# Specialized Bank Performance and the Challenge of Term Finance

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Abstract:- This paper aimed to assess the role of specialized state-owned development banks in Sudan in promoting, developing and acquisition of agricultural technology. The study stressed its role exemplified by the Agricultural bank of Sudan(ABS) as a development bank and how to tackle commercial issues. The main focus of the study is to study the means and modes adopted by the specialized bank and its role in developing the agricultural sector. Primary and secondary data were collected from the Agricultural Bank of Sudan by structured questionnaire. Targeted random sampling were followed to cover about 59 bank employees (main branch/ headquarter). Statistical Analysis and chi-square test were done using the Statistical Analysis Program (SAS) Program. The results showed Murabahah which is an Islamic and a trade-based mode was dominant. The study revealed that the bank should compromise its role commercially and developmentally in financing agricultural technologies. It should adopt reliable innovative modes to help farmers achieving high levels of technology in agricultural production. Musharakah which is a form of partnership and an Islamic mode of finance is not widely used. It is a participatory approach in which both partners participate in the management and provision of capital and also share in the profit and loss. The study recommended Musharakah as the most appropriate mode to develop agricultural technologies in the sector.

*Keywords:- Specialized Bank, ABS, Murabahah, Musharakah, Partnership.* 

# I. INTRODUCTION

Sustainability and profitability of agricultural production depend heavily on good management practices and capabilities to adapt to technical, economic and social changes (Asoegwu et al 2007). The appropriate choice and subsequent proper use of agricultural engineering have a direct and significant effect on achievable levels of land productivity, labor productivity, profitability of farming, the environment and on the quality of life for people engaged in agricultural production is expected to satisfy the whole economy (Verma ,S.R.2006). World agricultural production (2007) has an average growth rate at a lesser pace than the demographic growth. The World Bank has shown that in sub-

Saharan Africa (to which Sudan belongs) the annual food needs increase to reach 4% i.e. more than double the current figure. These rates are only achievable through a significant progress in plant and animal production and productivity using appropriate agricultural technologies as the basic ingredients (World Bank, 2007).

The mobilization of resources at all levels either they are external or domestic is an important factor in order to increase production and productivity in agriculture and to enhance the productive capacity in rural areas where 70% or more of the poor and food insecure live (FAO 2004). The formal and the informal financial sectors are constituting the financial systems of most countries. The formal sector, is made up of the Central Bank, Commercial Banks, Development Banks, Building Societies, Insurance Companies etc. These institutions are mostly found in the urban and semi-urban settings, (Mehrteab 2005). Most banks are profit-making, private enterprises. However, some are owned by government, or are non-profit organizations (Wikipedia the free encyclopedia April 2015). Commercial bank lending to agriculture in Africa has been declining in recent decades, as there are many problems associated with Agriculture and finance. (FAO,2004). According to FAO (2003), risks, transaction costs, lack of information and collateral are the main factors affecting the demand and especially the supply of term finance. Many of the specific underlying problems are interrelated and are general constraints for agricultural investments and the provision of finance to farmers. Agriculture constitutes a pivotal role in Sudan, with over 70% of population depending on it directly or indirectly for livelihood, it provides 70-80% of the employment and according to annual report of Sudan Bank (2015) it contributes by 27.9 % of the gross domestic product (GDP) as well as supplying raw materials for agro-based industries and also about 80% of the country's exports (excluding oil). In Sudan there are three major farming systems; irrigated farming, rain-fed semi-mechanized and rain-fed traditional farming systems. Out of cultivable land of the country, which is estimated, to be 200 million feddan, utilized area does not exceed 41 million feddan, about less than the Quarter (Wikipedia, 2013) Agriculture in Sudan has a large potential to expand and become a driving force for economic growth and development, as it is well endowed with rich natural resources. Sudan, like most of the least developed world, depends on public sector to develop and deliver agricultural technology. In the last few decades the private sector has Volume 9, Issue 3, March – 2024

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## II. METHODOLOGY

#### A. Study Area:

The Study was carried in ABS in the main branch .ABS has about (8) branches in the Khartoum state, (7)in the state of Gedarif and (109) branches in the other states as well as the 2 silos in Gedarif and Port Sudan. The bank owes the green revolution company which is based in Khartoum, and its main activity is to import production inputs for the bank. The council of the board of directors of the agricultural bank of Sudan is consisted of 13 members governmental, unions and federations and private sector. The Agricultural bank of Sudan has about 109 branches, the total number of employees was 1543, and about 1126 of them were females. The total number of workers was 1219.

