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EFFECT OF INITIAL LOAN APPRAISAL ON THE NON-PERFORMING LOANS IN AGRICULTURAL FINANCE INSTITUTIONS

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Abstract

Purpose: In the recent past Agricultural Finance Corporation has experienced huge non-performing loan portfolio. This has been to the tune of 5 billion comprising of 2500 clients. The purpose of this study was therefore to establish the contributors of non-performing loan to agricultural finance institution. The study sought to determine the effect of initial loan appraisal, the extent to which loanees' level of financial management skill affect NPL, and effect of credit policies and loan recovery strategies on nonperformance of loans at AFC.

Methodology: The study adopted a case study research design. Data was collected by using questionnaires administered by the researcher. The research targeted a single unit AFC. A total of 4 heads of department from credit, debt collection and recovery, Finance and Audit were targeted to respond to the questionnaire. The selection of the 4 heads was based on purposive sampling method. In addition 36 credit officers and 16 branch managers were selected using stratified and random sampling method as respondent to the study. This gave a total of 54 respondents. The data was analyzed using descriptive statistics utilizing SPSS.

Results: The research findings showed that there was a significant positive relationship between loan appraisal and ratio of non-performing loan to total advances. This implies that as the process of loan appraisal is improved and done properly, the loan performance also improves similarly. Therefore, if initial loan appraisal is not done properly it will lead to more non-performing loan

Unique contribution to theory, practice and policy: The study recommends that AFC top management should create a working relationship with other lending institutions to ensure that farmers do not abuse the well-kept farming financial records to acquire more loans from the other financial institutions whose recovery could create huge NPL on the part of AFC loans advanced to them.

Keywords: Non- performing loan, economic inflation, world recession, initial loan appraisal, agricultural finance institutions

1.1 INTRODUCTION

Financial institutions generally serve as financial intermediaries. It is their function to mobilize funds savers by issuing to them own securities. This form of asset transformation is required to ensure that funds are moved from surplus economic units to deficits economic units within the economy. These institutions, like any other business organization, have some risks to manage before they can successfully achieve their aim and objectives. Non –performing loans (NPLs) generally refer to loans which for a relatively long period of time do not generate income; that is the principal or interest on these loans has been unpaid for at least 90 days (Caprio & Klingebiel, 1999). Non-performing loans (NPLs) could also occur when the amortization schedules are not realized as at when due resulting in over-bloated loan interest due for payment.

Non- performing loans (NPLs) reduce the liquidity of the financial institutions, credit expansion; it slows down the performance of the real sector with direct consequences on the growth of the institutions, the institution which is in default and the economy as a whole. According to the theory of finance, there are various risks facing financial institutions. They include: credit risk, market risk, operating risk, reputation risk, climatic risk and political risk. The system is highly sensitive while the activities of the operators need to be conducted within the laid down and agreed rules and procedure, in order to achieve a reasonable level of efficiency.

Lending involves the creation and management of risk asset and is an important task of financial institution management. As in liquidity and portfolio management, effective management of the lending portfolio requires an articulated lending policy. This should set out the institutions lending philosophy and objectives including modalities for implementation, monitoring, appraisals and review to enhance efficiency and growth of Agricultural finance institutions. It is worth to clearly point to the fact that risks are the major intents of banking business. The degree of success of a financial institution greatly depends on the ability of management to ensure that the practice of risk management mitigates the impact of risk in such a way, and to such extent that recorded surplus is not only robust and covers the interest of various stake holders, but also ensure the health integrity of the bank.

One of the major components of financial institution's asset is loans and advances, and the effective management of such loan portfolio has been a problem. The failure of many banks is not because of their inability to mobilize adequate deposits from the surplus sector to the deficit sector of the economy, but mainly because their lending portfolio have been poorly managed. The banking sector is seen to have an important role to play in the economic development of the country. This is mostly pronounced in the realm of financial intermediation. However, the study by Mulondo (2011) on the sector shows that little success was recorded in this regard. Some financial institutions find it difficult to meet their obligations to their customers due to fault or weakness in managing their lending portfolio and shortcomings which could render them either illiquid on insolvent thus hampering the growth of the institution.

