

Effects of Financial Inclusion on Socio-Economics Transformation: A Case of Mbarali-Mbeya, Tanzania

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Abstract

The study analyzes the effects of financial inclusion on socio-economic transformation. The study being conducted in Mbarali-Mbeya the target group was all participants in supply chain system over rice farming. More over a study used a correlation research design and a multistage sampling technique to obtain 210 unit of inquiry. The questionnaires were data collection method in which the collected, edited and screened data was analyzed inferentially by applying F-test, multiple regression, logit analysis and multiple correlation. From this analysis the results were as follows:-accessibility; adequacy; affordability; safety and sustainability of financial services and products indicated the constructs to fit the model. It was also found that financial institutions' management innovation; presence of facilitating and innovative financial infrastructures; financial literacy; and formal operating mechanism showed the extent to which all four variables positively and significantly lead into financial inclusion. It was further revealed that surplus agricultural outputs, quality produce, increase in sales revenue, per capita income, and being accessed to quality social services were positive and significant determinants of socio-economic transformation. From these discrepancies then this study recommends that to be attained to sustained socio-economic transformation then financial users are to be effectively financial included. To be attained to financial inclusion, universal accessibility to adequacy, affordable and quality financial products are to be realized. Furthermore the study recommends that financial institutions' management innovation, financial infrastructures, financial literacy and formalization of the businesses are to be sustained towards achieving financial inclusion necessary for sustaining socio-economic transformation.

Keywords: financial inclusion, management effectiveness, financial infrastructures, financial literacy, socio-economic transformation.

1. Introduction

Financial inclusion is the accessibility, presence of sound, effective and adequate financial services and products for the individuals and firms growth (United Nations Development Program UNDP , 2009). Financial inclusion ensures accessibility and affordable financial services and products to both large and small scale firms of which to most of developing countries, stable, sound and efficient financial inclusion is a discrepancy not addressed to cause improvement in social and economic welfare especially with MSMEs, the households and low income earners (Global Financial Development Report, 2014). Accessibility, availability and adequate financial services and products which include credits (loans), savings, money transfer and insurance are determinants of social and economic transformation. Thus with effective financial sector in creating financial inclusion is the determinants of increase in per capita income and improvement in social

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welfare.

Furthermore financial inclusion determine for financial stability to both small and large scale firms and individual and thus growth of the businesses (United Nations, UN, 2003). Financial inclusion is the source of growth in primary, secondary and service economic sectors. More production, extracts from agriculture needs enough financial capital that is brought through financial inclusion. Large and quality agricultural produce and other extracts from other primary economic sectors forestry, fishing, mining help to sustain for the industrial (manufacturing and constructive industries), trade (market) and service sector (Cheng & Degryse, 2010). Acquisition of other physical resources as raw materials (e.g. seeds, fertilizers), capital input (e.g. machinery) need accumulated financial resources obtained at an affordable price of which require adequacy and sound operation of banking and non banking financial sector.

In Malawi, proceedings deposited into committed savings account (withdrawals allowed an accomplishment of self-specified goal), prompted farmer to spend 13% more money on equipment and grow the value of crop output by 21% consequently earning good margins (Brune *et al.*, 2015). In Niger, social safety net payments done through mobile devices rather than cash basis lessened travel and wait times by 75%, the saved time and costs was comparable to cash sufficient to feed a household house of five individuals for a day in Nigeria (Aker *et al.*, 2014). In Zambia credit products such as short-term and group loans to farmers have proven to shore –up investments, expenditures consequently increasing agricultural output and revenue by 10% (Fink, et al., 2014).

2. Literature Review

The study by Baregu (2017) focused on access of finance by Agri-firms different from this study in which agriculture was not only sector of which economic transformation entails. The study by Mpango (2013) of Tanzania becoming a middle income state by 2025 by unlocking potentials in which eight (8) issues or commandments were dictated but this study specifically looks on the impacts of financial inclusion towards socio-economic transformation in which it was revealed that financial capital accumulation is to be brought through promotion of financial inclusion. But financial does not only implies being accessed and used to financial services and products rather to be attained to financial inclusion/deepening is the accessibility to affordable, adequate, quality safe and sustainable financial services and products.