#### B. Population of the Study, Sampling and Sample Size

The population was the Bank officials of the Sudanese Agricultural Bank. Targeted simple random sampling was done to officials who worked or currently working in the finance department of the Agricultural Bank. Total number interviewed was 59; the respondents were 56, i.e. 94.9% of the total number interviewed.

#### C. Data Types and Collection Tools

Primary and secondary data were obtained and used in this study;

Primary data were obtained by conducting, interviews, and surveys by the researcher during 2013 with bank officials of the agricultural bank of Sudan using questionnaire as tool for data collection in addition to some Key informants. The questionnaire was designed and prepared in Arabic language including both open-ended and close-ended questions according to the situation and the information required . It was structured and it was consisted of 51 questions and distributed to a targeted population, those who have worked or still working in the finance department of the Agricultural Bank of Sudan. The questionnaire was constructed to assess and determine mainly the following themes: bank official particulars, bank policy and approach, government support and motivation, monitoring and risk management and employee performance, selection, capacity building and motivation.

Secondary data; The research utilized secondary data collected from previous studies, published papers, workshops, seminars proceedings, studies and annual reports and other relevant sources.

#### D. Data Analysis Procedures

Data collected were coded, computerized and analysed using the SAS program to carry out descriptive analysis frequency matrix and percentages for the variables of the study. Chi-square Test of Independence was used as an inferential test to determine the existence and the level of significance of relationship between two nominal (categorical) variables. The frequency of one nominal variable was compared with different values of the second nominal variable. The test is based on the level of significance

efforts to adopt agricultural technologies and manage their deployment for farmers. Thus, Productivity and efficiency of agricultural sector is pivotal to any economic development program in the Sudan. Through a series of economic adjustment programmes, the government gave priority to the development of the agricultural sector giving special emphasis on research, education, extension, agricultural technology and innovation. It is deserved mentioning that there is uncertainty about the ability of the formal financial system to adopt and implement efficient financial programs and modes that are compatible with the nature of agriculture and the developing challenges. A major problem facing farmers in the LDCs is the unavailability of inputs on a timely basis or the quantity required. This constraint is largely linked to the lack of credit, difficulties in obtaining foreign exchange, the lack of risk management and price formation mechanisms, the seasonality of agricultural input requirements, spatial dispersion of farmers, poor transport infrastructure and, sometimes, to the marketing and management inefficiencies of the state-owned companies and institutions which responsible for single channel input supply and marketing. The current conventional financial means and modes have some failures or shortcomings in terms of outreach, implementation and applicability and repayment.

begun to play an increasingly important role in technology

development worldwide, complementing public research

The Agricultural Bank of Sudan (ABS) was the only formal agency specializing in farm credit prior to 1990. Two specialized banks, the Farmers Bank and the Animal Resources Bank have recently been established, and agricultural insurance was introduced for the first time in 1994. The ABS is fully owned by the government. Capital Sources of the ABS are Central Bank of Sudan 64% and the Ministry of Finance and National Economy 36%. Its objectives are to provide credits and facilities for promotion and development of the agricultural sector. The ABS gives loans to three different types of farmers: small, medium and large. The ABS is now the most geographically widespread bank in the country. Nonperforming loans for the ABS represented about 14% to41% of the total annual finance since 1998. The bank financially funded number of agricultural services companies and capable agricultural production firms known for their efficiency and premium administration to realize top agricultural production levels (Annual report 2011).ABS follows the Islamic system in all its operations as Islamic Banking adhere to the concepts of Islamic law. Modes could be divided into trade- based modes, participatory-based modes and rental- based mode.

The study aimed to assess the performance of the Agricultural bank as specialized state owned bank under the current macroeconomic and financial policies, in addition to the means and modes adopted by the bank. it addressed and elaborated the challenges and constraints facing the specialized banks to support the agricultural development.

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of 0.05 (significant), 0.01(highly significant) and, 0.001(very highly significant).

