

SRIWIJAYA INTERNATIONAL JOURNAL OF DYNAMIC ECONOMICS AND BUSINESS

Challenges of Financing Agricultural Investment Evidence from Gambella Region, Ethiopia

Chuol Jock Ruey¹, Eshetu Yadecha² and Ganfure Tarakegn Kistana³

¹Gambella University, Ethiopia, ^{2,3}Jimma University, Ethiopia

¹chuol.jockruey@gmail.com, ²shtydch@gmail.com, ³tganfure@gmail.com

Abstract: The aim of this paper was to assess the agricultural investment financing challenges in Gambella city administration and Itang special Woreda, Ethiopia. To achieve the objectives, data were collected from both primary using questionnaires and secondary sources from annual reports, manuals, and performance reports. Explanatory research design was used and the 215 sample were selected using stratified random sampling technique from workers of DBE, investment agency and investors of Gambella region. The data were analyzed using SPSS version 20 to run both descriptive and multiple liner regression result. Accordingly, the major challenging factors are the low investment return, farm risk, security issues, lending procedures, farm size, distant of investor's farm from lender, poor infrastructure, lack of technical capacity, farm age and budget failure with their respective proportion. The correlation matrix result showed that here is no multicollinearity problem existing among explanatory variables. Regression also revealed that all the explanatory variables with exception of budget failure and lending procedures have significant challenging effects on financing agricultural investment. Finally, the research recommended that diversified sources of finance for agricultural investment should be established, training programs on performance issues, irrigation in response to drought, agricultural technical capacity, and infrastructure facilities are needed, stable security and return of loan amount must be seriously dealt with, and measures like strong monitoring and evaluation need to be put into practice.

Keywords: Agricultural investment; financing; challenges; multiple linear Regression model

Introduction

It is known that finance plays an important role in any aspect of business operation and is used to start up, expand, diversify and for working capital of the business firms. According to Mckernan and Chen (2005), finance is the backbone of any business, including farming

¹ Corresponding author

investment, therefore, without finance; no one-business can achieve its objectives. Finance is also helpful in Agricultural investment sectoral growth and development by providing loans. According to Famogbiele G., (2012), finance is helpful in bringing agricultural growth, poverty reduction and solving the problems hindering the agriculture sector productivity, economic sustainability, business opportunities, institutional changes, innovation incentives as well as growth. Agriculture is one of the greatest contributors to local economy and the need providers in almost all countries of the world in terms of its products ranging from based needs to the most advanced ones. According to Ken (2006), agriculture had two meanings: The narrow or daily definition, farming, and the wide definition, an activity which relates to the production process of human needs which originated from plants or animals, accompanied by efforts of renew, reproduce and reconsider economic factor. Agriculture has also been very advantageous through the ages of human development. According to Aziz (2012), agriculture has several major advantages and contributions such as playing a significance role in developing human civilization since the beginning of human knowledge on cultivation until now, providing foods, clothing, shelter and many other basic needs that every human being needs, helping developing the economy development through zakat collection (collected from the rich to be given to the poor) and solving unemployment issues.

Throughout the world, agricultural investment growth has been given essential financial support since it plays great roles of developing the nations. According to Islamic banking system, financing agricultural investment had increased from 31.5 billion in 2007 to 41.3 billion in 2010 (Bank Negara Malaysia, <http://www.bnm.gov.my>, 4th March 2011). This shown good indication that from 2007 until 2010, Islamic banking and financing institutions had played greater roles in supporting the government in agriculture investment sector development. Despite these all benefits and contributions of the sector, and the support rendered to it, the agricultural investment is still financing challenges. As to Yusoff and Aziz (2013), fear of risk of agricultural lending is the leading challenge of financing agricultural investment. Jessop *et al* (2012), conducted a study in six countries (Cambodia, Mali, Senegal, Tanzania, Thailand and Tunisia) entitled on Creating Access to Agricultural Finance and identified the following constraints of agricultural finance: high delivery cost, proximity; weak farming practices and farmers; lack of banking technology; lack Collateral; exogenous risks; Government intervention; weak collaboration among farmers. According to Meyer (2015), challenges of financing agricultural investment are the government commitment to support agriculture; the role of public and private sectors; emerging aid modalities to agriculture; and financing regional public goods. Aderaw G. & Manjit S. (2015), found it that agricultural finance is constrained by many factors that can be categorized as: operational constraint, Capacity constraint, vulnerability constraint and politico-legal constraint.