44% to 55% of SMEs in Tanzania are operating in informal sector (NBS, 2011). In the same line it has revealed that most of financial Institutions indeed with micro finances, microcredits and savings associations such as Kuleana, UPATU are operating informally. The major providers of financial services and producers to small holders' farmers, processors, the households and majority informal micro-enterprises are family members and friends. Users living in rural areas are less accessed to these services as compared to those in towns in which most of facilitating financial infrastructures are found. Reaching these informal business-users, SMEs, collateral, capacity and guarantees are other areas

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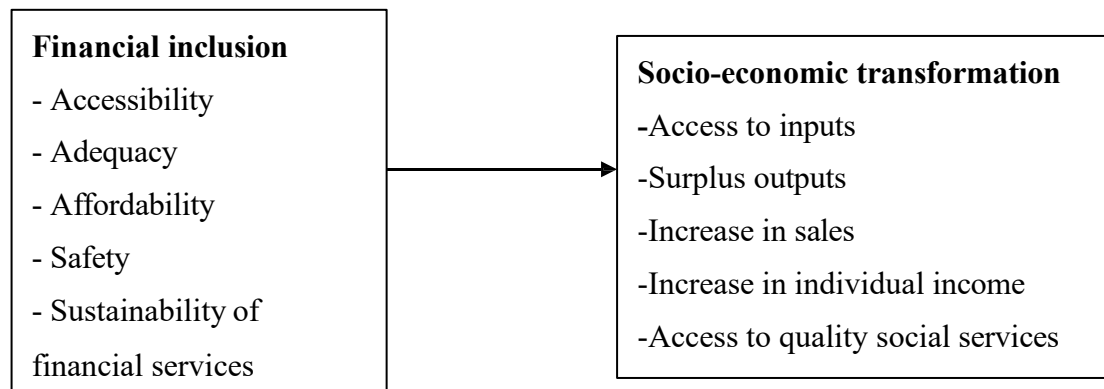
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of dilemma. It is only 17% credit provided to private sector, and it is 10% of formal credit accessed and 14% of only users are the ones who have bank accounts. The dynamics or floatation of return from security market such as DSE is the result of unsustainable financial capital mobilization.

Stability, sound and efficient financial sector is still not experienced as 71% of banking financial Institutions provides a short term finance. 61% of cash transactions are conducted outside the banking financial system showing that majority of users lack banking behavior. 40% is for systemic intermediation and 26% is provided by Non-Banking Financial Institutions. Credits losses, non-performing loans, and lack of capacity, aggregation, inflation and sharp rise in interest rates cause accessibility to be not sufficient, adequate and sound for socio-economic transformation to be achieved. This study adopted three theories/models which were the Traditional economic theory (Ball & ManKiw, 2011); The Business Correspondent Model (Prabha, 2010) and; the Modern Development Theory (Galor & Zeira, 1993). Three objectives governing the study were i) to examine the predictors of financial inclusion ii) to explore factors contributing to financial inclusion and iii) to determine the indicators of the social and economic transformation to be achieved through sound and efficient financial inclusion. More about operationalization of variables was shown in the conceptual framework figure 1 below

Figure 1. Conceptual framework of impacts of financial inclusion on socio-economic transformation.



