ Formal savings ○ Formal insurance	○ Formal Credit × Informal credit	○ Formal credit (proxied by phone ownership) × Formal credit (house, land etc)
VA6: Other income generating activities	No data	○ Formal credit ○ Informal credit	○ Formal credit
VA7: Trust in FIs and staff	○ Formal insurance	No data	○ Formal credit
VA8: Remittance	○ Formal savings × Formal insurance	No data	No data
VA9: Risk Assessment and experience of shocks	× Formal credit × Formal savings × Formal insurance	No data	No data

Note: ○ indicates that the explanatory variable increases the demand for the service, and × vice versa.
Source: The author compiled the table, based on Bendig et al. 2009, Awunyo-Vitor et al. 2012 and Doan et al. 2010.

education of household heads does not exert an influence on credit utilization in Vietnam, as they work at places where education is not well rewarded (Doan et al. 2010: 16). "Assets (VA5)" plays a significant role as they are provided to FFIs as collateral and used as a source of savings. Looking at the types of assets, it was found that while phones are favored as an asset, land and houses are found to have no impact on borrowing in peri-urban Vietnam because of a lack of, or incomplete, legal documentation of

the assets (Doan et al. 2010: 16). "Other income generating activities (VA6)" are a significant variable that people can use to get credit and make savings, as they can enhance the creditworthiness of people. Trust in FFIs and its staff (VA7) may even be more important than proximity to FFIs in Ghana (Bendig et al. 2009: 27). Better community relationships and interpersonal trust were found to play an important role in the rural parts of peri-urban areas if people utilized informal credit, such as borrowing from relatives and friends. Remittance (VA8) plays the role of insurance and could also become a source of savings at formal institutions. In terms of risk assessment and the experience of shocks, households that are exposed to risks more than others are less likely to have savings and opt for credit and insurance, as they see the use of formal services as an additional risk.

3. Data and Methodology

The purpose of this paper is to examine a hypothesis which runs contrary to the existing literatures —that "proximity to FFI" is not necessary a crucial determinant which affects the utilization of formal financial services by rural people. To examine this hypothesis, the author selected the case of OSIL's newly established branch office called Ada Kasseh, which has smoothly extended financial services to rural areas since its inception. OISL is a subsidiary of Opportunity International of the United States, which is a socially-oriented institution that operates microfinance business in 15 developing countries.

The research consists of both a literature survey and fieldwork. The fieldwork was conducted twice: first of all, from 18th February to 8th March 2013, and then from July 22nd to August 15th 2013.

The author collected the following data in order to examine the determinants of the utilization of OISL's financial service from both the perspectives of the financial service provider (OISL) and the users: (1) Loan and savings, including the outstanding amounts of all the 2,436 clients of the Ada Kasseh branch, to grasp the overall picture; (2) 164 loan application sheets randomly collected from the shelves of the Ada Kasseh branch to examine OISL's loan provision application policy, with different residential areas and different creditworthiness; (3) key informant interviews with staff at OISL's headquarters office to complement the examination[1]; and (4) questionnaire surveys of 53 OISL clients and 34 non-OISL clients conducted in 12 communities in the studied area.

Sampling Methodology of the 12 Communities

The author considers "proximity" in two ways: the direct distance from the Ada Kasseh branch to places of residence and people's "accessibility" to the branch, regardless of the direct distance. The author selected 12 communities from the list of clients at the Ada Kasseh branch that met the following conditions: (i) their direct distances from the Ada Kasseh branch; (ii) the different locations, such as regional centers, areas along primary roads and rural areas accessed by feeder roads, taking into account people's "accessibility".

The author consulted with a community organizer who has worked with all of the branch's clients since the beginning of OISL's operation in Ada Kasseh and selected 12 communities that met the above-mentioned conditions. The locations of the 12 communities are shown in Figure 2 below. The author interviewed OISL's clients and non-clients in the 12 communities. This was done by accompanying the OISL relationship officers and deposit mobilizing officers during their regular visit to the respective communities. A list of interviewees is attached in Annex 1. The author interviewed those who had attended OISL's regular meeting after they had accepted the interview request. Regarding the non-OISL clients, the author interviewed people in their own respective community who had accepted the interview request.

Who Conducted the Survey?

The author conducted the survey with the support of interpretation by OSIL's community organizer, who speaks both English and the local languages spoken in the studied area.

Structure of the Survey

The questionnaire utilized for OISL's clients and non-clients included questions on physical endowments, such as loans and savings, place of residence, house ownership, retained profits; human endowments, such as their age, gender, education, marital status; and institutional endowments, such as the frequency of the visits by OISL staff, and the number of participants at OISL's regular meetings.

Methodology

The quantitative analysis was complemented by qualitative analysis, which was based on the questionnaire surveys deployed in this paper. Firstly, the author examined the geographical penetration of financial services by utilizing data from the Ada Kasseh branch. Secondly, the determinants of loan provision were examined from the lenders' perspectives by utilizing the loan application data. Thirdly, the determinants of the demand for loans and savings were examined from the users' perspectives by using the questionnaire survey results. The explanatory variables, reviewed in section 2, were applied to examine the effectiveness of the candidate explanatory variables, which were examined by multiple regression analysis. When considering the examined results, the author analyzed whether "proximity" was a crucial determinant or not.

4. Empirical Results and Discussion

4.1. Overview of the Studied Area and Ada Kasseh Branch

Ada Kasseh is a town in the Ada East district of the Greater Accra Region of Ghana, which is 120 km east of the Capital Accra. It is situated along the Accra-Aflao Road that connects it to the

neighboring country of Togo. Precipitation in the area is between 750 mm to 1250 mm per year, which enables farmers to produce a variety of agricultural products with the main vegetation being cassava and vegetable that grow throughout the whole year. According to the National Statistical Service, 68.3 percent of the total population live in rural areas in the Ada East district.[2]