## III. RESULTS AND DISCUSSION

The results of the analysis are presented and discussed in the context of the answers of the different questionnaire questions targeting the bank officials to complement the study objectives posed at the beginning of the study. The targeted bank officials were selected according to their previous experience in finance department or their current working in the department of finance. Analysis and categorization were done to determine Bank officials' quality, the bank policy and approach, government support, monitoring and risk management, employee selection and performance, human development and research and significance of association between some selected parameters. The targeted bank officials were selected according to their previous experience in finance department or their current working in the department of finance. Analysis and categorization were done to determine mainly Bank officials' quality, the bank policy and approach, government support, monitoring and risk management, employee selection and performance, human development and research and significance of association between some selected parameters .Main to female ratio is about 1:2 (Figure 1) .The majority of the officials (74.1%) was within the age 20-50 years old .Result revealed that the majority (64.2%) within the range 15-30 working experience as shown in (Figure 2) and almost all of them (91.0%) were graduates and post graduates so the majority were relatively young and well educated .

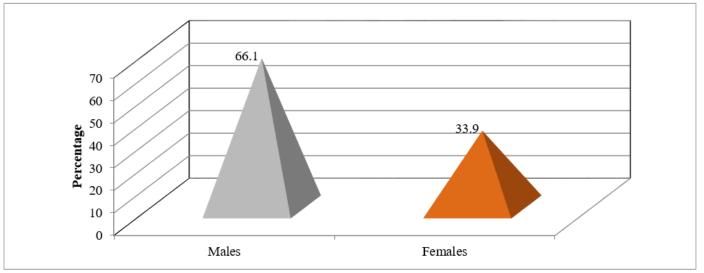


Fig 1: Percentage Distribution of Respondents by Gender

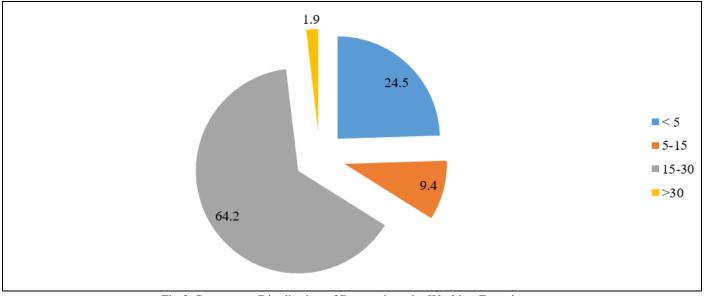


Fig 2: Percentage Distribution of Respondents by Working Experience

More than half (57.4) said that the finance portfolio is done due to number of farmers in the area and 24.1 % believed that it is due to the agricultural density (Figure 3).

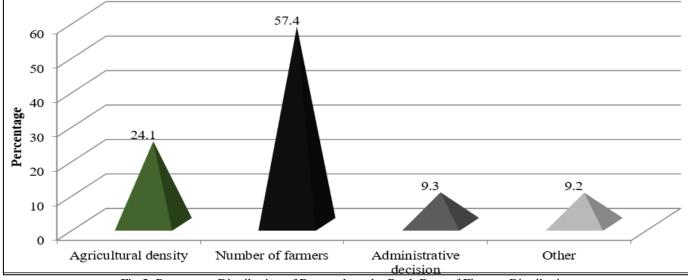


Fig 3: Percentage Distribution of Respondents by Bank Base of Finance Distribution

About 20.00% agreed with the fact that the bank should focus only on agriculture (Figure 4). Only (22.6 %) disagreed with the fact that finance was becoming more specialized (Figure 5).

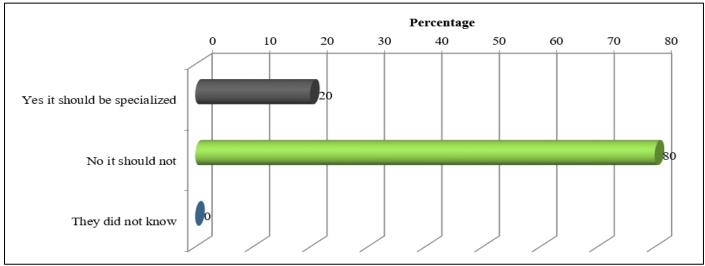


Fig 4: Percentage Distribution of Respondent by Bank Official's Opinion in Bank Specialization

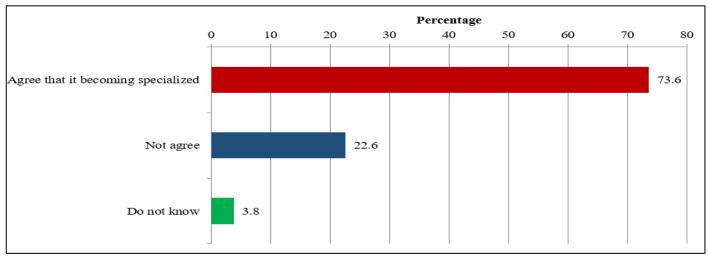


Fig 5: Percentage Distribution of Respondents by their Opinion about Finance Specialization

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Almost all of them (92.5%) agreed that the bank should focus on both the operational cost and the capital cost only 5.6% said that it should focused on capital cost ,as illustrated in (Figure 6).