However, this study is different from the aforementioned studies in that, the previously done papers have tried to investigate the challenges of financing agricultural investment by employing different variables and methodologies, which was identified by this study as the inconsistency of findings of the previous studies. On the other hand, the previous studies are similar with this study since they focused on challenges of financing agricultural investment. In Gambella city administration and Itang special Woreda, Gambella peoples' regional state, Ethiopia, the agricultural investment has been seen not successful due to financing challenges, but the knowledge is not integrated yet and no one has tried his/her level best to come up with integrated knowledge as a solution to existing challenges.

Hence, this resulted in knowledge gap since the previous studies overlooked the study areas and the problem. Therefore, the purpose of this study was to fill the existing gap by investigating challenges of financing agricultural investment and provide possible solution in the concerned areas.

Statement of the problem

In Ethiopia, Agricultural investment is an important resource for the development because of the greater contributions that it makes to poverty alleviation, job creation and the potential for new business development. According to Shimelles Tenaw, Zahidul & Parviainen (2009), Ethiopia's most important natural resource is its rich endowment of agricultural land. Agriculture which constitutes 46% of GDP directly supports about 85% of the population in terms of employment and livelihood; generates about 88% of the export earnings; and supplies around 73% of the raw material requirement of agro-based domestic industries. It is also the main source of food for the population and hence the highest contributing sector to food security. In addition, agriculture is expected to play a crucial function in generating surplus capital to speed up the country's overall socio-economic development. Despite all these benefits and contributions, it has been made for the economic development of the country, the agricultural investment is still confronting with varieties of financing challenges. According to Yusoff and Aziz (2013), financing agricultural investment is still facing many challenges such as fear of risk of lending to investors. Gashayie and Singh (2015), stated it that, despite the government programs undertaken over the years, supply and demand for financial services continues to be mismatched, both in terms of the types and the volume of services. And government policies have not been able to remedy these shortcomings.

Despite all the existing challenges of financing agricultural investment, there are no enough literatures that come up with integrated knowledge. At country level, Shimelles Tenaw, Zahidul & Parviainen (2009), focused on the contribution of agricultural investment in the national development, and those researches that have been conducted in this topic (wolday, 2006), and Woldaiet *al.* (2010) are different from each other and from this study due to variable gap and methodological gap. This study is also different from those previously done studies since it tried to avoid information misleading gap by collecting data from the three institutions which are responsible and working for the agricultural investment. And at regional level generally and the study areas particularly, financing agricultural investment that aimed to support sectoral development has been confronting with various challenges like failure to return the loan amount, risks, security issues, lack infrastructure to facilitate investment activities, however; this problem has been overlooked. The other thing that has also been overlooked is to investigate on financing point of view the reasons for low investment performance, and measures taken since many investors left before completing their predetermined goals (14 out of 177 have left as revealed by DBE Gambella branch report of 2019). The gap here is because, no any single study has touched the financial perspective of agricultural investment so as to see the existing and sever problems that hindered the success of financing agricultural investment. Therefore, this study was motivated to try to reflect on the current financing challenges facing agricultural investment in Gambella city administration and Itang special Woreda, Gambella peoples' Regional State, Ethiopia. This is because the dynamic nature of the challenges of financing agricultural investment is still in progress and those challenges have not been researched in case of Gambella city administration and Itang special Woreda.

Specific objectives

1. To identify the sources of finance for Agricultural investment.
2. To analyze the performance of the agricultural investment.
3. To examine the major challenges of the agriculture investment.
4. To explain measures undertaken to solve or reduce the challenges by responsible bodies.