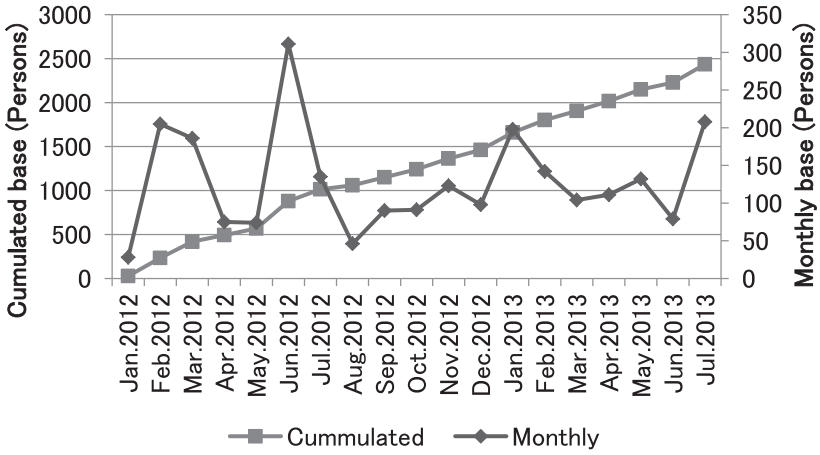
The Ada Kasseh branch is a strategic arm of OISL that has promoted its operation in the studied areas. OISL started providing loans by seconding loan officers called "relationship officers" (ROs) in 2005 from the Ashaiman branch, which is 60 km west of Ada Kasseh. However, the high transaction costs were further increased by inadequate communication with local people. This was due to the different local languages spoken there, which make the dissemination of financial services rather difficult. Therefore, OISL started its operation at Ada Kasseh by placing a mobile banking vehicle (MBV) there. The MBV was stationed at Ada Kasseh for a whole week, except for Wednesdays when it went to another regional center called Ada. OSIL recognized the potential demand for financial services during the one and a half year feasibility study, and established the brick and mortar branch office there on 24th June 2013.

There are 13 staff members working at Ada Kasseh: a branch manager, 2 ROs, 2 deposit mobilizing officers (DMOs), who collect small deposits every day (like *susu*, the traditional deposit collectors of Ghana), a community organizer, a customer service officer, 2 cashers, 2 guard men, a driver and a cleaner. Out of 2,436 clients in the Ada Kasseh branch, as of July 2013, 500 clients save money in their accounts without borrowing any money. Most of the clients are group members and so individual clients are limited. Most of them are farmers who mainly produce vegetables.

Figure 1 shows the trend of the clients' who have opened bank accounts at the Ada Kasseh branch since its inception, from January 2012 to July 24th 2013.

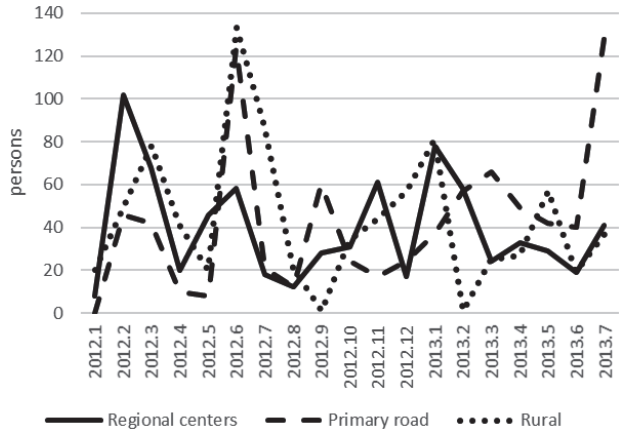
As the grey line (which is the cumulated numbers of clients) indicates, the number of clients joining

Figure 1 Number of Bank Accounts Opened at the Ada Kasseh Branch



Source: OISL Ada Kasseh branch

Figure 2 The Trend of OISL Clients, Classified by Three Categories of the Community



Source: Compiled by the author.

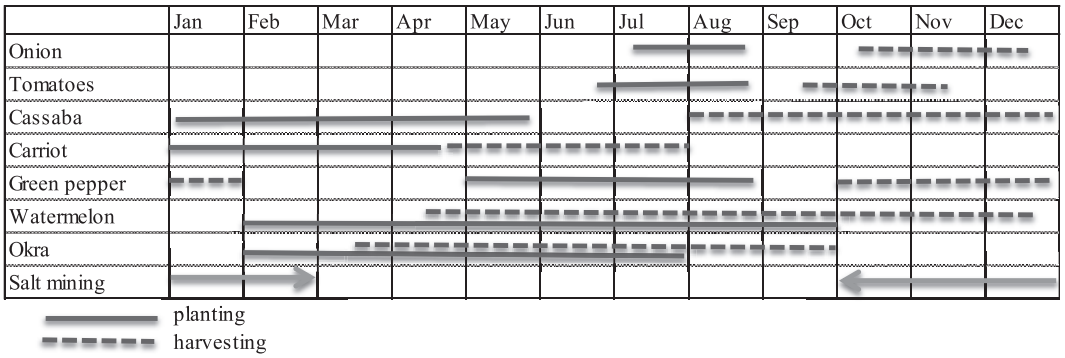
the branch has steadily increased with some fluctuations every month. The huge drop that occurred in August 2012 was due to the resignation of a loan officer due to a health problem. Figure 2 shows the breakdown of new clients, according to their residential areas. They are classified by the above-mentioned categories: "regional centers"; "areas along primary roads" and "rural".

A huge increase in the number of accounts was observed in January/February and June/July, which reflected the demand there was for loans to purchase farming inputs. Since most of the clients were farmers, the demand for loans increased from January to September as the cropping calendar indicates in Figure 3.

The community organizer played an ice-breaking role by visiting communities several times to explain OISL's services.[3] When the people in the community showed an interest in using the services, the ROs went to the clients' meeting several times a month to explain about basic financial issues, such as savings, financial planning, insurance, loan management, the danger of multiple debts and borrowing within the repayment capacity, etc.[4] These activities, called "transformational work", play a significant role in helping people understand OISL's services and decide using them. Some people even stated that they could not use OISL because they had not been in their communities when OISL staff had come to visit (ID 42, 52, 58, 65, 66, 85).

The impact of the resignation of the loan officer in August 2012 was not apparent in the regional centers and communities along the primary road, but a huge drop was observed in the number of clients in rural areas. The impact of the MBV, which used to be stationed in Ada every Wednesday and visited the surrounding communities, made people consider utilizing OISL's services (ID 24 of Bonikope, ID 36 of Anyakpo and ID 38 of Kportitseope).

Figure 3 Cropping Calendar of the Main Products and Salt Mining Activities.



Source: The author compiled this, based on interviews with the farmers of Addokope, Anyakpo, Anyamam, Bonikorkpe, Keaseve and Matsekorkpe.