1.2 Statement of the Problem

Non-performing loans (NPLs) have become contemporary issues in credit management and undoubtedly the new Non-performing frontier in Finance institutions. The accumulation of Non-performing loans (NPLs) is generally attributable to a number of factors including economic down turns and macroeconomic volatility, terms of trade deterioration, high interest rates, excessive reliance on overly priced inter-bank borrowings, insider lending and moral hazards.

According to the Central Bank of Kenya non-performing loans stood at 114.4 billion as at march 2009, which was 50% of aggregate advances loaned out. This was attributable to certain economic variables such as inflation and general economic performance that lead to non-performance of loans. Agricultural Finance Corporation had recorded amount of non-performing portfolio debt comprising of 17,000 clients at a close of 1 billion as at 30[th]June 2015.

It is also imperative to note that, while several researches have been undertaken on management of credit and related financial matters, little if any research has been done in the area of effects of non-performing loans on the growth of agricultural finance institutions. A study undertaken by the Central Bank of Kenya (2009) on the growth in the banking industry identified factors hindering the growth of banks in Kenya. Non-performing loans being the key factor is as a result of poor portfolio management skill, poor loan appraisals; natural calamities such as bad weather, crop and livestock disease and poor credit policy, still many people tend to ignore the factors that lead to non-performing loans which later hinder the growth of agricultural institutions. It is on this basis then that research needed to be undertaken.

1.3 Research Objectives

i.   To find out the effect of initial loan appraisal on the non-performing loans at Agricultural Finance Corporation
ii.   To establish the extent to which loanee level of financial management skills affect non-performing loan at Agricultural Finance Corporation
iii. To determine the effect of credit policies on non-performance of loans at Agricultural Finance Corporation
iv.   To examine the effects of loan recovery strategies on non-performing loans at Agricultural Finance Corporation

2.0 LITERATURE REVIEW

Mulondo (2011) reviewed literature in the concept of initial loan appraisal and loan performance. The Pearson's correlation test on the relationship between loan appraisal and performance revealed that there was a significant positive relationship between loan appraisal with provision/Total advances ratio(r=0.575, p-value<0.01) and ratio of non-performing loan to total advances. This implies that as the process of loan appraisal is improved and done properly, the loan performance also improves. Proper loan appraisal will help identify and analyze loss exposures, use a combination of techniques to handle each exposure to ensure loan performance of any given portfolio.

According to Rupp (2002), credit risk management is a process that involves a series of steps; identifying and analyzing loss exposures through the appraisal technique, measuring loss exposures, selecting the technique or combination of techniques to be used to handle each exposure, implementing the technique chosen and monitoring the decisions made and making appropriate changes. It is also the support, control systems and other practices necessary to manage the outstanding risk assets, normal repayment and to monitor business risk. The appraisal technique involves credit initiation, evaluation, negotiation, and approval of facility. As an important step in initiation process, credit officers should visit the potential customer to gather information on client's business, mode of operation, management, and financial situation. Bank should base their credit analysis on the five C's principals of lending.

The 5Cs as discussed by Pandey (1997), Van Horne (1998), Sinkey (1998) and Bacon (1996) include the customer's character as determined by their honesty and ethical reputation. It also refers to the capacity of the client as determined by their cash flows, and capital as determined by the client's real net worth. The collateral pledged for the credit facility is another aspect, and the condition, that is the vulnerability of economic fluctuations. In credit evaluation, consistent and rating scheme to all investment opportunities should be applied if credit decisions are to be made in consistent manner which results in aggregate reporting of risk exposure (Santomero, 1996). Several authors Santomero (1996), Bannet (1984) and Harrison (1996) agree that credit scoring should be used in the appraisal process to predict the credit worthiness of would be borrowers. However, external factors like completion, economic cycle, natural disasters, technological advances, regulatory changes, industry changes, demographic factors affect the credit evaluation process and this at times results in problem loans (Wayne, 1998).