Literature Review

Theoretical review

Agricultural investment credit is a crucial expression of financial intermediation that provides funds to those economic entities that can put them into the most productive use. Gitman and Joehnk (1996), stated it that an investment is any mean into which funds can be allocated with the objective that will bring positive income so that their value will be keep or increased. Theoretical studies have demonstrated the relationship that exists between financial intermediation and economic growth. For instance, Schumpeter (1934), Goldsmith (1969), in their studies, strongly focused the role of financial intermediation in economic growth. Furthermore, in the same topic, Greenwood and Jovanovich (1990), observed that financial development can lead to rapid growth in a related study, Bencivenga and Smith (1991), explained that development of banks and efficient financial intermediation contribute to economic growth by channeling savings to high productive activities and reduction of liquidity risks. They therefore concluded that financial intermediation leads to growth. Therefore, to confirm whether those theories are in line with financing agricultural investment in Gambella city administration and Itang special Woreda or not is something researchable.

Empirical literature review

Many empirical studies have been conducted in different places throughout the world concerning the challenges of financing agricultural investment. Those studies come up with different results and those variables that are considered to be the challenging factors of financing agricultural investment are also different. Therefore as the results shown, it is understood that this topic is still researchable and need intervention in different places of the world.

Jessop *et al* (2012), conducted a study in six countries (Cambodia, Mali, Senegal, Tanzania, Thailand and Tunisia) entitled on Creating Access to Agricultural Finance and identified the following constraints of agricultural finance: high delivery cost, proximity; weak farming practices and farmers; lack of banking technology; lack Collateral; exogenous risks; Government intervention; weak collaboration among farmers.

Temu (2009), conducted a study entitled “Innovations in Addressing Rural Finance Challenges in Africa” and identified the following constraints: high transactions costs (inaccessibility of rural areas and physical access challenges, asymmetric information, underdeveloped infrastructure compounding the challenge of inaccessibility); low income cash flows and capital bases (lack of collateral, social cultural barriers, demand for small volumes savings, demand for small loan sizes), highly risky commodity and financial markets (financial transactions risks, agricultural commodity production and markets risks).

Miller (2008), identified 12 agricultural finance constraints under four headings as Vulnerability Constraints (Systemic risk, Market risk, Credit / financial risks), Operational Constraints (Low investment returns, Low investment and asset levels, Low geographical dispersions, Capacity Constraints, (Infrastructural capacity, Technical capacity and training, Social exclusion, Institutional competency) and Political and Regulatory Constraints (Political and social interference, and Regulatory framework)

Woldai *et al.* (2010), identified a set of root causes for these constraints that grounded the agricultural finance. The study discovered that the financial service offerings to agricultural sector players in Ethiopia face gaps in terms of access to financial services, product quality, and quantity. In terms of access, only few financial institutions serve rural areas in Ethiopia, leading to low levels of financial inclusion. In terms of product quality, gaps exist for all major product categories, including credit, savings, insurance, and payments, and all major types of agricultural players, including producers, traders, and manufacturers of all sizes.

Yehuala (2008), studied Determinants of Small holder farmer access to formal credit and Deresse and Zerihum (2018), undertook a study on the area of access to finance of Smallholder on Members of Agricultural Cooperatives in Southwest Oromia Region. They found it that, participation in extension package, simplicity in lending procedures, Christianity in religious, large number of working family size, large land size, educational level, and possession of other non farm income positively determine access to credit/finance of Small Holder Farmer.

Stefan B. & Laure L. (2011), studied Financing availability and investment decisions of Slovenian to a market economy and found it that, when budget failure becomes severe, the lender would have no enough and available money for lending to investors and as a result, the investors would face shortage of budget to run their investment activities there is a non-significant impact of investment subsidies received by farmers, but a negative impact on operational subsidies for small farm only, the alleviation of financial constraints.