4.2. Financial Institutions and Their Means in the Studied Area

Several formal and informal financial institutions operate in the studied area. Formal institutions exist in the regional centers: Ghana Commercial Bank (GCB) operates at Ada Foah and Sogakope; Ada Rural Community Bank (ARCB) operates at Kasseh, with an agency in Sege; Agricultural Development Bank at Sogakope; and Sege Credit Union at Sege. Regarding the informal financial institutions, both the Aelsheida susu company and Afamega susu company operate in the studied areas. People use "Plan Ghana", which was a community-based financial service. People who have a good, long business relationship with the sellers commonly use accounts payable.

In such a situation, OISL has attracted potential clients, as the following comments by the people who were interviewed show.

(1) OISL's staff frequently visit and stay longer in communities, which has made people trust them, compared with some of the susu, who were the only financial services that visited the communities before OISL and sometimes ran away with the collected money (ID12, 36, 64, 69, 72, 74. 83);

(2) Existing FFIs did not provide loans, even though people had saved for several years. Susu companies were reluctant to lend more money than they had received from people. OISL provided group-based loans, including agriculture loans that attracted previously unbanked people (ID 13, 14, 31, 32, 44, 45, 47, 52, 60, 62, 66).

(3) People appreciated OISL's procedures, such as a shorter credit screening process, compared with other FFIs (ID 38), lower interest rates compared with susu (ID10, 14, 63, 73), higher deposit interest rates (ID 52), and they did not require unbearable collateral compared with GCB and Sege CU (ID 76).

(4) Some people utilized OISL as an alternative so as to avoid the risks of not being able to borrow money from existing FIs (ID 75, 76).

4.3. Determinants of the Utilization of the Loans and Savings Service

4.3.1. Geographical Penetration of OISL's Financial Services in the Studied Area

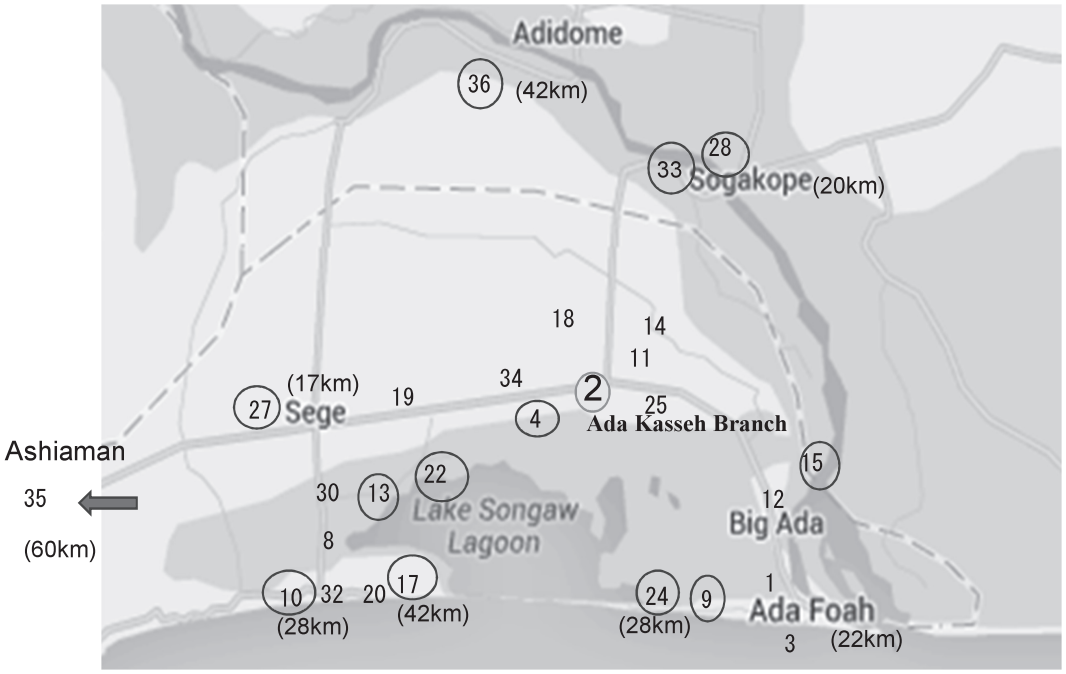
Figure 4 shows the location of the communities that OISL is operating in. OISL has approached the communities that are located along primary, secondary and tertiary feeder roads within a radius of about 60 km of the Ada Kasseh branch.[5] The figures in parenthesis show the distance of each community from the Ada Kasseh branch.

Table 2 shows the classified communities that the Ada Kasseh branch operates in, based on the above-mentioned people's "accessibility" perspectives, with the direct distance figures included. Communities where the total number of OISL clients was less than five have been excluded from the classification.[6]

4.3.2. Characteristics of Loan and Savings Per Classified Community

Due to the accounting system that administers data by groups, out of the 2,436 clients, the loan

Figure 4 Beneficial Communities



Note: ◯ Communities where the interviews were conducted.
Source: Author compiled the map, based on the Google Map (https://www.google.co.jp/maps/@5.9785786,0.438983,11z)

Table 2 Classification of Communities

No	Regional Centers	Direct distance	No	Along primary roads	Direct distance	No	Rural	Direct distance
1	Ada	18km	4	Addokope	3km	8	Akplabanya	25km
2	Ada Kasseh	0km	11	Asigbekope	7km	9	Anyakpo	25km
3	Adafoah	22km	14	Fantekope	11km	10	Anyamam	28km
12	Big Ada	14km	18	Kpotame	10km	13	Bonikope	30km
27	Sege	18km	19	Koloidaw	11km	15	Keaseve	15km
28	Sogakope	20km	22	Matsekorkope	11km	17	Kpotichekope	42km
35	Ashaiman	60km	25	Bedeku	5km	20	Lolonya	35km
			34	Ashaimani	4km	24	Ocanseykope	30km
			33	Tefle	17km	30	Toflokpo	21km
						32	Goi	34km
						36	Battor	42km

Note: -The number of respective places is equal to those shown in Figure 2.
-The figures indicate the physical distance there is between Ada Kasseh and the respective communities.
Source: Compiled by the author.

outstanding data of 398 individual clients and regular deposits data of 1,516 individual clients were available. Table 3 shows the average loan amounts per classified community.