The empirical results suggested that collateralized loans had a higher PD, loans granted by savings banks were riskier and a close bank-borrower relationship had a positive effect on the willingness to take more risk. At the same time, size of the bank loan had a negative effect on default while maturity had a significant positive effect on default. Bloem and Gorter (2001) suggested that a more or less predictable level of non-performing loans though it may vary slightly from year to year is caused by an inevitable number of wrong economic decisions by individual and plain bad luck (inclement weather, unexpected price changes for certain products, etc.). Under such circumstances, the holders of loans can make an allowance for a normal share of non-performance in the form of bad provisions, or they may spread the risk by taking insurance.

Enterprises may well be able to pass a large portion of these costs to customers in the form of higher prices. For instance, the interest margin applied by financial institutions will include a premium for the risk of non-performance on granted loans. The magazine (KUSCCCO, 2007) documented that an Economic Recovery Strategy of Wealth and Employment creation was developed by the government in 2003 to address the challenges of alleviating poverty which had risen from 38%in 1990 t0 56%of the population in 2001. The agro-based institutions were identified as important vehicles through which these goals could be achieved leading to creation. According to new government survey, 46% of the population lived below the poverty line in 2006 which means a reduction in 10% in poverty level six years ago. The government attached great importance to the agro-based institutions sector so that it can play a leading role in the economic recovery of the country by creating conducive environment for growth of the agro-based institutions.

Most sectors of the economy have undergone comprehensive policy and legal reforms to revitalize their performance through liberalization and privatization. Agro-based institutions were currently undergoing a turbulent period of trying to adjust to the liberalization of the economy. The reforms in the financial sector have led to stabilization of interest rates charged by banks and institutions, hence encouraging more borrowing for developmental purposes. The clients have now gained a lot of confidence in bank loans and thus are lured to their offer of unsecured loans as the interest rate charged was almost the same as that of APC institution of 12% p.a. (Jeremiah & Joseph, 2007). The agro-based institution has been faced with weak marketing structure, poor management and leadership capacity and weak capital base. As a result

agro based financial performance has been declining and majority of them have not been able to compete effectively (National Development Plan 2002-2008, pages38, Government of Kenya).

Most financing institutions are member-owned financial institutions that offer saving and credit services to farmers. AFC provide farmers with financial services to improve their economic and social well-being through asset accumulation and income generation. They mainly served the interest of farmers as a result of pooling their resources together. They offered a range of financial services; most significantly, they focus against farmers share capital (David & Murungi, 2004). Agro-based financial institutions served farmers, industry and informal sectors which helped in narrowing the gap between the rich and poor. They served farmers at all socio-economic levels and contributed to employment opportunities in both urban and rural arrears. Urban agro –based draws their clients from farmers, industries, parastatals and informal sector. Bank on the other hand being the competitor was governed by the Companies Act and the Banking Act. Thus ultimate benefits of agro-based financial institutions were to the farmers as owners and customer who were also the sole decision maker.

Figure 1 presents the conceptual framework of the study. The independent variable considered in the study was initial loan appraisal, that is, credit history and capacity of the loan applicant, whereas the dependent variable is non-performing loan, which was measured by project portfolio management, and credit management policy. This relationship between the various variables is as illustrated.