Wenner (2010), studied the Credit risks Management in financing agricultural and found it that, adverse weather conditions like drought or floods, instability in external markets, low profitability of certain activities and low quality of products, make the provision of agricultural investment finance harder since the risk of default is very high and the opposite here is true and that an increase in the farm risk discourage loan lender to farmer and the opposite is true.

Richard L Meyer (2015), studied Financing agriculture and rural areas in sub-Saharan African and found that, proving financial support to investors who operate in areas with poor infrastructure, is difficult because of less or no delivery for the products.

Fogarasi, B Wieliczko, M Wigier (2014), studied Financing of agriculture and investment supports in agriculture. They found it that, the younger the farm age in the investment, the more interesting the lenders are to provide financial support for the growth of those young farmers and enhance the rural development.

Methods

To achieve the objective of the study, the researchers used descriptive and exploratory research design. Descriptive research design was used to capture a population's characteristic and test hypothesis (Cooper and Schindler 2008). The exploratory research design was used here because no previous studies existed on this topic and mixed approach was used in this study. The study used cross-sectional study design and, both Primary and secondary data were used. Primary data as the main data for this study were collected from primary sources using structured questionnaire from selected sample of 215 respondents through simple and stratified random sampling techniques. Secondary data were used as supplemental of the primary data and were collected from secondary sources such as annual reports, Journals, Books, and Articles, websites, and conference papers.

Method of data Analysis

After the data were collected from primary and secondary sources, those data were prepared for readiness by editing, coding and logging in the computer using Statistical Package for Social Science (SPSS v.20). SPSS was used to produce descriptive and inferential statistics so as to drive conclusions and summarization regarding the population to see the overall agricultural investment financing challenges. In this research report, descriptive statistics was applied using percentages, and frequencies and inferential statistic which is correlation and regression analysis was also applied.

Model specification

Since the aim here is to look for the financing challenges of agricultural investment on the viewpoints of three institutions (lending institution, borrowing institution and administrative institution), the following three Models were constructed:

Model 1:

$$FaiDBE = \beta_0 + \beta_1BF + \beta_2IR + \beta_3FR + \beta_4SIs + \beta_5Infrs + \beta_6TC + \beta_7LPs + \beta_8DFFL + \beta_9FA + \beta_{10}FS + \epsilon_i$$

Model 2:

$$FaiAG = \beta_0 + \beta_1BF + \beta_2IR + \beta_3FR + \beta_4SIs + \beta_5Infrs + \beta_6TC + \beta_7LPs + \beta_8DFFL + \beta_9FA + \beta_{10}FS + \epsilon_i$$

Model 3:

$$FaiInt = \beta_0 + \beta_1BF + \beta_2IR + \beta_3FR + \beta_4SIs + \beta_5Infrs + \beta_6TC + \beta_7LPs + \beta_8DFFL + \beta_9FA + \beta_{10}FS + \epsilon_i$$

Table 1. Description of variables

S/n	Variable	Definition
1	BF	Budget failure or the difference between revenue available and expenses
2	IR	Investment Return or the difference of the coefficient of variation of farm's actual and expected income
3	FR	Farm Risk or the Ratio between net profit and cost of investment
4	SIs	Security Issues or Stability and instability in the study areas
5	InFrs	Availability of rural transport systems, irrigation systems, water supply, electricity, and telecommunication facilities
6	TC	Technical capacity or Staff knowledge, training and experience along with the systems in place required to operationalize a policy
7	LPs	Processes and time, and criteria needed to provide loan

8	DFFL	Physical distant of farm from lender(in KM)
9	FA	Years of the farm has been operating
10	FS	Total land size cultivated
11	Fai	Mobilization and allocation of funds for agricultural activities
12	β	the constant or the intercept of the equation
13	β_1 to β_{10}	the coefficient of each explanatory variable
14	ε_i	the error term
15	DBE	Development Bank of Ethiopia or the lending institution
16	IA	investment agency or investment administrator
17	Invt	Investor or the borrowing institution

Source: Researcher’s design

Findings

This section discusses the descriptive and inferential results of challenges of financing agricultural investment and the study of those factors having challenging effect on financing agricultural investment; so as to come up with conclusion and recommendations.

