

## GIVING OUT LOANS, THE BEST WAY OUT CASE STUDY: ATWIMA KWANWUMA RURAL BANK, ASHANTI REGION OF GHANA

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### ABSTRACT

*This paper is designed to model a linear programming problem and to apply optimization techniques to the operations of real life problems of banks, giving out loans to different clientele. The main objective of this paper is to determine the maximum net returns, which comprises the difference between the revenue from interest and lost funds due to bad debts. The bad debts are not recoverable both as principal and interest, thus reducing the total revenue. It is also to use the optimum solution to determine among the different clientele, the ones that are recommended and the ones that are least attracted. Atwima Kwanwuma Rural Bank was chosen for the study.*

**Keywords:** *Rural Banks, Loans, Linear Programming.*

### INTRODUCTION

Banking is the transactions carried on by any individual or firm engaged in providing financial services to consumers, businesses, or government enterprises. In the broadest sense, banking consists of safeguarding and transfer of funds, lending or facilitating loans, guaranteeing credit-worthiness, and exchange of money.

### BANKS IN GHANA

The Ghanaian banking system is characterized by a relative large number of banks, a wide mix in ownership structure and by differences in clientele base. The Bank of Ghana established in 1957, is the country's central bank and issues the

national currency. Since 1967 the monetary unit has been the cedi of 100 pesewas. Following numerous devaluations between 1981 and 1983 the new cedi was introduced (9,152.73 new cedi equaled US 1 dollar in early 2006).

The financial system in Ghana falls into three main categories: formal, semi-formal, and informal. The commercial banking system, which is dominated by a few major banks (among the total of 19), reaches only about 5% of households, most of which are excluded by high minimum deposit requirements. With 60% of the money supply outside the commercial banking system, the rural banks, saving and loans companies, and the semi-formal and informal financial systems play a particularly important role in Ghana's private sector development and poverty

reduction strategies. The assets of rural and community banks are nearly 4% of the commercial banking systems, with saving and loans and credit unions adding another 2% (World Bank, 1994). While the term "Rural and Micro Finance Industry" is used to refer collectively to the full range of these institutions, they use different methodologies to reach different (albeit overlapping) clientele among farmers, rural households, the poor, and micro enterprises, and hence different regulatory and supervisory instruments may be required.

At the end of the year 2004, there were seventeen banks operating in Ghana. These consist of nine commercial Banks, five merchant banks, and three development banks. The nine commercial banks are: Ghana Commercial Bank Ltd., Social Security Bank Ltd, Barclays Bank of Ghana Ltd., Standard Chartered Bank, The Trust Bank Ltd., Metropolitan and Allied Bank, International Commercial Bank, Stanbic Bank Ghana Ltd., and Unibank. The Merchant Banks include: Merchant Bank Ghana Ltd., Ecobank Ghana Ltd., CAL Merchant Bank, First Atlantic Bank, Amalgamated Bank. The Development banks include: Agricultural Development Bank, National Investment Bank, and Prudential Bank.

Three of the commercial banks control fifty-five percent of total assets of the banking sector, which is relatively moderate compared with other countries in Africa. However, about 25% of total assets and 20% of deposits are held by a single state-owned commercial bank, the Ghana Commercial Bank (GCB). The development banks and merchant banks, which focus on medium-and long-term financing and corporate banking respectively, together share about 30%. The five small commercial banks operate on a much smaller scale. Foreign investors hold about 53 % of the shares in eight commercial banks, which is below the Sub-Saharan Africa average, and three banks are state-owned (Bank of Ghana, 2004). The banking penetration ratio, at one bank branch per 54,000 inhabitants, is relatively high, but formal banking reaches only 5%

of the population and the coverage varies widely (Bank of Ghana, 2004). This reflects that 35% of bank branches are in the greater Accra Region even though the region represents less than 13 percent of the country's population. About half of all bank branches in the interior belong to GCB (Bank of Ghana, 2004).

As measured by the aggregated total-assets-to-Gross Domestic Product ratio, the banking sector grew rapidly between 1996 and 2000, reflecting partly financial deepening as well as loose monetary conditions. After reaching 44% in the year 2000, the ratio dropped to 38% at the end of the year 2002, as the trend of financial deepening resumed (Bank of Ghana, 2004). The same trend characterized the share of commercial banks, foreign operations: the share of bank assets denominated in foreign currency reached 35% in the year 2000 and then declined to 30% in 2001, probably reflecting the increased stability of the cedi exchange rate (Bank of Ghana, 2004).