3. Research Method

The study used a quantitative research approach. Also the study employed a correlation research design while the study being conducted in Mbarali-Mbeya. The areas such as Igurusi, Chimala and Mlangali were surveyed. The area was chosen as it is the area popular in growing of rice but to find majority users of financial services i.e small holders' farmers found to face a problem of not being accessed to adequate, affordable and sound financial services/products. The unit of inquiry included all participants in supply chain over the rice farming. Indeed the study used to stratified-multistage sampling technique in which 210 respondents of at least 70 respondents were chosen from each street /village, ward or area Indeed the size of unit of inquiry was computed by employing a level of

confidence = 99%, maximum error of estimate (E) = 13% and p- value = 0.50 from the formula $n = p.q(Z\alpha/2/E)^2$. The study involved the variables financial inclusion (defined by accessibility, adequacy, affordability, safety and sustainability) and socio- economic transformation (defined by access to business inputs, surplus outputs, increase in sales, increase in individual income and access to quality social services). These variables were measured by using mixed questionnaires and the level of measurement used was ordinals. But using the proposals by Knapp (1990) the ordinal scales were then treated as interval scales. That means the study applied questionnaires and review of secondary sources such as Journals, past research thesis and dissertations. The collected, edited and cleaned data were analyzed inferentially by using F-test, multiple regression, logit regression and multiple correlation analysis tests.

4. Findings and Discussions

Multiple deficient determinant of financial inclusion. In here the study aimed at revealing the significant determination effects of financial inclusion. Financial inclusion is not only about being accessible to financial services but accessibility to adequate, quality and sound financial products which meet the need and objectives of the user. Financial inclusion is a financial deepening which promotes over universal accessibility to affordable, adequate, quality, sound and efficient financial products which is the focus of this study. Contrarily from what was said by Fin Scope (2017) over financial inclusion being treated the same as accessibility is not enough to be achieved to socio-economic transformation (See Table 3 and 4) or simply improvement in social and economic welfare as it has shown in Table 3. The Table 1 below were the facts for accessibility, adequacy, low cost, sound and sustainable financial products as indicators of financial inclusion.

Table 1: F-Test analysis

Statistics tests		Value	d.f	p-value
F-tests	AAD AF	2.410	(1,209)	0.051
Sa Su		1.210	(1,209)	0.045
		0.970	(1,209)	0.052
		0.924	(3,207)	0.047
		1.020	(2,208)	0.050

Sum of Squared Residual $RSS_A = 1940.564$ Sum of Squared Residual $RSS_{AD} = 2001.420$ Sum of Squared Residual $RSS_{AF} = 1861.721$ Sum of Squared Residual $RSS_{Sa} = 1765.450$ Sum of Squared Residual $RSS_{Su} = 1964.740$ A = Accessibility

AD = Adequacy AF = Affordability Sa = Safety

Su = Sustainability of financial services FI = Financial Inclusion

Computations:

The F-tests for $F_A(1, 209) = (RSS_1 - RSS_A)/k$

RSS_A/n

$2.410 = (1,989.280 - 1940.564)/1$

$1940.564/209$

$F_{AD}(1, 209) = (RSS_2 - RSS_{AD})/k$

RSS_{AD}/n

$1.210 = (2,026.646 - 2001.420)/1$

$2001.420/209$

$F_{AF}(1, 209) = (RSS_3 - RSS_{AF})/k$

RSS_{AF}/n

$0.970 = (1,880.532 - 1861.721)/1$

$1861.721/209$

$F_{Sa}(3, 207) = (RSS_4 - RSS_{Sa})/k$

RSS_{Sa}/n

$0.924 = (1,817.512 - 1765.450)/3$

$1765.450/207$

$F_{Su}(2, 208) = (RSS_5 - RSS_{Su})/k$

RSS_{Su}/n

$1.020 = (2,006.930 - 1964.740)/2$

$1964.740/208$

Note: From $H_0: d \neq FI$ but because $H_a \geq 1$ then this is the same as saying $H_a: d = FI$ for alternative hypothesis (H_a) to be accepted where H_0 = null hypothesis; FI=financial

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inclusion; d= predictors (A, AD,AF, S_a and S_u)