The average loan size of the rural community (1,142.7 GHC) was the highest with the higher standard deviation. It is likely OISL has captured potential clients that demand loans for farming, whereas existing FFIs were reluctant to give these, as mentioned in 4.2. In contrast, the severe competition OISL has with existing FFIs makes it difficult for OISL to attract the same variety of clients in the regional centers that they have in rural areas. This has resulted in a small amount of loan provision there, as is shown in the smaller than average loan sizes with a smaller standard deviation. In fact, an auto repair shop owner who has borrowed money from OISL's Ashiaman branch nine times since 2005 intended to start borrowing from Sege Credit Union, which offered a loan of 10,000 GHC without collateral, whereas OISL did require collateral, such as a building, and a third-party guarantee when he applied to increase the loan amount to 10,000 GHC (ID 10).

Table 4 shows the average amounts of regular deposits. The average regular deposits of communities along primary roads (141.65 GHC) was the highest, with a high standard deviation. The average regular deposit of 69.5 GHC per client of rural communities was the lowest.

According to the interviews, people kept their money at home instead of savings with OISL. This ranged from 50 GHC (US$25) to as much as 3000 GHC (US$1,500), depending on their daily consumption needs (ID 31, 32, 33, 34, 35). Extended families in the coastal and lagoon areas tended

Table 3 Average Loan Sizes

Variable	Obs	Mean	Std. Dev.	Min	Max
Rural	159	1,142.76	1,121.12	303	6,464
Along primary roads	130	947.85	1,108.64	202	8,080
Regional centers	109	711.17	271.27	303	1,515

Source: OISL headquarters office.

Table 4 Average Regular Deposits

Variable	Obs	Mean	Std. Dev.	Min	Max
Rural	620	69.57	245.16	.06	3,787.60
Along primary roads	529	141.65	393.79	.01	5,312.68
Regional centers	420	101.56	319.65	.01	3,736.54

Source: OISL headquarters office.

to keep a certain amount of money for big family members (which is pointed out by ID 82). An interviewed farmer, who produced onions at Anyakpo, saved at OISL twice a month for safety reasons to obtain interest. He stated that his neighbors did not save so much and, therefore, he was an exception in his area (ID30). A traditional chief of Anyakpo (ID 36) stated that thieves could not enter the community without being watched by the people and any thieves found would be rolled up in sacks and thrown into the sea. He sometimes played the role of an informal judge and encouraged the community to repay delayed payments to OISL at OISL's request. Supernatural interventions were also mentioned as a tool to prevent assets from being stolen (ID 33, 36). This was confirmed by Nukunya 2003 who stated that: "(i)n farming communities, especially among the southern Ewe, the supernatural is employed in another interesting way which also merits mention... Anyone who tries to steal a crop put under a spell may be hurt in any way possible to prevent him from harvesting the crop" (Nukunya 2003: 98).

In contrast, areas along the primary roads are on the frontline of urbanization and so are not completely closed to outsiders. Therefore, people cannot fully rely on the invisible mutual supervision system that is commonly found in rural communities. In such a situation, relatively large deposits are saved at OISL. The interviewees from Matsekorkope, Koloidaw and Addokope stated that they preferred to save at OISL rather than keep their money in their house so as to prevent it from being stolen (ID 62, 67, 81, 82). Clients of regional centers, such as Ashiaman, Sege and Big Ada, do not necessarily save at OISL, as there are many other FFIs they can use.

4.3.3. Determinants from a Lenders' Perspective

As has been observed so far, the financial services of the Ada Kasseh branch are utilized throughout

the studied area. The author examined whether "proximity" is a crucial determinant when the lender accesses loans by utilizing OISL's loan application sheets of 164 applicants. The author used total assets, net cash flows and "proximity" to the Ada Kasseh branch as the determinants of approving loans.

Tables 5 and 6 show the relationship there is between the approved loan amounts and the three explanatory variables estimated by the multiple regression analysis. Net cash flows were calculated by deducting the total costs paid for business and household consumption from total revenues, which consist of business and other sources. Total assets consist of cash in hand, savings at banks and susu, credit payable, and stocks and fixed assets declared by the applicants when a RO helps them to write their loan application forms. As for "proximity", Table 5 utilizes "direct distance" from the applicants' communities to the Ada Kasseh branch, while Table 6 utilizes the "accessibility" of communities by regarding those located in rural areas as "rural" and those in regional centers and along primary roads as "non-rural". Dummy variables of 1 for rural and 0 for non-rural are utilized.

Table 5 Estimated Determinants of Demand for OISL Loans, Utilizing "Direct Distance" as Proximity

Case	No. of samples.	Partial correlation coefficient (t-statistics)			R^2
		Net cash flow	Assets	Direct distance	
1	164	2.134 (7.759)	0.372 (7.992)	− 2.708 (− 1.666)	0.433
2	42	4.463 (5.493)	0.450 (6.936)	− 1.444 (− 0.697)	0.785

Note: Case 1 utilizes all of the 164 loan application sheets, including those that do not have assets data. Case 2 examines application sheets, including assets data.
Source: Compiled by the author.

Table 6 Estimated Determinants of Demand for OISL Loan, Utilizing "Accessibility" as Proximity

Case	No. of samples	Partial correlation coefficient (t-statistics)			R^2
		Net cash flow	Assets	Accessibility	
1	164	2.145 (7.856)	0.372 (8.017)	− 156.376 (− 1.855)	0.435
2	42	4.528 (5.698)	0.435 (6.748)	− 169.362 (− 1.452)	0.794

Note: Same as Table 7.
Source: Compiled by the author.

Determinants of Loan Provision from the Lender's Perspective

Both Tables 5 and 6 indicate that the lender considers "assets" and "net cash flow" of the applicants more than they do "proximity", as these two coefficients have much more significance than "proximity". In addition, the coefficient of "direct distance" (t-statistics of −0.697) has far less statistical significance than "accessibility" (t-statistics of −1.452).