Following the tightening of monetary policy in 2001, domestic credit to the private sector has remained around 10% of Gross Domestic Product, which is low even by African standards. This essentially reflects a typical crowding out effects, as most of the banks' resources are absorbed by the public sector, either in the form of loans to state-owned enterprises or holding of government securities, which have led to very high real Treasury-bill yields, especially in periods of tight monetary policy. As of September 2002, net loans constituted 38% of total assets as banks preferred to invest their resources in liquid, low-risk assets, such as government securities, the latter constituting 25% of total assets, (Amoah, 2004). In addition, state-owned enterprises have also attracted sizable amounts of directed lending from commercial banks recently, thereby exacerbating the crowding out effect. As a result, during the few years, banks lending to the public sector has typically absorbed more than half of the total available resources. The residual resources available for

lending to the private sector (about 29% of total assets in 2002) have been mainly channeled to the commerce and manufacturing sectors (23% of total credit), while the agriculture, forestry, and fishing sectors have received less than one-tenth of total bank credit although agriculture accounts for 36% of Gross Domestic Product (Amoah, 2004). With the exception of Tema Oil Refinery (TOR), which is the sector's large exposure, no single borrower amounts to 10% of the financial sector's total equity

### **THE NEED FOR RURAL BANKS**

By the early 1970's the Bank of Ghana had realized that the normal banking institutions were not able to mobilize funds and provide services to the rural community and thereby impact adequately on the development of the country. The Bank of Ghana therefore set up a department at the head office called the Rural Banking Department. The department was to see to the establishment and supervision of rural banks in the country. The rural banks were to operate under the banking law of Ghana (amended in 1989, 2005), Companies Code and the rules and regulations of the Bank of Ghana. The first rural bank to be set up in the early 1970's was the Nyarkrom Rural Bank at Agona Nyarkrom. The number has increased to 115 to date.

Rural banks have been commended for their efforts in making banking services available in most rural communities, which have enabled them access credit facilities to improve their businesses and enhance their living conditions. Some of the functions of the rural banks are:

- Rural banks share responsibility to deepen and widen financial intermediation through introduction of appropriate innovative instruments and products to suit the needs of the community.
- Rural banks extend banking services to the remote communities and assist them to increase productivity that would eventually translate into improved living conditions.

- Rural banks translate government policies on the "Golden Age of Business" to create wealth and reduce poverty.
- Rural banks enhance the economic empowerment of the rural population in the area.
- Rural banks bring about developmental and social needs of the economy in which it operates to stimulate job creation and create wealth.
- Rural banks offer credit facilities to the people to enable them tap the enormous natural resources of the area. For example the provision of credit to farmers to enable them to purchase seeds, fertilizers and other agricultural inputs
- Rural banks accelerate economic transformation and growth leading to improved standard of living and lower poverty rates in the rural communities.

In recognition of these roles, the Bank of Ghana is putting in place policies and programmes that would strengthen rural banks and enable them perform their developmental roles effectively.

### **LOANS**

Loan in finance is the lending of a sum of money (World Bank, 1994). In common usage it is the lending of any piece of property. A loan may be secured by a charge on the borrower's property (as a house-purchase mortgage is) or be unsecured. There are number of conditions attached to the loan: for example, when it is to be repaid and the rate of interest to be charged on the sum of money loaned. Almost any person or any organization can make or receive a loan, but there are restrictions on some types of loans; for example, those made by a company to one of its directors.

Loans can take many forms. The two major characteristics that vary among bank loans are the term of the loan and the security or collateral required to get the loan. For the loan term we have the long term and the short term, and that of the security is secured or unsecured debt.

### ATWIMA KWANWOMA RURAL BANK

Atwima Kwanwoma Rural Bank Limited, founded in September 1983, to operate as a rural banking outfit has currently four branches in Ashanti Region, besides its headquarters at Pakyi No 2. These are in Old Tafo, New Tafo, Santanse and Ayigya. According to the Managing Director of Atwima Kwanwoma Rural Bank, from 1995 to 2003, the bank spent over €600 million on development projects within its catchment areas (Godfred, O. A., personal communication). Its profit rose from €233.2 million to €2.392 billion between 1999 and 2003, (Godfred, O. A., personal communication). The bank in 1999 launched a scholarship scheme to assist wards of needy share holders and customers, and since then fifty-one students have enjoyed this benefit at a total cost of €73 million (Godfred, O. A., personal communication).