From Table 1 above with $F_A = 2.410$ means that the financial services accessibility was not much a challenge especially with urban, cities and towns population users. This is from the facts that in towns and cities the facilitating financial infrastructures are metallurgical found such as corporate banks, bank branches, agent banks, ATMs. These results comprehend with those by Prabha and Bhist (2010) model on the presence of correspondents as contributing factors towards increasing financial accessibility. But the remaining $F = 7.59$ showed a discrepancy that this study has addressed. With $F=2.410$ over accessibility to financial products indicated to be occupied by urban area populations which is only 32% of the whole Tanzanian population and the remaining $F=7.59$ was for the remote disadvantageous users groups in which in total it is about >70%. This remote rural population is disadvantageous user group because of absence of technological infrastructures. Even the electricity, telecommunication network and internet that could facilitate Mobile Banking, e-banking (use of Sim Account, Mobile application programs) are not steady. Mlangali the researched area exemplify the fact. Informal operating mechanisms of the users and its sources of finances (credits, savings) are family and friends and informally operating financial groups such as Kuleana are the factors for why the accessibility in reaching its universal situation with $F=10$ is not feasible. These facts are consistent with what was reported by Brown *et al.*, (2015) in which it was postulated that about 51% of micro finances are operating informally. But the $F=2.41$ in other side mean that accessibility is a prior condition to be attained to financial inclusion but on itself does not defined sufficiently to adequacy, safety and sustainable financial services and products to be achieved to social and economic transformation.

Given $F_{AD} = 1.21$ showed that the accessibility is there though not sufficient to be attained to adequate amount that satisfy the needs of user groups. The adequacy is mostly sustained with management effectiveness in differentiating or categorizing the users basing on their need, capability, character, income (margin-capital level) and collateral. This will then help to provide these services equitably vertically and horizontally. This was dictated by Man Kiw & Ball (2011) in the traditional economic theory. The theory proposed that 'the principle of netting' can be applied when providing financial credits to the households (who are both savers and users) and firms (who are only users). Then it could expected that the households could be given more money to adequately foster consumption and investment expenses. Because of inadequacy access to these financial credits that is why majority of the households do not grow. This applies the same to small holders in which because of being accessed to inadequate financial services, credits that is why they are not able to acquire an innovative technology, enough capital machinery inputs, quality seeds for marginal physical productivity and agricultural surplus of their farming practices.

It actually hold true that less amount of credits accessed by the households as less compared to amount accessed by the firms is from the fact that, the households' businesses are not insured, guaranteed for the credits to be not repaid and indeed not on

time. The large firms are operating formally and financial literate to observe the performance of credits/loans the issue not speculated by traditional economic theory. It is therefore because of informal operating mechanisms and financial illiteracy of majority of small holders' farmers that is why financial institutions are offering credits at a high cost to be attained to expected returns.

With affordability, $F_{AF} = 0.97$ it shows a weak significance that existed between affordability of financial services and its deepening. This is the reality due to the fact that the large population users of agricultural finance/ credits are financially illiterate that they are not able to conduct the cost and cost-benefits analysis to be chosen to cost-effective financial services. Choice and flexibility over accessing to the low costing products and marginal benefits to be attained through using a particular financial services and products is still a dilemma that has been addressed by this study. It is because of the financial illiteracy in which most of small holders' farmers are not even known to the formula used in computing the principal amount and interest rate to be paid either in annuity or a lump sum. The financial literate customers usually do calculate the cost of acquisition of financial products say the cost of debt (K_d) and cost of equity

(K_e) such as shares, savings. Thus it is through effective computation of the cost of financing where a user is in right position to decide on what source of financing to capitalize on. And if it is to take all then the optimum cost is to be taken called weighted average cost of capital (WAAC).

With cost-benefit analysis then the trade-off between the total cost of capital over use of debt, equity or WAAC is computed against the expected return from investments/production (r). The expected/required rate of return is measured in terms of payback period, AAR, IRR, NPV and profitability Index. Prabha *et al.*, (2013) insisted on training to embark users with the basics of financial management though the high cost of finances/credits may be because of high transaction cost due to a long distance of travelling searching for the financial services. This was revealed by customers from Mlangali and Igurusi who were forced to travel to either Mbeya town or atheist to Chimala. Though Chimala is still not much sparsed with these correspondent services what Bhist & Prabha (2010) on the Business Correspondent Model proposed for accessibility to affordable financial services.