Descriptive Analysis results

This part describes the challenges of financing agricultural investment.

Table 2. Sources of finance for agricultural investment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Self-help financing	31	16.4	16.4	16.4
	Development bank of Ethiopia	140	74.1	74.1	90.5
	Others	18	9.5	9.5	100.0
	Total	189	100.0	100.0	

Source: SPSS output from survey data, 2020

The descriptive study as shown by the table 2 above found it that, DBE 140 (74.1%) is the major source of finance for agricultural investment in Gambella city administration and Itang special Woreda. The self-help financing 31 (16.4%) took the second level in this order while the others sources 18 (9.5%) are the lasts in financing agricultural investment. This implies that, agricultural investment has different sources (formal and informal sources) which makes similar with the finding by Awoke (2004), who found it that, in addition to formal sources of finance for agricultural investment, there are considerable built-in mechanisms in the informal sources which ensure effectiveness of operation.

Table 3. Performance of agricultural investment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	160	84.7	84.7	84.7
	Moderate	23	12.2	12.2	96.8
	High	6	3.2	3.2	100.0
	Total	189	100.0	100.0	

Source: SPSS output from survey data, 2020

The table 3 above indicated it that, nearly the overall performance of the agricultural investment is low in Gambella city administration and Itang special Woreda as shown by 160(84.7%), 23(12.2%), and 6(3.2%) which represents low, moderate and high performance of agricultural investment respectively. As to respondents, the reasons for such a performance are lack of experience, security issues, unexpected natural risks, diversion of loan amount from originally intended purposes to be used for other purposes instead, poor infrastructure and poor farming practice.

Table 4. **Challenges of financing agricultural investment**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Budget failure	10	5.3	5.3	5.3
	Farm risk	30	15.9	15.9	21.2
	Investment return	33	17.5	17.5	38.6
	Security issues	29	15.3	15.3	54.0
	Infrastructure	14	7.4	7.4	61.4
	Technical capacity	13	6.9	6.9	68.3
	Lending procedures	17	9.0	9.0	77.2
	Distance of farm from lender	15	7.9	7.9	85.2
	Farm age	12	6.3	6.3	91.5
	Farm size	16	8.5	8.5	100.0
	Total	189	100.0	100.0	

Source: SPSS output from survey data, 2020

The table 4 above revealed that, the major challenging factors of financing agricultural investment are the low investment return, farm risk, security issues, lending procedures, farm size, distant of investor's farm from lender, poor infrastructure, lack of technical capacity, farm age and budget failure with their respective proportion. But, above all the most challenging ones or the severe ones are low investment return, farm risk and security issues in a good order as their share of 17.5%, 15.9% and 15.3% shown.

Table 5. **Measures taken by responsible bodies**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rescheduling of periodic payback	83	43.9	43.9	43.9
	Taking land and other properties if investor failed to perform	40	21.2	21.2	65.1
	Doing processes of closure	66	34.9	34.9	100.0
	Total	189	100.0	100.0	

Source: SPSS output from survey data, 2020

Table 5 above indicated it that, the first and the foremost measure is to reschedule the periodic payback to alert the borrowers to pay within renewed time period, taking land and other properties of investors if they failed to perform and doing the processes of closure are the measures taken as shown by 83(43.9%), 40(21.2%) and 66(34.9%) of the respondents respectively.

Regression and Correlation Analysis Result

Correlation Analysis Result

In this study, correlation among budget failure, farm risk, poor infrastructure, lack of technical capacity, security issues, investment return, lending procedures, distant of farm

from lender, farm age and farm size was tested. Applying correlation matrix in this study was helpful to know the relationships among variables. Hair et al. (2006), had mentioned agreement that, below 0.9 correlation coefficient of variables cannot have the problems of multicollinearity.