In the near future, the management plans to intensify its resource mobilization, to introduce efficient and prompt service through the computerization of the bank's products, and among others, implement a policy of "know your customer", a concept which will be hoodwinked into the bank's internet access.

Atwima Kwanwoma Rural Bank being the leading rural bank in Ghana was chosen as the bank for the study. It has the largest turnover among all the rural banks in Ghana with highly competitive banking products. They give out loans to different groups of people such as: Travel loans, other loans, Churches loans, Group loans and Susu loans. A linear programming model which is one of the quantitative analysis techniques was developed and the Simplex Method used to solve the problem.

- The bank is name is Atwima Kwanwoma Rural Bank instead of Atwima Kwanwoma Bank because it is established to provide banking services to the rural folks and those in the peri-urban areas.
- The bank offers susu loans, group loans, salary loans, individual loans and travel

finance loans.

- Any customer or organization with very impressive accounts operation with the bank qualifies for a loan.
- The interest rate susu loans attract per annum is 32%, while group, church development, travel finance, and other loans attract 36%, 32%, 48%, 36% interest per annum respectively.
- The various recovery rates for susu, groups, church development, travel, and other loans are 98%, 96%, 97%, 95%, and 95% respectively.
- The bank conducts effective monitoring of customers accounts and employ recovery teams to ensure that the loans are returned.
- The bank encounters 4% bad debt overall for all advances.
- The most patronized loan is group loans. Thus is because customers think it comes in a more flexible way.
- The least patronized loan is church development loans. Thus is because it has less demand.
- The average number of loans given out annually to Susu, groups, churches, travel and other loans are 10%, 70%, 5%, 5%, and 10% respectively.
- The bank does not intend to introduce new loan product this year, but may do so in subsequent years.
- The vision of the bank is to be the leading rural bank in Ghana.

### FORMULATION OF MODEL

This section considers the formulation of a loan policy by using Atwima Kwanwoma Rural Bank which gives out loans involving a total of 62 billion cedis. Being a full-service facility, the Bank is obliged to grant loans to different clientele. Table 1 provides the types of loans, the interest rate charged by the Bank, and the probability of bad debt as estimated from past experience.

**Table 1: Loan items and rates**

Types of Loans	Interest Rate (%)	Probability for Bad Debt (%)
Travel	48	5
Other	36	5
Churches	32	3
Groups	36	4
Susu	32	2

**MATHEMATICAL MODEL**

The variables of the model are defined as follows:

- $x_1$  = Travel loans (in billion of cedis)
- $x_2$  = Other loans (in billion of cedis) which include personal and funeral loans
- $x_3$  = Church loan (in billion of cedis)
- $x_4$  = Group loans (in billion of cedis)
- $x_5$  = Susu loans (in billion of cedis)

The objective of the Atwima Kwanwoma Rural Bank is to maximize its return comprised of the difference between the revenue from interest and lost funds due to bad debts. Since bad debts are not recoverable, both as principal and interest, the objective function may be written as:

$x_j$  units for the  $j$ th group

$\rho_j$  = probability for bad debt

$I_j$  = interest rate for the  $j$ th group

$I_j (1 - \rho_j)x_j$  = revenue from  $j$ th group

$$\text{Net revenue} = \sum_{j=1}^n I_j (1 - \rho_j)x_j$$

$$\text{Maximize: } \sum_{j=1}^n I_j (1 - \rho_j)x_j = \text{objective function}$$

Thus the objective function becomes

Maximize Z

$$= 0.48(0.95x_1) + 0.36(0.95x_2) + 0.32(0.97x_3) + 0.36(0.96x_4) + 0.32(0.98x_5)$$

which simplifies to

$$\text{Maximize} = 0.46x_1 + 0.34x_2 + 0.31x_3 + 0.35x_4 + 0.31x_5$$

OR

$$\text{Maximize} = \frac{23}{50}x_1 + \frac{17}{50}x_2 + \frac{31}{100}x_3 + \frac{7}{20}x_4 + \frac{31}{100}x_5$$