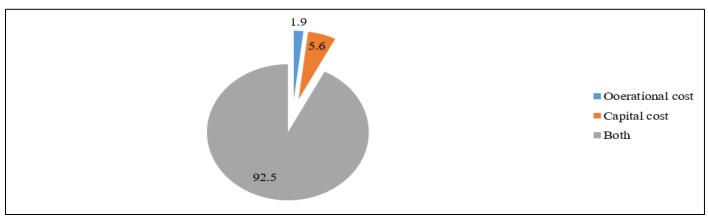


Fig 6: Percentage Distribution of Respondents by their Opinion about Bank Finance Focus

Figure (7) illustrated that the most frequent mode used was Muraabahah as responded by 69.6 %, which is a trade mode of finance, Muzaraah 1.8% Salam 16.1% and Mushaarakah which is a participatory mode of finance represented only 12.5% which is a small portion comparing to Moraabahah.

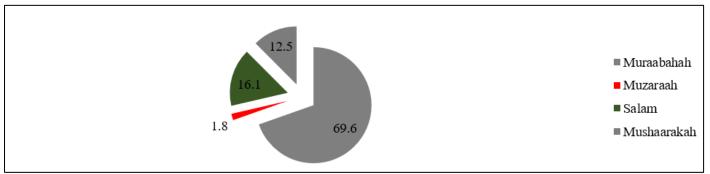


Fig 7: Percentage Distribution of Respondents by Finance Mode Frequently Adopted

About 55.6% described the Murabaahah as effective, but about 44.4% denied its effectiveness or they do not know about, illustrated in (Figure 8) & (Figure 9). The results showed that the majority (68.5%) agreed that the social situation of the client had sometimes its effect on the type of action taken against him. The whole respondents agreed with the effectiveness of the real estate, while 68.4% agreed with the effectiveness of the movable as collateral. About 72.22% agreed positively with their effectiveness collectively as collateral. In case of not fulfilling loans the majority of respondents (74.6%) said that the bank will deal with the case legally but there were no specific criteria to consider the loan as none performing loan.

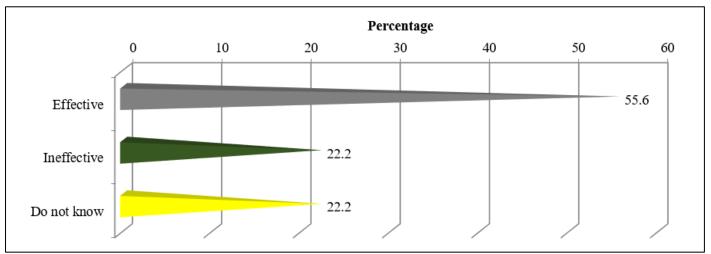
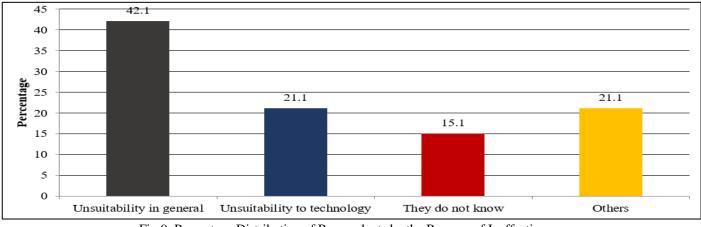


Fig 8: Percentage distribution of respondents by the effectiveness of the frequently adopted mode