Table 6. Correlation Matrix

	Constant	Budget failure	Farm risk	Investment return	Security issues	Infrastructure	Technical capacity	Lending procedures	Distant of farm	Farm age	Farm size
Constant	1										
Budget failure	-.620	1									
Farm risk	-.808	.501	1								
Investment return	-.821	.509	.66	1							
Security issues	-.803	.488	.64	.659	1						
Infrastructure	-.683	.424	.55	.561	.54	1					
Technical capacity	-.670	.415	.54	.549	.53	.457	1				
Lending procedures	1.000	.620	.80	.821	.80	.683	.670	1			
Distant of farm	-.696	.431	.56	.571	.55	.475	.466	.696	1		
Farm age	-.655	.406	.52	.537	.52	.447	.438	.655	.455	1	
Farm size	-.614	.401	.52	.529	.51	.439	.430	.647	.447	.43	1

Source: SPSS output from survey data by the researcher, 2020

Regression Analysis Result

In this study challenges of financing agricultural investment was assessed on the bases of three institutions (Development Bank of Ethiopia, investment agency and investors) to come up with overall solution to the problem, therefore, three models were developed.

Table 7. Challenges of financing agricultural investment as to DBE

Independent Variables	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
(Constant)	7.529	13.953	4.537	.540	.000
Budget failure	5.548	6.226	-.057	.891	.874
Farm Risk	-8.215	5.960	.101	-1.378	.010
Investment Return	9.703*	5.491	.118	1.767	.041
Security issues	5.918	3.052	.365	.211	.000
Infrastructure	12.000*	7.060	.196	4.200	.011
Technical capacity	17.215	3.050	.113	2.122	.032

Lending procedures	-1.043	5.882	.069	-.189	.062
Distance of farm	-4.797	7.780	.041	-1.552	.009
Farm age	7.324*	5.467	.087	2.311	.005
Farm size	14.022	2.114	.268	2.040	.011

*Indicates significance (p -value <0.05)

Source: SPSS output from survey data by the researcher, 2020

Regression result in the table 7 above shown that, with exception of budget failure and lending procedures which are insignificant challenging effects, the explanatory variables are considered to have challenging effects on financing agricultural investment at $p < 0.05$. This implies that, on the side of lending institution, farm risk, Security issues, investment return, level of infrastructure, Technical capacity, Distant of farm from lender, Farm age and Farm size have influence in providing financial service to investors in support of agricultural investment growth and development in the areas as their values are < 0.05 . Budget failure being positive and insignificant and lending procedures being negative and significant on financing agricultural investment are not matter in financing agricultural investment as their values of 0.874 and 0.62 respectively are > 0.05 .

Table 8. **Challenges of financing agricultural investment as to Investment agency**

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.529	12.953	3.637	.743	.580
Budget failure	4.548	5.226	.057	.791	.374
Farm Risk	-9.215	3.960	-.102	1.368	.000
Investment Return	10.703*	7.492	.179	1.574	.002
Security issues	7.928*	4.052	.365	.258	.006
Infrastructure	18.400*	7.060	.196	2.295	.023
Technical capacity	13.025*	3.050	.173	2.157	.042
Lending procedures	-.530	5.862	-.008	-.107	.031
Distance of farm	-4.797	7.780	-.041	1.617	.018
Farm age	7.324*	5.467	.087	2.340	.002
Farm size	20.980*	7.324	.368	2.859	.005

*Indicates significance (p -value <0.05)

Source: SPSS output from survey data by the researcher, 2020

Regression result in table 7 above shown that, with exception of budget failure which has positive insignificant challenging effect, all the explanatory variables have significant and significant challenging effects on financing agricultural investment at $p < 0.05$ in Gambella city administration and Itang special Woreda. This means that, on the side of investment agency (the agricultural investment administrator), farm risk, Security issues, investment return, level of infrastructure, Technical capacity, Distant of farm from lender, Farm age and Farm size are the challenging factors as the office of agency experienced their influence in providing financial service to investor and paying back the loan to the lending institution. Budget failure does not matter at 0.374. This means that there is always budget for supporting agricultural investment development.