The findings suggest that OISL considers net cash flows and assets more than they do "proximity" when it accesses loan applications. When it comes to deciding loan amounts, OISL relies more on applicants' net cash flow than their assets, which is similar to the results found by Awunya-Vitor et al. (2012), which showed that income generating activities are more significant than assets as a determinant of credit provision in the rural areas of Ashanti and Brong Ahafo Region of Ghana. This is because of the unregistered ownership of assets and the inefficient legal execution system. In addition, the Ada Kasseh branch manager stated that the amount OISL loaned was based on net cash flows, which were equivalent to 1.5 to 2 times the respective installments, at the most. This is because OISL considers that this rate enables clients to repay without any problems, even when they cannot earn a regular income.[7]

4.3.4. Determinants from the Users' Perspective

Table 7 summarizes the definition of the explanatory variables utilized for the analysis, and Table 8 provides the respective statistics. The author adopts the relevant explanatory variables, reviewed in Section 2, and adds variables related to the "relationship between OISL and clients" ("Frequencies"

Table 7 Definition of Ten Explanatory Variables

Variables	Description
Age	Age of the interviewees
Gender	Gender of the interviewee, 1 if the interviewee is a female
House	Dummy variable, 1 if the interviewee (or family) owns the house
Proximity	Distance between the Ada Kasseh branch and the area of residence (km)
Profit	Last year's profit (retained earnings)
Education	Years of going to school
Frequencies	Number of days visited per month by OISL staff (RO and DMO)
Meeting	Number who participate in OISL's meeting per month
Other FFI	Dummy, 1 if they currently utilize other formal financial institutions
Other IFI	Dummy, 1 if they currently utilize other informal financial services
Main Livelihood	Agriculture = 0, Non-Agriculture = 1

Source: Compiled by the author.

Table 8 Descriptive Statistics

	OISL = 1 Not OISL = 0	Sex Dummy Female = 1	Age	Main Livelihood Agriculture = 0, Non Agriculture = 1	Other FFI Use = 1	Other informal FI use = 1	Proximity to OISL (km)	Frequency of OISL visit	Participation in OISL meeting/ training a month	Schooling primary = 6 years, Jr. HS = 9, Sr. HS = 13	Last year's profit (retained profits) (GHC)	House Dummy owned = 1	Total Loans (GHC)	Total savings (GHC)
Total Sample Mean	0.609	0.598	39.713	0.713	0.368	0.253	18.424	3.678	2.464	6.747	1,061.460	0.839	806.047	516.655
Total sample Std. Dev	0.488	0.490	10.413	0.453	0.482	0.435	11.109	3.837	1.034	4.569	1,404.171	0.367	1,018.642	1,640.418
OISL Mean	1.000	0.566	40.660	0.717	0.453	0.170	18.453	5.925	2.528	7.038	1,099.500	0.849	1,292.830	838.283
OISL Std. Dev.	0.000	0.496	10.053	0.450	0.498	0.375	11.256	3.302	0.983	4.198	1,432.501	0.358	1,026.872	2,037.012
Non-OISL Mean	0.000	0.647	38.235	0.706	0.235	0.382	18.375	0.176	1.333	6.294	995.304	0.824	24.242	15.294
Non-OISL Std. Dev	0.000	0.478	10.787	0.456	0.424	0.486	10.862	0.746	1.247	5.062	1,350.942	0.381	137.136	69.968

Source: Compiled by the author.

and "Meeting" variables"), the "existence of other formal and informal FI" ("Other FFI" and "Other IFI" variables) and "main livelihood". "Frequencies" and "Meeting" variables are added as well to examine whether the relationship between FFIs and the users positively influences the utilization of financial services, regardless of the proximity to FFIs, based on the assumption made by Bendig et al. 2012 that having trust in FFI staff might be more important than proximity to FFIs in a rural village in the Central Region of Ghana (Bendig et al. 2012: 27). In the rural areas of Ghana, the substitution of formal financial services with informal financial services has been observed (Awunyo-Vitor et al. 2012, Bendig et al. 2012). Therefore, the related variables are added. "Main livelihood" exerts an influence on the utilization of financial services and "agriculture" and "non-agriculture" variables are included in the analysis.

The author utilized 40 sets of the questionnaire survey results that were filled out by OISL clients. Taking loans or savings amounts as a dependent variable, and the 11 explanatory variables as independent variables, multiple regression analysis was conducted eight times for loans and seven times for savings by deducting the insignificant variables, one by one, in order to keep the variables significantly correlated to the dependent variable.

Table 9 shows the estimated partial coefficients for the determinants of loans after deducting the age, gender, house as a proxy for assets, education, main livelihood, other informal financial service, other formal financial services and the proximity to FFIs.

The negative impacts of the frequency of OISL staff's visits and the clients' participation in these

meetings on loans are contrary to the author's expectation that these variables would enhance the clients' utilization of loans, as the above-mentioned interviews show. Part of these results can be explained by some of the interviewees' comments about the high demand for individual loans to save time and money (ID 8, 14). The demand increases for individual and higher loans as the loan cycles increase. As for the negative impact of the "frequency of OISL visits", whose coefficient is smaller than that of "participation in OISL meetings", it is likely that people are rather reluctant to spend a certain amount of time when staff come to communities. The positive impact of last year's profit is consistent with the literatures' survey result, that people can utilize the profits as collateral when they borrow money from FFIs.

Table 10 shows the estimated partial coefficients for the determinants of savings after deducting the frequency of OISL staff's visits, education, age, the proximity to FFIs, main livelihood, house as a proxy for assets, and other informal financial service.

In line with the reviewed results of other rural areas of Ghana, females do not save at FFI as much as the males do in the studied area. In the case of the Ashanti and Brong Ahafo Region (Awunyo-Vitor et al. 2012), the interviewed females had less control over their assets, especially those who lived with extended families in coastal areas, and cultivated small plots of land independently from their husbands (ID 82). Some female interviewees made their living by themselves, as their husbands were married to several wives, based on the polygamy system, and so could not afford to provide sufficient income to their respective families (ID 63). The positive and significant relationship between the other FFIs and

Table 9 Estimated Partial Correlation Coefficients for Loans

Explanatory variables	Partial correlation coefficient	t-statistics
Frequency of OISL visits	− 52.087	− 1.655
Participation in OISL meetings	− 344.336	− 3.235
Last year's profits	0.195	3.156

Note: Number of observations is 40. $R^2 = 0.452$.
Source: Compiled by the author.