Most of the responded (78.0%) attributed the reasons for agricultural finance risk to natural reasons, risk avoidance could be achieved by the client competency, which is measured mostly by his financial capacity. and in such case Losses and loans would be covered by the state or government and / or insurance companies. The majority (61.6%) supported the legal action against not fulfilling loans. Technical, administrative and client credibility were the most important finance obstacles. The majority (92%) agreed that the finance efficiency had to be checked. The feasibility study was one of the bank provisions for finance and the client should be committed to the feasibility study. That commitment of the client to the feasibility study should be checked by field visits as one of the mechanisms. Although about 49.1% agreed that they were sometimes supported by the state to get the loan, but they could not determine the type of support, here the methodology for obtaining this support was not clear. About 72.9% agreed that the state will help in paying or rescheduling of the installment in case of inability of the farmers to fulfill their loans, and the support might be due to the finance nature and /or the activity type and the client himself. Regarding the client motivation about 40.4% agreed that the marginal profit would be reduced and about 42.3% said that future finance procedures will be easier. The employee performance measured by the client's fulfillment of loans and he will be motivated according to profits gained. Academic qualification, professional and/ or administrative decisions were the criteria to work in the department of finance. There was on job training as agreed by the majority (90.6%) and almost all of them agreed that the training was related to their jobs and had its effect in their performance development, more professional training was required. More

than half (60.0%) agreed that there was research to improve the financial performance, and that they participated in such research directly or indirectly.

Tables (1-5) showed that there was no significant relationship (p=0.8) between gender and their participation in the research. There was no significant relationship (p=0.16) between gender and the number of training courses. There was no significant relationship (p=0.49) between gender and bank specialization. There was no significant relationship (p=0.98) between gender and finance focus. There was no significant relationship (p=0.17) between gender and finance classification.

Tables (6-15) revealed that there was no significant relationship (p=0.08) between education and participation in research. It was very highly significant (p=0.0007) between education and the number of training courses. There was no significant relationship (p=0.87) between education and the bank specialization. There was no significant relationship (p=0.92) between education and finance focus. There was no significant relationship (p=0.98) between education and finance classification. There was no significant relationship (0.07) between working experience and participation in research. It was highly significant (p=0.005) between working experience and number of training courses. There was no significant relationship (p=0.08) between working experience and bank specialization. No significant relationship (p=0.48) between working experience and finance focus. There was no significant relationship (p=0.89) between working experience and finance classification.

Gender	Participation in Research							
	They Participated in Research	No they did not	Not Necessary to Participate	They did not know	Total			
Male	14	2	3	5	24			
	(37.9)	(5.4)	(8.1)	(13.5)	(64.9)			
Female	9	1	2	1	13			
	(24.3)	(2.7)	(5.4)	(2.7)	(35.1)			
Total	23	3	5	6	37			
	(62.2)	(8.1)	(13.5)	(16.2)	(100.0)			

Table 1: Gender by Participation in Research

Chi value=1.1, p=0.8

Table 2: Gender by Number of Training Courses					
Gender		No. of Train	ing Courses		
	>1 Course	<5 Courses	Other	Total	
Male	13	14	7	34	
	(25.0)	(26.9)	(13.5)	(65.4)	
Female	6	4	8	18	
	(11.5)	(7.7)	(15.4)	(34.6)	
Total	19	18	15	52	
	(36.6)	(34.6)	(28.8)	(100.0)	

Chi Value=3.62, p=0.16

#### Table 3: Gender by Bank Specialization

Gender	Bank specialization					
Γ	They agreed	They did not Agree	They did not Know	Total		
Male	1	2	33	36		
	(1.8)	(3.6)	(60.1)	(65.5)		
Female	1	17	1	19		
	(1.8)	(30.9)	(1.8)	(34.5)		
Total	2	19	34	55		
	(3.6)	(34.5)	(61.9)	(100.0)		

# Chi value=2.43, p=0.49

Table 4: Gender by Finance Focus

Gender	Finance Focus					
	Operational Cost	Capital Cost	Both	Total		
Male	25	8	2	35		
	(46.3)	(14.8)	(3.7)	(64.8)		
Female	14	4	1	19		
	(25.9)	(7.4)	(1.9)	(35.2)		
Total	39	12	3	54		
	(72.2)	(22.2)	(5.6)	(100.0)		

# Chi value=0.0, p=0.98

Table 5: Gender by Finance Classification

Gender	Finance Classification							
	Finance Volume	Payback Period	Activity Type	Finance Type	They Did Not	Total		
					Know			
Male	7	10	18	3	0	38		
	(12.5)	(17.9)	)0(32.	(5.4)	(0.0)	)8(67.		
Female	5	7	3	2	1	18		
	(8.9)	(12.5)	(5.4)	(3.6)	(1.8)	)2(32.		
Total	12	17	21	5	1	56		
	(21.4)	(30.4)	(37.5)	(8.9)	(1.8)	(100.0)		