The problem has five constraints:

i) Total funds

$$x_1 + x_2 + x_3 + x_4 + x_5 \leq 62$$

ii) Group loans and Susu loans

$$x_4 + x_5 \geq 24.8$$

iii) Church loans, Travel and Other loans

$$x_3 = 0.5(x_1 + x_2 + x_3) \quad \text{Simplifying to}$$

$$-\frac{1}{2}x_1 - \frac{1}{2}x_2 + \frac{1}{2}x_3 \geq 0$$

iv) Limit on bad debts

$$\frac{0.05x_1 + 0.05x_2 + 0.03x_3 + 0.04x_4 + 0.02x_5}{x_1 + x_2 + x_3 + x_4 + x_5} \leq 0.04$$

Simplifying to

$$0.01x_1 + 0.01x_2 - 0.01x_3 + 0.02x_5 \leq 0$$

v) Non-negativity

$$x_1 \geq 0, x_2 \geq 0, x_3 \geq 0, x_4 \geq 0, x_5 \geq 0$$

A subtle assumption in the formulation above is that, all loans are issued at approximately the same time. This assumption allows the ignoring of differences in the time values of the funds allocated to the different loans.

Simplifying the maximization problem we obtain the resulting mathematical model to be:

$$\text{Maximize } Z = \frac{23}{50}x_1 + \frac{17}{50}x_2 + \frac{31}{100}x_3 + \frac{7}{20}x_4 + \frac{31}{100}x_5$$

subject to

$$x_1 + x_2 + x_3 + x_4 + x_5 \leq 62 \quad \text{Total funds}$$

$$x_4 + x_5 \geq 24.8 \quad \text{Group loans and Susu loans}$$

$$-\frac{1}{2}x_1 - \frac{1}{2}x_2 + \frac{1}{2}x_3 \geq 0 \quad \text{Church loans, Travel and Other loans}$$

$$-0.01x_1 - 0.01x_2 + 0.01x_3 - 0.02x_5 \leq 0 \quad \text{Bad debts}$$

$$x_1 \geq 0, x_2 \geq 0, x_3 \geq 0, x_4 \geq 0, x_5 \geq 0$$

The above problem is then solved, using the simplex method.

**RESULTS AND DISCUSSION**

The output of the Bank policy model is shown in Tables 2 and 3 while Tables 4 and 5 provide the sensitivity analysis

**Table 2: Optimal Solution and Reduced Cost**

Variable	Value	Objective coefficient	Objective Variable Contribution	Reduced Cost
(x <sub>1</sub> )Travel loans	18.6000	0.4600	8.5560	0.0000
(x <sub>2</sub> )Other loans	0.0000	0.3400	0.0000	0.1200
(x <sub>3</sub> )Church loans	18.6000	0.3100	5.8660	0.0000
(x <sub>4</sub> )Group loans	24.8000	0.3500	8.6800	0.0000
(x <sub>5</sub> )Susu loans	0.0000	0.3100	0.0000	0.0400

**Table 3: Slack and Surplus Values**

Constraint	RHS	Slack()/Surplus(+)
1 (<)	62.0000	0.0000-
2 (>)	24.8000	0.0000+
3 (>)	0.0000	0.0000+
4 (<)	0.0000	0.0000-

**Table 4: Range of Objective Function Coefficients (Single Change)**

Variable	Current Coefficient	Minimum coefficient	Maximum Coefficient
(x <sub>1</sub> ) Travel loans	0.4600	0.3900	infinity
(x <sub>2</sub> ) Other loans	0.3400	-infinity	0.4600
(x <sub>3</sub> ) Church loans	0.3100	0.2400	0.4600
(x <sub>4</sub> ) Group loans	0.3500	0.3100	0.3850
(x <sub>5</sub> ) Susu loans	0.3100	-infinity	0.3500

**Table 5: Right Hand Side Range (Single Change)**

Constraint	Current RHS	Minimum RHS	Maximum RHS	Dual Price
1 (-)	62.0000	24.8000	infinity	0.3850
2 (-)	24.8000	0.0000	62.0000	-0.0350
3 (>)	0.0000	0.0000	18.6000	-0.1500
4 (-)	0.0000	0.0000	0.0000	0.0000

Column 2 of Table 2 represents the optimal solution. Thus we have  $x_1 = 18.6$ ;  $x_2 = 0.0$ ;  $x_3 = 18.6$ ;  $x_4 = 24.8$ ;  $x_5 = 0.0$ . The result of multiplying a row entry of column 2 to that of column 3 is given in column 4 which represent the contribution of the decision variables to the optimal objective. The sum of column 4 is 23.102 and it is the optimal objective.