Table 10 Estimated Partial Correlation Coefficients for Savings

Explanatory variables	Partial correlation coefficient	t-statistics
Gender (female = 1)	− 617.746	− 2.592
Other formal FIs	786.849	2.575
Participation in OISL meeting	602.639	3.945
Last year's profits	0.365	4.042

Note: Number of observations is 40. $R^2 = 0.629$.
Source: Compiled by the author.

the amount saved indicates the users' risk aversion behaviors, which were frequently heard during the field interviews. People utilize different FFIs for different purposes, such as short-term savings for working capital at the nearby FFIs, long-term savings with the expectation of high dividends at another FFI (ID 11, 12, 13, 14), and savings at different FIs to hedge the risk of not being able to borrow money when it is needed (ID 76). Against the author's expectation, informal FIs were not found to be a significant explanatory variable, like the Ashanti and Brong Ahafo Region (Awunyo-Vitor et al. 2012). The reason for this is that people perceived susu companies and Plan Ghana, which are informal FIs frequently mentioned in the studied area, either positively or negatively, depending on their past experiences. It was observed that participation in the OISL meetings had a strong, significant positive impact on the amount saved. This is explained by the role of DMOs, who offer collecting services for daily savings, like the traditional *susu*, and encourage savings at the regular OISL meetings. Last year's profits could be a source of savings and, hence, have a strong relationship with the amounts saved.

5. Conclusion

The penetration of OISL's financial service in rural areas implies that "proximity" is not a crucial issue in the studied areas. The hypothesis that "proximity to FFI" is not necessary a crucial determinant that affects the utilization of formal financial services by rural people is therefore confirmed, based on the quantitative analysis that neither lenders' nor users' regard "proximity" to be a significant determinant of the provision and utilization of loans.

The study found that, instead of "proximity", the following determinants have an impact on financial service utilization in rural and remote areas. Firstly, the users' financial condition, which is embodied by net cash flow and the users' profits last year, is a significant determinant, regardless of "proximity". Secondly, OISL's efficient provision of financial services and products meet the demand of people whose needs were not being met by existing FFIs and informal financial services. This is especially the case with loan provision, including agriculture, which attracted many users. In contrast, existing FFIs were reluctant to provide loans, even though the clients had saved for a certain period. Thirdly, the lender's transformational work has encouraged people to at least open accounts, as many of the interviewees mentioned. However, after receiving loans, the lender's frequent visits and the users' participation in the meetings organized by the lender were found to be negatively perceived by users due to the users' high transaction costs and the preference for individual loans, rather than group loans. In the case of savings, the users appreciate such communication. Fourthly, the study found that "proximity" needs to be understood as "accessibility" to primary roads, rather than the "direct physical distance" to the Ada Kasseh branch. If the community is along a primary road, OISL is highly accessible by various means of transportation, including minibus, even though the community is

physically far away from the branch.

Although this study is based on the limited area of rural Ghana, OISL's approach to rural people and the user's perception of financial services has some implications for other FFIs when they consider expanding their financial frontier to remote rural areas.

Notes

1 Interviews were conducted with the following sections: the Marketing department and Transformation department on 25th February 2013, the Banking operations department on 26th February 2013 and the Finance department on 4th March 2013.
2 Ghana Statistical Service. "2010 Population & Housing Census District Analytical Report Ada East District". October 2014.
3 Based on interviews with the Head of Transformation of OISL on 25th February 2012 and the community organizer of the Ada Kasseh branch on 31st July 2013.
4 Based on an interview with the Head of Transformation of OISL on 27th February 2013.
5 The total length of the road network of the Dangme East district, of which the Ada East district was curved out in 2012, is about 172 km, and is made up of a primary road (28km), secondary roads (20.2 km), and feeder roads (123.3km). In the Ada East district, the only first class road is the 22km between Kasseh and Big Ada. There is also 53km of undriveable roads and 32km of driveable roads (Ghana Statistical Service, 2014).
6 The names of the excluded communities are: Addyerekope, Adomorkope, Afiadegbou, Kpodokope, Madavonu, Nakomkorkpe, Salem Agorkpo, Sokpoe, Wokonyekope, Tefle and Korleykope.
7 The interview with the Ada Kasseh branch was conducted on 1 August 2013 at the branch office.

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Annex 1. A List of Interviewees

ID	Residential Place	M/F	Age	Main business	Second business	Name of other FIs	Commuting tool to OISL Ada Kasseh branch	Purpose of loans	OISL = 1 Not OISL = 0	Main Livelihood Agriculture = 0, Non Agriculture = 1	Other FFI Use = 1	Other informal FI use = 1	Proximity to OISL (km)	Frequency of OISL visit	Participation in OISL meeting/ training a month	Schooling primary = 6 years, Jr. HS = 9, Sr. HS = 13	Last year's profit (retained profits) (GHC)	House Dummy owned = 1	Total Loans (GHC)	Total savings (GHC)
1	Kasseh Ada	M	35	Trade/ grocery			On foot	Purchase ice cream	1	1	0	0	1	6	3	13	750	0	700	105
2	Bonikorkpe	M	28	Farmer	Trade/ grocery		Bus (torotoro)	Buy seed, fertilizer, bags, etc (various needs exist)	1	0	0	0	30	2	1	9	950	0	880	0
3	Anyamam	M	39	Driver			Taxi	Buy car engines	1	1	0	0	28	6	3	0	1500	0	1000	700
4	Anyamam	M	33	Trade/ grocery	None		Bus (torotoro)	Buy drinks and bisket	1	1	0	0	28	4	2	0	na	1	210	420
5	Anyamam	M	27	Processor of primary goods	Driver		Bus (torotoro)	Buy more fish	1	1	0	0	28	4	2	9	1200	1	1500	500
6	Anyamam	M	35	Driver	Trade/ grocery	None			0	1	0	0	28	0		9	3000	1		0
7	Anyamam	M	33	Fisherman	Driver	None			0	0	0	0	28	0		9	1500	0	0	0
8	Anyamam	M	32	Salt digging and selling	Driver	None			0	0	0	0	28	0		6	1000	1	0	0
9	Anyamam	M	35	Farmer	Salt digging and selling	None			0	0	0	0	28	0		0	2500	1	0	0
10	Sege	M	33	Mechanic/ engine ering/auto repair	Driver	Sege Credit Union (9 years)		Buy spare parts	1	1	1	0	18	8	4	9	6000	1	2700	5650
11	Sege	M	42	Mechanic/ engine ering/auto repair	Driver	Danic, Ada RCB		Buy auto spare parts such as starter at Accra	1	1	1	1	18	8	4	9	na	1	2500	600
12	Sege	F	34	Hair dresser	Trade/ grocery	Sege CU		Buy wig and cream at Accra	1	1	1	0	18	8	4	9	na	1	1700	280
13	Sege	M	32	Carpenter	Trade/ grocery	Ghana Commercial Bank ADA RCB Sege CU		Buy wood, mattresses	1	1	1	0	18	8	4	9	na	1	4200	12750
14	Sege	M	43	Mechanic/ engine ering/auto repair	Driver	Sege Credit Union,		Buy spare parts	1	1	1	0	18	8	4	9	na	1	2500	2600
15	Tefle	F	64	Bakery	None	None	Taxi	Buy flour, margarine,	1	1	0	0	17	5	2	13	1400	1	1800	270
16	Tefle	F	48	Bakery	Hair dresser	Agriculture Development Bank Ghana commercial bank	Taxi	Buy flour, sugar and margarine.	1	1	1	0	17	4	1	9	5000	1	2000	300

