



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Asian Journal of Agricultural Extension, Economics & Sociology
Manuscript Number:	Ms_AJAEES_40448
Title of the Manuscript:	DETERMINANTS OF ACCESS TO FORMAL CREDIT AND PERFORMANCE OF SMALLHOLDER FARMERS: EVIDENCE FROM KUMBA MUNICIPALITY
Type of Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
Line 89 - 99 89 1.1.Hypothesis of the study¶ 90 1.1.1.Main Hypothesis¶ 91 The determinants of access to credit have no significant impact on the performance of smallholder 92 farmers in the Kumba Municipality.¶ 93 1.1.2.Specific Hypothesis¶ 94 1. Collateral security as a determinant of access to credit have no significant impact on the 95 performance of smallholder farmers in the Kumba municipality.¶ 96 2. Cost of credit as a determinant of access to credit have no bearing on the performance of 97 smallholder farmers in Kumba municipality¶ 98 3. knowledge/awareness of financial procedures as a determinant of access to credit have no 99 significant impact on the performance of smallholder farmers in the Kumba municipality.¶ Reviewer comment: These lines can be removed from the paper Line 187 187 information is presented on the table 1.¶ Reviewer comment: information is presented in table 1..... Line 198 198 Table 1.Target=ed population¶ Reviewer comment: there is a typographic error in the word “Targeted....” Line 227 227 Figure 4.1.Sources of Capital¶ 228 Reviewer comments: Use point decimal separator rather than comma decimal separator in figure 4.1	We appreciate you taking out time to go through the work. The comments are valuable. The corrections have been effected on the manuscript. Below are responses to the comments. - As regards the hypotheses, the other reviewers requested for it to be included. To that effect, the hypotheses were included in the manuscript during the first revision. - The typographic error on Table 1 has been corrected. The correction is highlighted in yellow in the manuscript. - The comma decimal separator in figure 4.1 has been replaced with point decimal separator as requested. - The authors have revisited the interpretation of table 4.3 and have effect the corrections accordingly. - Line 347 – 385 removed from the manuscript as requested. - The explanatory power of the model has been interpreted using the Adj R² - The three recommendations not directly linked to the study have been removed as requested. The review was thoroughly done. All the issues raised were salient. The authors sincerely appreciate your time and inputs. They were very valuable and have greatly improved the quality of the manuscript.



SDI FINAL EVALUATION FORM 1.1

Line 231

230 Figure 4.1 reveal that almost half of smallholder farmers (38.08%, 23.46%), finance their farming
231 activities using internal sources (personal savings, Njangi, family and relatives). On the other hand,

Reviewer comment: The authors should either add the percentage of ‘family and relatives’ in the parentheses in line 230 or remove in line 231 ‘family and relatives’ depending on what they define as internal sources of capital in this study

Line 245 to 248

245 The findings on table 4.3 reveal that majority of the respondents 197, cannot access finance due to
246 little or no formal education (that is, 78 are farmers with no formal education, 80 are farmers with
247 primary education and finally 35 farmers having a secondary education). Thus, it can be observed
248 that most farmers do not have access to finance due to little or no formal education.”

Reviewer comments: The authors’ interpretation of the results in table 4.3 is not correct.

The authors mentioned that the majority of the respondents cannot have access to credit due to little or no formal education. This is not correct based on the data presented in table 4.3.

Indeed, Table 4.3. just indicates that 79.6% ($78/98 = 79.6\%$) of the farmers who have no formal education do not have access to credit as opposed to 68.39% [$(80+35+4)/(125+45+4) = 68.39\%$] among the farmers who have formal education. And the authors could argue that: “This relatively high percentage of farmers who do not have access to credit among those (farmers) who have no formal education as compared to those who have formal education may suggest that formal education might influence positively farmers’ access to credit”. In other word interpreting the results in Table 4.3 this way would convince the reader than drawing the conclusion that: “....majority of the respondents cannot access to finance due to little or no formal education.....”

My suggestion of reformulation can be supported by the fact that what should be very important for financial institutions in their decision to lend money to farmers should be the insurance that they (farmers) can pay them back their money + the interest charged to the credit. As long as the farmer shows that he could pay back the money and interest (to the financial institutions) he is more likely to receive credit irrespective with the fact that he has formal education or not



SDI FINAL EVALUATION FORM 1.1

Line 254 - 261

254 Apart from the demographic factors that influence access to finance, the study also looked at the
 255 influence of access to credit on performance. Access to credit was cross-tabulated with the
 256 performance of the smallholder farmers to find out if access to credit can influence the performance
 257 of farmers. Table 4.4 revealed that if smallholder farmers have access to credit, it will increase
 258 productivity (27), annual return (40), technology (35), skill labour (36) farm sizes (26) and use of
 259 inputs (24). On the other hand, if they do not have access to credit, there will be a decrease in
 260 productivity (16), annual return (18), technology (16), skill labour (14) farm sizes (5) and use of
 261 inputs (13). ¶

Reviewer comments:

Table 4.4 data (like Table 4.3) is just descriptive and does not give any evidence statistically nor econometrically to support the conclusion that “.....if smallholder farmers have access to credit, it will increase productivity.....”.

One way to properly interpret the data in table 4.4 could be to state this :
 “Out of the 43 farmers interviewed who declared that productivity increased, 27 have access to credit. Likewise, among the 58 famers who mention increase in annual return, 40 have access to credit.....”