The reduced cost of  $x_2$  and  $x_4$  being non-zero indicates how much their coefficients should be increased before  $x_2$  and  $x_4$  become positive and contributes significantly to the optimal objective value. This is confirmed in Table 4 where the difference between entries in column 4 and column 3 gives 0.12 and 0.04 respectively for  $x_2$  and  $x_5$ .

Table 4 gives us the minimum and maximum limit up to which the coefficients of the respective decision variables could be changed so as to change the optimal objective value while maintaining the optimal solution. If the coefficient of  $x_3$  is increased to 0.4 then new objective value (NOV) is

$$NOV1 = 0.46(18.6) + 0.34(0.0) + 0.40(18.6) + 0.35(24.8) + 0.31(0.0) = 24.676$$

In this case the increased objective value is as a result of increase interest in rate. The reverse scenario is that the interest rate could be reduced with the same disbursement required by the optimal solution but at reduced objective value.

Table 3 shows the absence of non-zero surplus or slack values for the constraint equation. This means that all the budgeted amounts for the various investment portfolios were used.

Table 5 gives us the ranges through which the right hand side (constant) terms of the constraint equation could be varied to obtain change in the objective value. This would mean change in an investment portfolio to change the objective. The dual price column gives us the amount of objective value change per unit of budgeted investment.

The total fund should be increased, while the Group and Susu loans fund. Church loans, Travel loans and other loans fund, should be decreased to bring increase to the objective value. Assuming that the total investment is increased from 62.0 to 72.0 then the optimal objective value will increase by  $10 \times 0.3850 = 3.850$ . The new objective value will now be  $NOV2 = 23.102 + 3.850 = 26.952$ .

The solution of the Linear Programming problem suggest that the bank should continue investing in Travel loans, Church loans and Group loans while neglecting Susu loans and Other loans. However, it would be better to only reduce the scale of investment for the Susu loans and other loans since their complete cancellation may affect Susu collection which brings capital to the bank.

With the same optimal solution the turn-over can be increased through

- A single change in a coefficient of the objective function
- A single change in the constant term (budget allocation) of a constraint relation

It is not advisable to increase the objective function coefficient to increase the objective value, since that will mean increasing the interest rate. A better strategy is to change the relevant investment budgets. It is recommended that the total budget be increased.

Looking at the dual prices, the total budget shows that an increase of 1 billion cedis in allocated fund will increase the net return from all loans by 0.385 billion cedis. This also means that additional annual return on investment is 38.5%. The range of increase is not inhibited.

We observe from the solution output that Group loans, Travel loans and Church loans would do well and their budgets need to be increased. Thus, an alternative to the increment in total budget is to increase the budget of one of these loans. However, in order to increase any of these items other items in their budget group should be decreased considerably so as to allow for overall decrease in the group budget. As rows 2 and 3 of Table 5 show, the range of values of these group budgets are not large enough to allow for such changes. Hence the best option left is the increase in the total budget which can fortunately be made to have the desired impact on the Group loans, Travel loans and Church loans.

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#### APPENDIX NAMES OF RURAL BANKS

The list of community/rural banks supervised by Banking Supervision Department (BSD) of Bank of Ghana is provided below:

1. Abokobi Area Rural Bank Ltd
2. Ada Rural Bank Ltd
3. Adansi Rural Bank Ltd
4. Adonteng Community Ltd
5. Agave Rural Bank Ltd
6. Agona Rural Bank Ltd
7. Ahafo Ano Premier Rural Bank Ltd
8. Ahafo Community Bank Ltd
9. Ahantaman Rural Bank Ltd
10. Akatakyiman Rural Bank Ltd
11. Akim Bosome Rural Bank Ltd
12. Akoti Rural Bank Ltd
13. Akrofuom Rural Bank Ltd
14. Akuapem Rural Bank Ltd
15. Akyem Mansa Rural Bank Ltd
16. Akyempim Rural Bank Ltd
17. Amanano Rural Bank Ltd
18. Amansie West Rural Bank Ltd
19. Amantin Kasei Rural Bank Ltd
20. Amenfiman Rural Bank Ltd
21. Anlo Rural Bank Ltd
22. Anum Rural Bank Ltd
23. Asante Akyem Rural Bank Ltd
24. Asawinso Rural Bank Ltd
25. Asokore Rural Bank Ltd
26. Assinman Rural Bank Ltd
27. Asubonten Rural Bank Ltd
28. Asuopra Rural Bank Ltd
29. Asutifi Rural Bank Ltd
30. Atiwa Rural Bank Ltd
31. Atobiase Rural Bank Ltd
32. Atwima Rural Bank Ltd
33. Atwima Kwanwoma Rural Bank Ltd
34. Atwima Mponua Rural Bank Ltd
35. Avenor Rural Bank Ltd
36. Awutu Bawjiase Rural Bank Ltd
37. Awutu Emasa Rural Bank Ltd
38. Ayanfuri Rural Bank Ltd
39. Baduman Rural Bank Ltd
40. Bessfa Rural Bank Ltd
41. Biatorya Rural Bank Ltd
42. Bogoso Area Rural Bank Ltd
43. Bomaa Rural Bank Ltd
44. Bonzali Rural Bank Ltd
45. Bosomtwe Rural Bank Ltd
46. Brakwa Breman Rural Bank Ltd
47. Builsa Community Bank Ltd
48. Dangbe Rural Bank Ltd
49. Denkyiraman Rural Bank Ltd
50. Derma Area Rural Bank Ltd
51. Drobo Community Bank Ltd
52. Dumpong Rural Bank Ltd
53. East Mamprusi Rural Bank Ltd
54. Eastern Gomoa Assin Rural Bank
55. Ekumfiman Rural Bank Ltd
56. Enyan Denkyira Rural Bank Ltd

57. Esiam Rural Bank Ltd
58. Fiagya Rural Bank Ltd
59. Ga Rural Bank Ltd
60. Gomoa Rural Bank Ltd
61. Gomoa Ajumako Rural Bank Ltd
62. Guaman Rural Bank Ltd
63. Jomoro Rural Bank Ltd
64. Juaben Rural Bank Ltd
65. Kaaseman Rural Bank Ltd
66. Kakum Rural Bank Ltd
67. Kintampo Rural Bank Ltd
68. Kumawuman Rural Bank Ltd
69. Kwaebibirem Rural Bank Ltd
70. Kwahu Rural Bank Ltd
71. Kwahu Praso Rural Bank Ltd
72. Kwamanman Rural Bank Ltd
73. La Community Bank Rural Bank Ltd
74. Lower Pra Rural Bank Ltd
75. Mansoman Rural Bank Ltd
76. Manya Krobo Rural Bank Ltd
77. Mepe Rural Bank Ltd
78. Mfanteman Rural Bank Ltd
79. Mponua Rural Bank Ltd
80. Mumuadu Rural Bank Ltd
81. Naara Rural Bank Ltd
82. Nafana Rural Bank Ltd
83. Nandom Rural Bank Ltd
84. Nkoranman Rural Bank Ltd
85. Nkoranza Kwabre Rural Bank Ltd
86. North Tongu Rural Bank Ltd
87. Nsoatreman Rural Bank Ltd
88. Nsutaman Rural Bank Ltd
89. Nwabiagya Rural Bank Ltd
90. Nyakrom Rural Bank Ltd
91. Nyankumasi Ahenkro Rural Bank Ltd
92. Nzema Mamle Rural Bank Ltd
93. Odotobri Rural Bank Ltd I
94. Odokpon Kpehe Rural Bank Ltd
95. Odwen Anoma Rural Bank Ltd
96. Okomfo Anokye Rural Bank Ltd
97. Otuasekan Rural Bank Ltd
98. Sekyedumase Rural Bank Ltd
99. Sekyere Rural Bank Ltd
100. Shai Rural Bank Ltd
101. Sonzele Rural Bank Ltd
102. South Akim Rural Bank Ltd
103. South Birim Rural Bank Ltd
104. Suma Rural Bank Ltd
105. Tano Rural Bank Ltd
106. Tano Agya Rural Bank Ltd
107. Twifo Rural Bank Ltd
108. Union Rural Bank Ltd
109. Unity Rural Bank Ltd
110. Upper Amenfi Rural Bank Ltd
111. Upper Manya Krobo Rural Bank Ltd
112. Wamfie Rural Bank Ltd
113. West Mamprusi Rural Bank Ltd
114. Weto Rural Bank Ltd
115. Yabra Rural Bank Ltd