17	Tefle	F	40	Trade/ grocery	None	None			0	1	0	0	17	0		9	1000	0	0	0
18	Tefle	F	51	Bakery		Ghana Commercial Bank	Bus (torotoro)	Buy flour, margarine and sugar	1	1	1	0	17	5	2	6	4800	1	1200	180
19	Tefle	F	40	Bakery	Trade/ grocery	Ghana Commercial bank Agabe RCB			0	1	1	0	17	0		0	na	1	0	400
20	Tefle	M	58	Flour miller		Agriculture Development Bank	Bike,		0	1	1	0	17	2	1	13	na	1	0	0
21	Tefle	F	33	Trade/ grocery	Trade/ grocery	None	Bus (torotoro)	Buy neckless, dress and poultry feed at Accra.	1	1	0	0	17	4	1	0	na	1	2500	375
22	Tefle	F	17	Trade/ grocery		None			0	1	0	0	17	0		9	na	1	0	0
23	Bonikope	F	30	Farmer	Salt digging and selling	None	Bus (torotoro)		1	0	0	0	30	6	3	6	240	1	800	83
24	Bonikope	M	45	Pastor	Trade/ grocery/Fa rmer	Sege branch of ADA RCB	Bus (torotoro)	Buy food supplement, cosmetics. I sell these goods by motorbike.	1	1	1	0	30	6	3	9	350	1	230	250
25	Bonikope	F	48	Farmer	Trade/ grocery	None	Bus (torotoro)	Farming and drinking bar. labor force	1	0	0	0	30	6	3	6	1000	1	700	225
26	Bonikope	M	47	Farmer	Salt digging and selling	None	Bus (torotoro)	Pay for labor force. Buy seeds	1	0	0	0	30	6	3	6	1000	1	800	120
27	Bonikope	F	43	Farmer	Salt digging and selling	None	Bus (torotoro)	Laborforce	1	0	0	0	30	6	3	0	0	1	800	130
28	Bonikope	F	25	Trade/ grocery		None	Bus (torotoro)	Buy cloth and T-shirt at Ada Kasseh	1	1	0	0	30	6	3	6	500	1	600	90
29	Bonikope	F	25	Farmer	Trade/ grocery/sal t digging and selling	None	Bus (torotoro)	Pepper seed and laborforce	1	0	0	0	19	6	3	9	600	1	900	245
30	Anyakpo	M	45	Farmer	None	GCB	Bus (torotoro)	Buy irrigation system, labor force	1	0	1	0	25	6	3	3	3000	1	1400	4210
31	Anyakpo	F	37	Trade/ grocery	Trade/ grocery	Ada RCB	Bus (torotoro)	Buy chemical, fertilizer, seeds, oil, other agriculture input	1	1	1	0	25	6	3	9	na	1	1800	5270
32	Anyakpo	M	32	Farmer	Trade/ grocery, Civil servant	Ada RCB	Bus (torotoro)	Buy seeds fertilizer, chemical and food for labor	1	0	1	0	25	6	3	13	1200	1	1000	2150
33	Anyakpo	M	49	Farmer	Fisherman	Used to use GHC			0	0	0	0	25	0		13	300	1	0	0
34	Anyakpo	F	46	Trade/ grocery		Afamega susu company			0	1	0	1	25	0		0	na	1	0	0

35	Anyakpo	F	50	Farmer		None			0	0	0	0	25	0		0	na	0	0	0
36	Anyakpo	M	38	Farmer	Chief	Ada RCB, Afamega susu company	MBV	Buy seeds, laborforce, manual, fertilizer, irrigation systems.	1	0	1	1	25	3	1	9	na	1	3000	450
37	Kportitseope	F	40	Salt digging and selling	Livestock	None			0	0	0	0	42	0		0	1250	1	0	0
38	Kportitseope	M	43	Trade/ grocery	Livestock	Aelsheida susu company, Ada RCB, Sege CU, Afamega susu company	Bus (torotoro)	Buy drugs	1	1	1	1	42	6	3	13	na	1	700	105
39	Kportitseope	F	45	Trade/ grocery	Trade/ grocery	None	Bus (torotoro)	Buy rice	1	1	0	0	42	6	3	0	300	1	300	45
40	Kportitseope	F	45	Trade/ grocery	None	None	Bus (torotoro)	Buy flour, fish, oil. Firewoods	1	1	0	0	42	6	3	0	0	1	700	105
41	Kportitseope	F	50	Trade/ grocery	None	CFC (microfinance)	Bus (torotoro)	Buy maize, fish, oil, firewood, water.	1	1	1	0	42	6	3	3	100	1	500	75
42	Kportitseope	F	42	Trade/ grocery		Aelsheida susu (individual)			0	1	1	0	42	0		0	na	1	0	0
43	Kportitseope	F	46	Trade/ grocery	None	Aelsheida susu (individual)			0	1	0	1	42	0		0	0	1	0	0
44	Sogakope	F	31	Trade/ grocery	None	Wawu Menyo (susu company) Ghana Commercial Bank	Bus (torotoro)	Buy cream and wig	1	1	1	1	20	4	1	13	3600	1	1600	240
45	Sogakope	F	30	Trade/ grocery	None	GCB	Bus (torotoro)	Buy cosmetics	1	1	1	0	20	6	3	9	na	1	1500	925
46	Sogakope	F	26	Trade/ grocery		susu			0	1	0	1	20	0		9	102	1	0	0
47	Sogakope	F	47	Trade/ grocery	None	Wawu Menyo (susu company) Ghana Commercial Bank	Bus (torotoro)	Buy food, meat, shirt, equipment, etc.	1	1	1	0	20	4	1	9	2000	0	3000	450
48	ogakope	M	52	Trade/ grocery		Agricultural Development Bank	Bus (torotoro)	Built a shop and buy MTN credit (airtime)	1	1	1	0	20	4	1	13	1440	1	1200	1180
49	Sogakope	F	20	Trade/ grocery		None			0	1	0	0	20	0		13	na	0	0	0
50	Sogakope	F	45	Trade/ grocery		individual susu			0	1	0	1	20	0		6	na	1	0	0