The consumer loans may be observed of high cost because financial Institutions are used to the concept Yield to Maturity, which means that financial institutions usually would like to see the credits asked are invested at a given period of time and it perform towards return on investment. Since consumer loans repayment period is short then that is why the interest charged is high. But with investment or business or agricultural loans then the interest charged found to be low basing on the little amount of credits received. Indeed it should be known that any financial institution is there to observe the business perform or simply a profit is maximized. Thus FIs would like to be conservative to see that the targets are attained in which therefore it is upon the user to choose the affordable product which meets its needs and objectives. But because of being financially ignorant then most users

are not flexible to choose the affordable financial products which satisfy their needs.

The un-affordability of finances was because of economic changes implying increase in interest charge, inflation rate and exchange rate movement. It is at this time in which the defaulting is high to cause increase in non-performing loans. It is at this time whereby the low income earners, the small holders' farmers, financial illiterate users are accessed to high costing financial credits while less earnings from deposits and savings. Furthermore high costing financial services is subjected to the nature of operation of the business-users. Since unregistered, uninsured, non- licensed and non-guaranteed users are vulnerable to social, legal, and economic shocks then lending to this needy group is like sacrificing currency/credit risk. Thus for lenders to be at safe side they usually opt to offer credits at a very high cost to allow risk at portfolio as most of financial institutions would like to operate at a free risk financial environment. This ensures attainment of the expected returns.

With $F_{Sa} = 0.94$ it indicated that the financial inclusion does not implies only accessibility but safety way of transferring of money or payment. It is with the use of Mobile Banking in which the withdrawals and deposits is done electronically .More other bills to be settled through the use Mobile Banking are payment of water bills , electricity bill, VAT. It is with the use of debit and credit cards in which customers opt not to hold large amount of cash in the pocket. Use of float or e-money payments has overcome the problem of robbery and theft as it is with cash payment. It is with Mobile Banking, wire payment in which the storage of value of domestic currency is attained as holding large amount of hard cash is unsafe to create reserve over the currency in circulation. Excessive money supply is a leakage to the economy and that is why FIs demand customers to have bank accounts in which every transaction involving withdrawals or deposits should be conducted through account. Bank account transactions are controlled by monetary policy. It is from this discrepancy with safety over ways of payment = 0.924 in which a project or campaign on "Banking behavior for Economic Stability" should be initiated and implemented. Indeed inventions over intelligent ATMs, the e-banking (use of Sim account, NMB click apps) are key strategies towards sustaining safety in money transferring that are deposits and withdrawals. This was said by Prabha & Bhist (2010) in the Business Correspondent Model. The issues not addressed by this model was the same as what was revealed from the field area that is most of small holders' farmers such that at Mlangali were found not mindset transformed to the digitization. And if that is not enough most of them were found i) unbanked (they had no bank accounts) ii) they found to be not used to wire payment, credit/debit cards for safety of their payments. Because of not mindset transformed some of these small scale farmers were found proud of holding huge amount of money in their pockets, at home and making payments while holding large amount of money on hand. To them this behavior of holding cash on hands was a sign of being rich. For $F_{Su} = 1.02$ indicated un-sustainability over financial inclusion. Un-sustainability is because of inadequate and non-sound financial services accessed by small scale firms. This is from the same reason of why small holders' farmers,