Table 9. **Challenges of financing agricultural investment as to investors**

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		

(Constant)	8.128	10.182	5.981	.529	.340
Budget failure	-9.865	7.155	-.057	-.891	.625
Farm Risk	6.215	6.911	.101	1.378	.012
Investment Return	7.703*	5.128	.338	1.767	.039
Security issues	4.918*	3.052	.355	.223	.008
Infrastructure	11.003	2.110	.276	2.295	.023
Technical capacity	13.289	7.050	.110	2.157	.032
Lending procedures	-.568*	3.612	-.039	-.137	.892
Distance of farm	-3.163	4.654	.065	-1.617	.038
Farm age	5.582*	2.415	.058	2.340	.002
Farm size	14.053	5.336	.249	2.846	.005

*Indicates significance (p -value <0.05)

Source: SPSS output from survey data by the researcher, 2020

Regression result revealed in table 9 that, except budget failure that has positive and insignificant challenging effect, all the explanatory variables have significant challenging effects on financing agricultural investment at $p < 0.05$ in Gambella city administration and Itang special Woreda. This implies that, on the side of investors (the borrowers), farm risk, Security issues, investment return, level of infrastructure, Technical capacity, Distant of farm from lender, Farm age and Farm size are the matter in getting financial service from the lending institution so as to support investment growth and development in the areas. Budget failure in this case has no effect in getting financial support from the lending institution since it is revealed by the values of 0.625 which is >0.05 .

Conclusion

Based on the findings of the study, it was concluded that, DBE is the major source of finance for agricultural investment, performance of agricultural investment in Gambella city administration and Itang special Woreda is low, the challenging factors of financing agricultural investment are low investment return, farm risk, security issues, lending procedures, farm size, distant of investor's farm from lender, poor infrastructure, lack of technical capacity, farm age and budget failure. This study has further revealed that, budget failure is the only insignificant variables in financing agricultural investment according to investment agency and investors. But as to lending institution, both budget failure and lending procedures are insignificant. The conclusions of this study were reached despite varieties of setbacks, among which challenges caused by lack of freedom of movement to study areas due to security problems in those areas, unwillingness of respondents to provide data, lack of access internet, and fear of risk of current issue of COVID-19 were the ones confronted researcher. This study was limited to Gambella city administration and Itang special Woreda and employed only 10 explanatory variables. Finally, this study recommended that, diversified sources of finance for agricultural investment should be made available, training programs on performance issues need to be there, each challenges

must be seriously dealt with especially irrigation need to be started in these areas as a response to risk of drought, infrastructure facilities need to be made available, the government need to settle the security issues, investors/lenders must be aware of their obligation to return the loan amount, agricultural technical capacity need to be build in these areas, and others measures like strong monitoring and evaluation of agricultural investment polices need to be put into practice.