Chi value=6.46, p=0.17

Table 6: Education by Participation in Research

Education	Participation in research						
	They participated in research	No they didn't	Not necessary to participate	They didn't know	Total		
Secondary	2	1	0	2	5		
	(5.4)	(2.6)	(0.0)	(5.4)	(13.4)		
Graduate	9	2	1	4	16		
	(24.3)	(5.4)	(2.7)	(10.8)	(43.3)		
Post graduate	12	0	4	0	16		
_	(32.5)	(0.0)	(10.8)	(0.0)	(43.3)		
Total	23	3	5	6	37		
	(62.2)	(8.1)	(13.5)	(16.2)	(100.0)		

Chi value=11.42, p=0.08

Education		Number of Training Cou	rses	
	>1 Course	<5 Courses	Other	Total
Secondary	5	0	0	5
	(9.8)	(0.0)	(0.0)	(9.8)
Graduate	13	8	5	26
	(25.5)	(15.7)	(9.8)	(51.0)
Post graduate	1	10	9	20
-	(2.0)	(19.6)	(17.6)	(39.2)
Total	19	18	14	51
	(37.3)	(35.3)	(27.4)	(100.0)

# Table 7: Education by Number of Training Courses

# Table 8 Education by Bank Specialization

Education	Bank specialization						
	They agreed	They didn't Agree	They did know	Total			
Secondary	0	0	5	5			
-	(0.0)	(0.0)	(9.3)	(9.2)			
Graduate	1	2	25(46.3)	28			
	(2.0)	(3.7)		(51.9)			
Post graduate	0	1	20	21			
	(0.0)	(2.0)	(37.0)	(38.9)			
Total	1	3	50	54			
	(2.0)	(6.0)	(92.0)	(100.0)			

Chi value= 2.56, p=0.87

Table 9: Education by Finance Focus

Education	Finance focus						
	<b>Operational cost</b>	Capital cost	Both	Total			
Secondary	4	1	0	5			
-	(7.5)	(1.9)	(0.0)	(9.4)			
Graduate	18	7	2	27			
	(34.1)	(13.3)	(3.8)	(51.2)			
Post graduate	16	4	1	21			
_	(30.0)	(7.5)	(1.9)	(39.4)			
Total	38	12	3	53			
	(71.7)	(22.6)	(5.7)	(100.0)			

Chi value= 0.92, p=0.92

Table 10: Education by Finance Classification

Education	Finance Classification							
	Finance volume	Payback period	Activity type	Finance type	They didn't know	Total		
Secondary	2	2	1	0	0	5		
	(3.6)	(3.6)	(1.9)	(0.0)	(0.00)	(9.1)		
Graduate	5	7	12	3	1	28		
	(9.1)	(12.7)	(21.8)	(5.5)	(1.9)	(51.0)		
Post graduate	5	7	8	2	0	22		
-	(9.1)	(12.7)	(14.5)	(3.6)	(0.0)	(39.9)		
Total	12	16	21	5	1	55		
	(21.8)	(29.1)	(38.1)	(9.1)	(1.9)	(100.0)		

Chi value=3.50, p=0.98

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Table 11: Working Experience by Participation in Research

Working	Participation in research						
experience	They Participated in Research	No they didn't	Not Necessary to Participate	They didn't know	Total		
< 5	2	2	0	3	7		
	(5.9)	(5.9)	(0.0)	(8.8)	(20.6)		
5-15	3	0	0	0	3		
	(8.8)	(0.0)	(0.0)	(0.0)	(8.8)		
15-30	16	1	5	1	23		
	(47.2)	(2.9)	(14.7)	(2.9)	(67.7)		
>30	1	0	0	0	1		
	(2.9)	(0.0)	(0.0)	(0.0)	(2.9)		
Total	22	3	5	4(11.8)	34		
	(64.7)	(8.8)	(14.7)		(100.0)		

Chi value=15.92, p=0.07

## Table 12: Working Experience by Number of Training Courses

Working Experience	Number of training courses				
	>1 Course	<5 Courses	Other	Total	
< 5	8	0	4	12	
	(16.3)	(0.0)	(8.2)	(24.5)	
5-15	3	1	0	4	
	(6.1)	(2.0)	(0.0)	(8.1)	
15-30	5	16	11	32	
	(10.2)	(32.7)	(22.5)	(65.4)	
>30	0	1	0	1	
	(0.0)	(2.0)	(0.0)	(2.0)	
Total	16	18	15	49	
	(32.7)	(36.7)	(30.6)	(100.0)	