Independent Variables   **Dependent Variables**
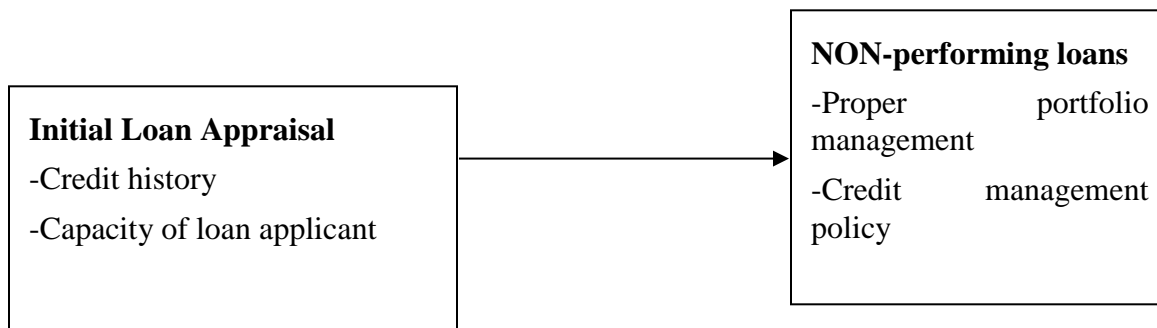

Figure 1: Conceptual Framework

3.0 RESEARCH METHODOLOGY

In this research, the researcher used the descriptive type of research design. This is the design whose purpose is to provide a description of affairs as they are (Delno & Kombo, 2006). Descriptive research design attempts to describe possible behavior, attitudes, values and characteristics. This involved formulating the objectives of the study, designing the methods of data collection, selecting the sample, collecting data and analyzing results. This type of research was suitable in cases where the problem has been defined specifically and the researcher wants to establish certain issues about the problem. The target population was the heads of the department at AFC. They were from finance, debt collection and recovery, credit and audit departments. These were the respondent to the questionnaires. At the same time credit officers and branch were targeted to respond to the questionnaires. The sample represented equal

proportion of senior and middle management staffs. The characteristics of the population were as indicated in Table 1:

Table 1: Target Population.

Category of staff in AFC	Target Population
Head of Department	10
Branch Managers	140
Credit Officers	200
Total	350

3.1 Validity and Reliability of Research Instrument

An instrument is valid when if it measures what is intended to measure and accurately achieves the purpose for which is designed. Kothari (2004) defines validity as the accuracy and meaningfulness bases on research results. To ensure validity of instrument the researcher carried out a pilot test and debug the questionnaire. The desired changes were effected on the questionnaire before actual data collection. This eliminated the possibility of the questionnaire covering indicators not represented in the banking institution.

The questionnaires were designed to capture the independent views on the quality and features of AFC. Validity concerns whether the instrument measures what it is supposed to measure or it is the degree to which results obtained from the analysis of data actually represent the phenomena under study. Mugenda and Mugenda (2003) notes that validity has to do with how accurate the data obtained in the study represents the variables of the study and is a true reflection of the variables. Reliability is the extent of variable error in a measurement. It exists when repeated measures of the same table characteristics show limited variation. There are different types of internal consistency reliability tests (Cooper & Schindler, 2006).The most popular one is the Cronbach's alpha (Cronbach,1951).This tool evaluates how well a set of variables measure a single concept (Cooper & Schindler,2006). Cronbach alpha is not a statistical test, it is a coefficient of reliability or consistency. Cronbach' alpha can be written as a function of number of test items and an average inter-correlation among the items. Equation for the standardized Cronbach's alpha i

$$\alpha = \frac{N.\bar{C}}{\bar{V} + (N-1).\bar{C}}$$

Where α =Cronbach's alpha, N= Number of items, $\bar{C}$ = Average inter-item covariance among the items, $\bar{V}$ =the average variance. Terblance and Boshoff (2008) noted that in order for a scale to be acceptable and usable, Cronbach's alpha should be greater than or equal to 0.70.

Table 2: Validity of the Instrument

		N	%
Cases	Valid	15	100.0
	Excluded[a]	0	.0
	Total	15	100.0

a. Listwise deletion based on all variables in the procedure.

Source: SPSS software output

The information contained in Table 2 reveals the validity of the data used for the analysis of primary data for pilot test. As we know, validity is 100 percent and the number of variable used for pilot test is 15. This shows that the further analysis of data can be preceded.