References

- Aderaw G. & Manjit S. (2015). Agricultural Finance Constraints and Innovative Models Experience for Ethiopia: Empirical Evidence from Developing Countries Vol.6, No.7, 2015
- Awoke MU, (2004). Factor Affecting Loan Acquisition and Repayment Patterns of Small Holder Farmers in Ika North East of Delta state, Nigeria. *Journal of sustainable Agricultural Resources*; 9(5):61-64
- Bank Negara Malaysia, <http://www.bnm.gov.my>, 4th March 2011.
- Bencivenga, V. R. and Smith B. D. (1991). Financial Intermediation and Endogenous growth. *Review of Economics Studies*. Vol. 58, P. 195-209.
- Deresse M. & Zerihum A. (2018). Determinants of Access to Finance of Smallholder Farmers: A study on Members of Agricultural Cooperatives in Southwest Oromia Region, Ethiopia: HAJBE, Jimma University, Ethiopia. 1(1).
- Famogbiele G. (2012). The Challenges of Agricultural Finance Institutions in Nigeria: Constraints to Sustainable Agricultural and Economic Growth.
- Fogarasi, B Wieliczko, M Wigier (2014). [Financing of agriculture and investment supports in agriculture](#) :design of future agricultural, 2014 - academia.edu
- Gashayie & Singh (2015). Factors that Affect Financial Sustainability of Microfinance *European Journal of Business and Management*,– Citeseer. ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.7, No.7, 2015.
- Gitman & Joehnk (1996). *Worth: Personal financial planning*, 7th edition: The Dryden Press; 1996 (656 pp.)
- Goldsmith, R. W. (1969). *Financial Structure and Development*. New Haves CT: Yale University Press.
- Honohan, P. and Beck, T. (2007). *Making Finance work for Africa*. *World Bank*, Washington DC, USA.
- Jessop et al (2012). "Creating Access to Agricultural Finance: Based on a Horizontal Study of Cambodia, Mali, Senegal, Tanzania, Thailand, and Tunisia." Prepared for the Agency Française de Développement <http://www.afd.fr/webdav/site/afd/shared/Publications/Recherche/Scientifique/s/A-savoir/14-VA-ASavoir>.
- Jovanovic, B. (1990). Financial Development, Growth and the Distribution of Income. *Journal of Political Economics*. 98:1076–1107.
- Ken S. (2006). *IlmuKusabawananAgrikultur*. Kuala Lumpur: Synergy Media.
- Mckernan & Chen (2005). Small Business and Microenterprise as a opportunity- and asset building strategy. No. 3, 2005.
- Miller, C. (2008). "Twelve Key Challenges in Rural Finance", FAO Rural Finance Workshop, 28Oct, FAO, Rome.
- Mugenda, O.M & Mugenda, A.G (2003). *Research Methods, Quantitative& Qualitative*
- Muhammad Ab. Aziz. (2013). "A Review of Islamic Banking Products Offered by Agro Bank between 2008 and 2012". *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, Vol 1(4).
- Muhammad Y. Muhammad Ab., Aziz. (2013). *Shariah-Compliant Financing for Agricultural in Islamic Banking Institutions*. Paper presented at The 5th Islamic Economic System Conference (iECONS), 4th -5thSeptember 2013, at Berjaya Times Square, Kuala Lumpur. Pdf.
- Obansa SA, Madukwe D. (2013). Agriculture Financing and Economic Growth in Nigeria. *European Scientific Journal*, 2013; 7(1):345-354.

- Richard L Meyer (2015). Financing agriculture and rural areas in sub-Saharan African: Progress, Challenges and the way forward-papers.ssrn.com
- Schumpeter, J. A. (1934). The Theory of Economic Development. Cambridge, Mass: Harvard University Press.
- Shimelles Tenaw, Zahidul & Parviainen (2009). [Effects of land tenure and property rights on agricultural productivity in Ethiopia, Namibia and Bangladesh](#), University of Helsinki, - pdfs.semanticscholar.org.
- Stefan B. & Laure L. (2011). Financing availability and investment decisions of Slovenian to a market economy: Journal of Applied Economics 14(2), 297-317, 2011
- Temu, A. E. (2009). Innovations in Addressing Rural Finance Challenges in Africa. A Presentation made at the AFRACA Technical Workshop of 2008. Dar es salaam, Tanzania: AFRACA.
- Wenner (2010). Credit risks Management in financing agricultural: Government of the Virgin Island. 2010.
- Wolday A., & David P., (2010). Agricultural finance potential in Ethiopia. Constraints and opportunities for enhancing the system. Addis Ababa. Retrieved from <http://www.eap.gov.et/?q=taxonomy/term/56>.
- Woldey, A., & Peck, D. (2010). Agricultural finance potential in Ethiopia Constraints and Opportunities for Enhancing the System. Association of Ethiopian Micro-Finance Institutions.
- Yehuala, S. (2008). Determinants of Small holder farmer access to formal credit: The case of Metema District, Northern Gonder Zone, Ethiopia. MSc. Thesis, Haromaya University.