## Chi value=18.50, p=0.005

# Table 13: Working Experience by Bank Specialization

Working	Bank specialization					
experience	They Agreed	They didn't Agree	They did know	Total		
< 5	0	1	12	13		
	(0.0)	(1.9)	(23.1)	(25.0)		
5-15	1	0	3	4		
	(1.9)	(0.0)	(5.8)	(7.7)		
15-30	0	2	32	34		
	(0.0)	(3.9)	(61.5)	(65.4)		
>30	0	0	1	1		
	(0.0)	(0.0)	(1.9)	(1.9)		
Total	1	3	48	52		
	(1.9)	(5.8)	(92.3)	(100.0)		
		Chi value=15.59, p=0.08				

#### / **1**

Working	Finance focus					
Experience	<b>Operational Cost</b>	Capital Cost	Both	Total		
< 5	8	4	1	13		
	(15.7)	(7.8)	(2.0)	(25.5)		
5-15	4	0	0	4		
	(7.8)	(0.0)	(0.0)	(7.8)		
15-30	24	7	2	33		
	(47.1)	(13.7)	(3.9)	(64.7)		
>30	0	1	0	1		
	(0.0)	(2.0)	(0.0)	(2.0)		
Total	36	12	3	51		
	(70.6)	(23.5)	(5.9)	(100.0)		

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Working Experience	Finance focus						
	Finance Volume	Payback Period	Activity Type	Finance Type	They didn't know	Total	
< 5	4 (7.4)	4 (7.4)	4 (7.4)	0 (0.0)	1 (2.0)	13 (24.2)	
5-15	1 (2.0)	1 (2.0	2 (3.8)	1 (2.0)	0 (0.0)	5 (9.8)	
15-30	6 (11.3)	10 (18.9)	14 (26.4)	4 (7.4)	0 (0.0)	34 (64.0)	
>30	0 (0.0)	0 (0.0)	1 (2.0	0 (0.0)	0 (0.0)	1 (2.0)	
Total	11 (20.7)	15 (28.3)	21 (39.6	5 (9.4)	1 (2.0)	53 (100.0)	

 Table 15: Working Experience by Finance Classification

Chi value=7.83, p=0.89

## IV. CONCLUSION

The Agricultural Bank of Sudan has started in 1999 its first step in recommended reforms and began to venture into commercial lending to reduce risk, increase its income and to gain more opportunities for portfolio diversification. Although it was focusing on both the operational cost and the capital cost, but still there was no distinction in terms of loan type and modes between them. Murabahah which is a trade – based finance was the dominant mode and mostly practiced. The current practiced modes were ineffective and unsuitable for agricultural development. A typical finance transaction requires collateral which seemed to be beyond the capability of the farmers. According to the financing policy of the Central Bank of Sudan profit margin will be determined. Administrative fees were according to a pre-determined tariff. Loans and grants were supported by the state or government, and the support might be due to the finance nature and /or the activity type and the client himself. Losses and loans due to natural reasons would be covered by the state or government and/or insurance companies. There was no specific criterion to consider the loan as bad, doubtful or non-performing loan. The unsuitability of the payback criterion in addition to shortage of the grace period, low productivity, marketing outlet obstacles, and fungibility were the reasons for nonfulfilling loans. The finance efficiency had to be checked and the feasibility study was one of the bank provisions for finance. The bank was equipped with relatively high qualified staff,91.0% were graduates and post graduates and the majority was relatively young and well educated. The agricultural bank of Sudan seemed to play no role in extension, marketing and /or information supply. The bank used to measure the employee performance by the client's fulfillment of loans and he will be motivated according to profits gained. Continuous training and research were conducted in the bank for raising capacity of the staff. Comprehensive financing programs should be adopted in the agricultural sector based on a participatory approach and modes. A competent monitoring and risk management system should be established and more careful screening of promising farmers or borrowers, closer monitoring and follow up their adoption of technology, rationing of finance and better utilization and management of collateral could be adopted. Improvement of modes of finance and focusing on

participatory finance modes are highly recommended for assets acquisition and agricultural development. The specialized banks as a source of finance need to be invigorated and equipped to compromise their roles and responsibility commercially and developmentally.

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