Table 3: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.922	.982	5

Source: Researcher's estimate with SPSS software

The value of Cronbach's alpha in Table 3 is 0.922 which lie between 0.902 and 0.99. According to the theory of reliability, it is an excellent data in terms of reliability. The pilot test shows that the data collected are valid.

Table 4: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Initial Loan Appraisal	9.4000	155.971	.954	.946	.891
Financial management skills	9.1333	147.410	.967	.976	.881
Loan recovery strategies,	9.6667	167.524	.889	.986	.909
Credit policies	9.6000	160.686	.984	.987	.894
Inflation	7.2667	86.781	.896	.977	.982

3.2 Specification of the Empirical Model

The model shows the severity of non-performing loan and perception of financial institutions on the reasons for such non-performing loan. In this model the dependent variable is the severity of non-performing loan and the independent variable are initial loan appraisal, financial management skills, credit policies, loan recovery strategies, inflation, and natural calamities and loanees attitude. The model is adapted from Farhan et al. (2012) for the purpose of the present analysis and it is specified as:

Non- performing loan=f (initial loan appraisal, financial management skills, loan recovery strategies, credit policies, inflation, and natural calamities and loanees attitude). n mathematical form the model is given as below:

$$NPL=\alpha_o + \alpha_{1LP} + \alpha_2 FMS + \alpha_3 LRS + \alpha_4 CP + \alpha_5 I$$

4.0 FINDINGS AND DISCUSSION

4.1 Rating of Factors Contributing to NPLs at AFC

Besides these factors mentioned in Table 4 as affecting the NPLs at AFC, the study findings also pointed out other reasons contributing to NPLs. These included among others, low market prices offered for farm produce for higher cost of production leaving nothing for repayment of loans. At the same time, poor harvest due to unprecedented weather conditions also led to non-recovery of NPLs. Equally too much dependence on farm and livestock produce for cash flows which are marred by uncertainties as well as political interference such as political skirmishes and land disputes led to NPLs. The high economic inflation coupled with high cost of living causes financial distress among the loanees thus impaired repayment of loans. The lack of adequate financial management skills by some loanees not only lead to diversion and mismanagement of funds but also poor financial planning. Some over ambitious loanees end up in over borrowing of funds which actually cannot be accommodated by the cash inflows generated by overtraded projects. Other factors contributing to NPLs at AFC include farmer's reluctance and dishonest presences and practices to pay and their diversion of AFC loans for non-intended purposes.

In general, the recovery of NPLs by AFC will require sustainable strategic leadership, teamwork, business diplomat and entrepreneurial spirit and tenable AFC-farmer relationship.

Table 5: The Rating of Factors Contributing to NPLs at AFC

Variables	% Effect on NPLs	Extent	Rank
Loan Recovery strategy	40	Great extent	1
Level of Loanees Financial management skills	10	Lesser extent	4
Credit Policies on NPLs	20	Great extent	3
Initial loan appraisals	30	Great extent	2

4.2 Regression Results

The regression was run with the perception of employees on contributors of non-performing loan. The average of the Likert scale for the related statements was used for the purpose of regression. The result of the multiple regression as specified in equation (1) is given in Table 5 in which the dependent variable is severity of non-performing loan.

Table 6: Regression Coefficient and Significance of the Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.945[a]	.892	.856	11.43190	.892	24.807	1	3	.016

a. Predictors: (Constant), Initial loan appraisal

Regression analysis was conducted where the dependent variable was the perception regarding the severity of non-performing loan while the independent variable was initial loan appraisal. The R^2 is the ratio of the explained variation compared to the total variation, thus it is interpreted as the fraction of sample variation in dependent variable that is explained by independent variables. The value of R_2 is 0.892 and the adjusted R square is 0.856 which shows that 89.2% 0f the sample variation in the severity of non-performing loan is explained by the independent variables adopted in the regression analysis.