51	Sogakope	F	28	Trade/ grocery		ADB			0	1	1	0	20	0		6	na	1	0	0
52	Keaseve	F	35	Trade/ grocery	Brick constructor)	Plan Ghana			0	1	0	1	15	0		6	na	1	0	0
53	Keaseve	M	31	Trade/ grocery	Farmer/ Fisherma n	Plan Ghana Ada RCB (quit in 2012)	Bike	Buy fertilizer, seed and labor costs	1	0	0	1	15	5	2	6	0	1	1800	270
54	Keaseve	F	60	Trade/ grocery	Farmer	Plan Ghana		Buy straw and strings	0	1	0	1	15	0		0	300	1	0	0
55	Keaseve	M	58	Farmer	Livestock	Plan Ghana (used to use) Ada RCB (used to use)		Buy fertilizer, seed and labor costs	1	0	0	0	15	6	3	9	0	1	800	120
56	Keaseve	F	30	Trade/ grocery		None			0	1	0	0	15	0		0	0	1	0	0
57	Keaseve	M	42	Farmer	Brick constructor	Plan Ghana, Ada RCB	Bike	Buy fertilize, seed, labor	1	0	1	1	15	6	3	0	0	0	800	121
58	Keaseve	F	50	Trade/ grocery	None	Plan Ghana		Buy maize, pepper and oil	0	1	0	1	15	0		0	0	1	0	0
59	Keaseve	M	27	Farmer	None	Plan Ghana		Buy fertilizer, pipe.	1	0	0	1	15	6	3	9	1200	1	800	120
60	Matsekorkpe	F	35	Trade/ grocery	Farmer	used to use susu	Bus (torotoro)	Buy maize, fish and oil	1	1	0	0	11	7	3	9	500	1	500	185
61	Matsekorkpe	M	33	Farmer	Dress making	susu			0	0	0	1	11	0		13	4000	1	0	0
62	Matsekorkpe	F	54	Farmer	Farmer	Aelsheida susu (individual)	Bus (torotoro)	Buy rice and beans and oil.	1	0	0	1	11	6	3	9	240	1	400	60
63	Matsekorkpe	F	40	Trade/ grocery	Farmer	Aelsheida susu (individual)	Bus (torotoro)	Buy fish	1	1	0	1	11	6	3	0	1800	1	700	105
64	Matsekorkpe	F	39	Trade/ grocery	Farmer	None	Bus, taxi	Buy fish	1	1	0	0	11	6	3	9	0	1	700	105
65	Matsekorkpe	F	62	Trade/ grocery	Farmer	Aelsheida susu (individual)			0	1	0	1	11	0		13	240	1	0	0
66	Matsekorkpe	F	48	Trade/ grocery	Farmer	Aelsheida susu (individual)			0	1	0	1	11	0		9	0	1	0	0
67	Matsekorkpe	M	29	Carpenter	Farmer	Ada RCB			0	1	1	0	11	0		9	0	1	0	0
68	Asigbekope	F	35	Trade/ grocery	Farmer	Ada RCB	Bike		0	1	1	0	10	0	0	9	0	1	0	0
69	Asigbekope	M	36	Farmer	Driver/ mechanic/ engineering/ auto repair/ carpenter	None	Bus, bike	Buy fertilizer and seeds	1	0	0	0	10	6	3	9	na	0	400	60
70	Asigbekope	F	60	Trade/ grocery		None	Taxi	Buy pepper	1	1	0	0	10	6	3	0	900	1	700	105

71	Asigbekope	F	30	Trade/ grocery	Farmer	None	Taxi	Buy pepper	1	1	0	0	10	6	3	6	200	0	700	105
72	Asigbekope	F	30	Trade/ grocery	Farmer	None	Bike	Buy pepper, rice and oil.	1	1	0	0	10	6	3	9	360	1	500	75
73	Kasseh Ada	M	43	Trade/ grocery	Driver	Ada RCB	Own car		1	1	1	0	1	20	1	0	na	0	5000	750
74	Ada Kasseh	F	40	Dress making	Farmer	Ada RCB		Buy 2 sawing machines and a lining machine.	1	1	1	0	1	21	1	9	600	1	700	105
75	Ada Kasseh	F	45	Trade/ grocery	Farmer	GCB	On foot,		1	1	1	0	1	0	0	9	na	1	0	0
76	Ada Kasseh	M	60	Trade/ grocery	Farmer	Ada RCB Agricultural Development Bank	On foot,	Buy cement	1	1	1	0	1	2	1	13	700	1	1400	210
77	Ada Kasseh	F	56	Trade/ grocery	None	Ada RCB	On foot,	Buy maize and kokonte.	1	1	1	0	1	2	1	9	0	1	3500	525
78	Ada Kasseh	F	34	Trade/ grocery	Trade/ grocery	Aelsheida susu (individual)			0	1	0	1	1	0		13	na	0	0	0
79	Ada Kasseh	M	26	Trade/ grocery	Farmer	GCB Aelsheida susu (individual)			0	1	1	1		0		9	5100	1	0	0
80	Ada KaAsseh	F	32	Farmer		None			0	0	0	0		0		9	300	0	0	0
81	Addokope	F	24	Trade/ grocery	Farmer	None	Taxi	Buy biscuit	1	1	0	0	3	4	3	9	200	1	700	105
82	Addokope	F	50	Trade/ grocery	Farmer	None	Taxi	Buy cassava do.	1	1	0	0	3	4	3	9	150	1	700	105
83	Addokope	F	55	Trade/ grocery	Farmer	None		Buy cassava do.	1	1	0	0	3	4	3	0	200	1	800	120
84	Addokope	M	26	Farmer	None	None		Buy fertilizer, water melon seeds, pesticide and paid labor costs.	0	0	0	0	3	4	3	13	600	1	800	120
85	Addokope	F	40	Trade/ grocery	Farmer			Buy pepper	0	1	0	0	3	0		0	500	1	0	0
86	Addokope	M	30	Farmer	Brick constructor	None			0	0	0	0	3	0		9	500	1	0	0
87	Addokope	F	48	Trade/ grocery	Farmer	Alphamaga susu Ada RCB susu			0	1	1	1	3	0		0	700	1	0	0