How did the authors get the data?
 How did they measure that credit increases productivity? Did they ask the individuals they interviewed if they think that credit increases their productivity? (yes or no).
 In other words, are the responses presented in the table from the statement of the farmers in their sample???

Cross tabulation tables are data summary tools and can not be used to draw any causation relationship between the variables. In other word, to draw a causality relationship between variables, I recommend the authors to refer to Angrist and Pischke, 2008 and other econometrics textbooks

Line 309: Table 4.5.4. Performance of smallholder farmers

Reviewer comments: The authors made a typographic error in row 6. It should be “More credit will.....” and not “Mori”



SDI FINAL EVALUATION FORM 1.1

Line 329 – 333

329 The result in Table 4.6 revealed the R^2 value, the coefficient of multiple determinants of 0.84, this
330 implies that about 84 percent of the variation in the performance of smallholders' farmers is caused
331 by changes in the factors influencing the access to credit. This implies that the remaining 16 percent
332 changes in performance of smallholders' farmers are caused by variation in other variables not
333 included in this equation and represented by the error term. The F-statistics of 21.19 which is greater
334 than the critical F-value of 3.157 needed for significance at 0.05 level of significance implies that
335 there exists a significant relationship between the determinants of access to credit and performance
336 of small holder's farmers in Kumba municipality. ¶

Reviewer comments: in line 330, the interpretation of the R^2 is not correct.
- First since we have a multiple regression here (multiple regression because the authors have 3 independent variables in this regression namely, 1. influence of collaterals, 2. influence of cost, and 3. influence of knowledge), the authors should interpret the explanatory power of the model using the Adj R^2 rather than the R^2 which is appropriate when we have only simple linear regression (Cameron and Trivedi, 2010).
- Second, the value of the R^2 or Adj R^2 in a linear regression just indicates explanatory power of the model (and not any causality relationship between the variables). Therefore I suggest the author replaced in line 330 and 333 the words "...caused.." by the word "...explained....". Stated differently, this correction is important because the fitted value parameters just indicates the percentage of variability in the dependent variable explained by the dependent variables in a linear regression model.

Line 339 – 340

339 variables and the performance of smallholder farmers. In other words, an increase in any of these
340 variables will lead to a decrease in the performance of smallholder farmers in the Kumba

Reviewer comments: I suggest in line 340 that the authors replace "...variables will lead to a decrease....." by ".....variables is associated with a decrease.....". This suggestion is made because in this regression which results are presented in Table 4.6, there is no identification strategy (necessary condition to warrant a causation relationship between the dependent variable in a regression and the independent variables). For more information the author can refer to several econometrics textbooks (e.g., Angrist and Pischke, 2008)

Line 347 – 385

Reviewer comments: The authors can remove these lines from the paper



SDI FINAL EVALUATION FORM 1.1

Line 344

344 positive. This means that there exists a direct relationship between knowledge/awareness and the

Reviewer comments: I suggest the authors replace in the above line (line 344) the word ‘direct’ by ‘positive’. In other word rather than “.....there exists a direct” by “...there exists a positive....”. Indeed, ‘positive’ correlation or relationship is different from ‘direct’ correlation or relationship.

Line 347 – 385

Reviewer comments: The authors can remove these lines from the paper

Line 408

408 interest rate, taxes, legal fee, insurance and traveling expense, have a great influence on access to

Reviewer comments: I suggest the authors remove from the discussion ‘insurance and travel expenses’ because nowhere in their papers they mentioned explicitly ‘insurance nor travel expenses’ nor tested the relationship between ‘insurance and traveling expense’ with ‘access to credit’ in their study.

Line 455 - 459

455 Also, the farmers are recommended to partner with other cooperatives for information and resource
 456 sharing. The farmers that cultivate maize, for instance, should get a measure per bag of maize and
 457 exchange it for fertilizer from farmers involved in poultry farming. This will permit the maize
 458 farmers to use the fertilizers on their farms while the farmers dealing with birds can locally
 459 transform the maize to feed.¶

Reviewer comments: I suggest the authors remove this recommendation because in this paper, the authors just discussed about the relationship between ‘access to credit determinants’ and ‘farm performances’. In other words, the authors did not address in their papers, the alternatives among farmers to raise their farms’ performances by exchanging with their peers.



SDI FINAL EVALUATION FORM 1.1

Line 460 – 462

460 Also, most of the farmers who own land do not have land titles. The study recommends that they
 461 should acquire land titles for their lands which they could use as collateral security to secure loans.
 462 This will address the challenge of access to credit¶

Reviewer comments: I suggest the authors remove this recommendation as well because they did not consider explicitly land titles as determinant of access to credit in this study.

Line 476 – 480

476 Finally, the government should also facilitate the issuance of Certificate of Occupancy. This is one
 477 of the documents required in the process credit lending. Most smallholder farmers have real estate
 478 to use to secure loans, but they don't have the certificate for that real estate. Thus if the government
 479 facilitates the issuing of this certificates, it will be easy for smallholder farmers to overcome the
 480 problem of collaterals.¶

Reviewer comments: I suggest the authors remove this recommendation because they did not mention 'certificate of occupancy' in this study.

Comments about the term "impact" to come back