4.3 Curve Estimation
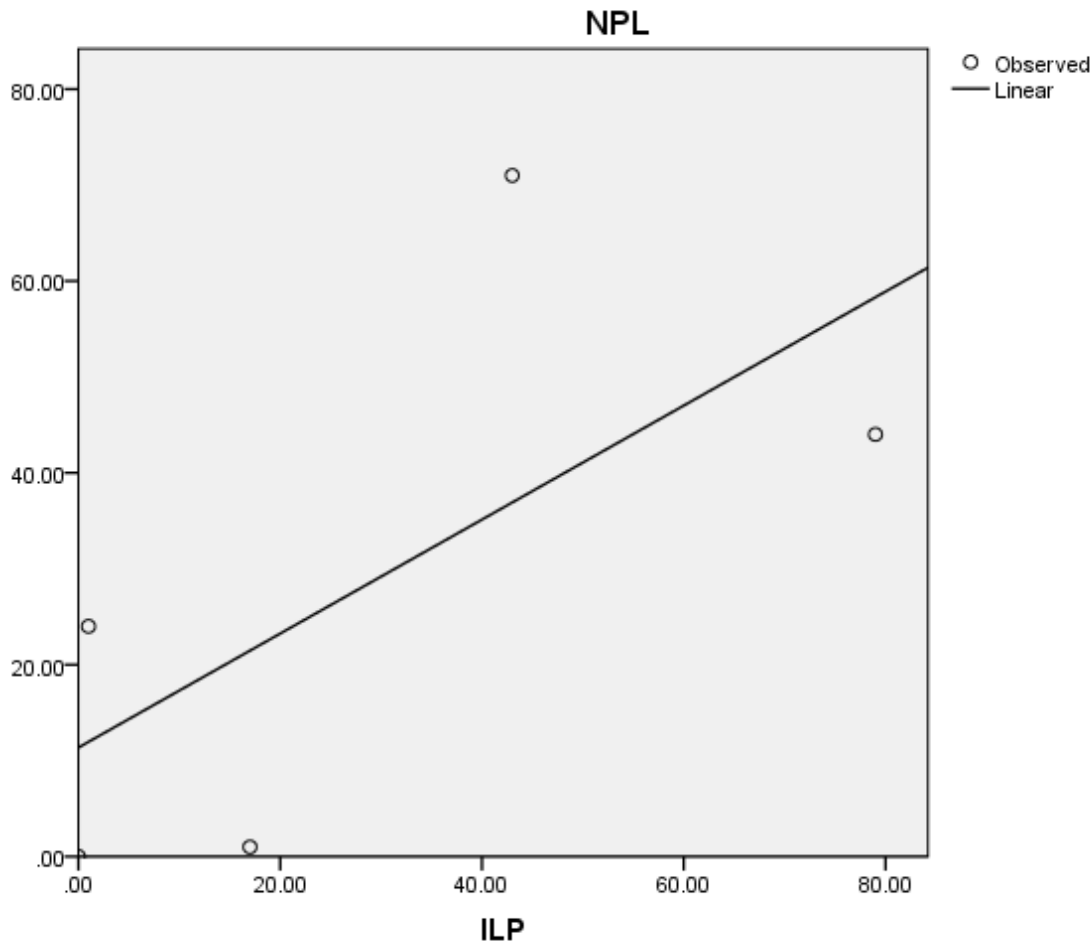
Source: Output from SPSS soft ware

The person correlation test on the relationship between loan appraisal and performance in table 6 revealed that there was a significant positive relationship between loan appraisal and ratio of non-performing loan to total advances. This implies that as the process of loan appraisal is improved and done properly, the loan performance also improves similarly if initial loan appraisal is not done properly it will lead to more non-performing loan

5.0 CONCLUSIONS AND RECOMMENDATION

5.1 Conclusions

From the analysis of the findings, it can be generally concluded that first initial loan appraisal has greater impact on NPLs. This is because even with the stringent controls applied on loans appraisal by AFC, there still existed a huge portfolio of non-performing loans. On the other hand, it is imperative that while 60% of the educated loanees purport to keep financial records for their core purposes of financial planning, cost control and effective utilization of funds, this assertion

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is more of theoretical practice to please the AFC management and perhaps secure more loans having satisfied the key loaning requirements. Practically, the higher skills by the educated loanees' category apparently worked against loan recovery strategies by AFC. Once the loans are acquired, default stand at more than 30%. Therefore, this clearly becomes apparent from the study finding that the initial loan appraisal while contributing to NPLs to some extent, fails to shield AFC from NPLs recovery perse. This is perhaps because the initial appraisals lay a lot of emphasis on the existing projects or projects with the potential of existing resources such as those farmers with land and title deeds. A time for example when succession issues are long and tedious process, it's imperative to note that many young men and energetic men who may have the drive and vision and energy to take up farming are left out by AFC on this basis.

A lack of competitive strategic thinking and business development thinking by AFC to management may therefore not be working well for their loan appraisal aspect. Business development may be incorporated in the new initial loan appraisal requirement to take into account tenets such as the level of education, their certificate as collateral security and their levels of entrepreneurial and visionary agricultural skills, potential or practical business proposals as basis for advancing loans to the potential applicants. This is in addition to the requirements to apply new technology in farming shall go a long way in ensuring that potential loanees who have the talent, ambition and drive to do business with AFC but lack the traditional basics of titles and some farming background are not left out by AFC loaning policies. In the event, the amount of savings required, the repayment duration, the application of in-duplum rule and set minimum value of security seemed to favor the old farmer's school of thought with the resultant large portfolio of non-performing debt.

The findings of the study also analyzed the effect of loan recovery strategies on NPLs. The strategies such as loan re-structuring and dialogue or continuous education with loanees were found to have the greatest impact on NPLs. This stood at 65%.Asset refinancing strategy, sale of forceful property in possession, attachment of loanees collaterals contributed to the largest recovery of non-performing loan portfolio fetching 25%of the total loans recovered in the period (1.3 million).The findings however, revealed that demand notice and concession offer bids and outsourcing loan recovery agent have the least impact in reducing NPLs contributing to 3% of the total loans recovered during the period under review.

A Comparative of the extent of the impact of all these variables on non-performance of loans indicated that the loan recovery strategies employed by AFC had the greatest impact at 40% or ranked 1. The second most important factors affecting NPLs was the loanees financial management skills, age and business experience. This had greater impact at 30% or ranked second. The effect of AFC credit policies on NPLs was ranked third at 20% while initial loan appraisal was ranked last at 10 with lesser extent.

5.2 Recommendations

From the findings, it is recommended that:-

  i.   AFC top Management creates a working relationship with other lending institutions to ensure that the farmers do not abuse the well-kept farming financial records to acquire more loans from the other financial institutions whose recovery would create huge NPLs on the part of AFC loans advanced to farmers.

ii.   The Government through the relevant ministry set out less bureaucratic process for "grant of permission to carry out research" in state parastatals
iii.   AFC management should improve her loan appraisal policies; or rather outsource partially the services of recovery of non-performing loans specifically. AFC must embrace business development and new technology requirement as a basis for improved productivity by loanees.
iv.   In view of the importance of NPLs (Non-Performance of loans) to financial institutions, to a supervision authority, and to analysts, it is necessary for international organizations to develop a single definition of NPLs for the world. Now china's financial institutions all adopt the five-grade classification: standard, watch, substandard, doubtful, and loss, which is suggested by the institute of International Finance for external reporting.

5.3 Recommendations for Further Research

i.   The impact of bureaucratic government procedures related to a permission to carry out research on post university academic researches.
ii.   A comparative study on the quality of finance research studies undertaken by full time and part time masters students in Kenya on NPLs in banking industry.
iii. The impact of non-recovery of loans on agriculture-based financial parastatals in Kenya
iv.   The relationship between corporate performance and recovery of NPLs at AFC

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