who are not registered, not licensed and non-insured, are vulnerable to economic and ecological shocks to be accessed to non sustainable financial services. Indeed their collaterals are not easily realized, convertible, its title of ownership not easily transferred (because of non-convertible natural land deed). Again un-sustainability may be because of non-performing credits, more defaults and credit losses. Moreover un-sustainability in provision of adequate and low costing financial services say credits may be because of changes in micro-economic variables such as exchange rate (FX), inflation (i), interest (r) and GDP. It is with $F_{Su}=1.02$ which shows most of the micro finances, savings and loans associations, informal financial groups such as Kuleana is not reliable and sustainable source of finances towards meeting its adequacy. Majority of micro-finances found to operate informally while creating information asymmetric for user to be not flexible in choosing the alternative financial services that meet the need. They indeed found not to operate in transparency, fair treatment manner in creating a free risk financial environment and lowering of transaction cost. It is from this increasingly financial transaction cost which makes accessibility to financial services become non-sustainable. It is with fluctuations indeed which affect the outcomes i.e. the agricultural outputs, sales, quantity of economic materials/ resources acquired and access to the quality social services. This is also the reason why the large scale firms are capable to efficiently allocate the financial products for performance of their businesses. Performance of the large scale businesses is the prior advantage to be able to repay the principal and interest on time and thus creating the so called performing loans. In effective management of most of micro finances is among the reasons over non-sustainability of the financial deepening.

Determinants of financial inclusion. To be attained to financial inclusion through increasingly accessibility to adequate, low cost of products, low transaction cost and sound financial services and products then management effectiveness, innovation, presence of efficient facilitating infrastructures, strong enforcement over rules, regulation and policy, financial literacy and formal operating mechanisms of both

financial services providers and users. More facts from the field were as shown in Table 2 below:-

Table 2. Multiple regression analysis

Predictors	Un-standardized coefficients	β Standard error	Standardized coefficients	β t	p-value
Constant	11.20	4.210	-	0.923	0.010
Management effectiveness	0.052	0.464	0.002	0.054	0.000
Financial infrastructures	0.160	0.786	0.007	0.094	0.050

Financial literacy	0.042	0.770	0.012	0.099	0.020
Formalization of the business	0.085	0.751	0.751	0.059	0.010
R ²	0.210				
R ² adj	0.200				
Observations	210				

From the structural model $FI = 11.120 + 0.052Mi + 0.160Fi + 0.042F1 + 0.085Fb$ in which $R^2 = 0.210$ with management effectiveness/ innovation, Mi , $t = -0.0541$, $p = 0.000$ while $\beta = 0.002$ show a statistical significance that exist between the two variables i.e. Mi and FI though the association is positive but weak. It is with this fact to say FI 's management effectiveness is not significant. In effectiveness is due to the facts that most of financial institutions are risk takers to observe that the expected return is attained or simply a profit is maximized. Most of financial institutions do not opt to balance score card concept by making sure that while they maximize returns but at the same time they ensure that customers also satisfy to continue transacting. That means FI s should adopt an Innovation Customer Centric Approach in which different types of customers and their need should be identified and fulfilled. More over innovation goes with curbing homogeneous products through diversification, differentiation of financial products, training, and conducting effective credit review, monitoring and administration. Coming with more diversified products say trade finance, mortgage finance, minor credits, agricultural credits, group loans, and more differentiated programs such as reduced interest rate, increases accessibility, inventions over use of wire payment, e-banking, credit cards, debit cards, intelligent ATMs (allows both deposits and withdrawals) which led into safe method of transacting and reduced cost of transaction. This therefore enables accessibility to affordable financial services even out of bank working hours.

With the presence of facilitating financial infrastructures $\beta = 0.007$; $t = 0.094$ at $p = 0.05$ shows a weak relationship that exist between the variables that is fi and FI . This problem is more with remote rural population –users where the said facilitating financial infrastructures such as bank branches, retail banks, ATMs, use of mobile financial services, wire payment is still a dilemma because internet subscription, telecommunication network and electricity is unsteady to support e-banking and financial transactions. It is with the use of Mobile Banking which had made financial services become customer centered, reduced transaction cost such as that of travelling a long distance more than 5 kilometers searching for Banking financial services following the facts that most of Banks are found in towns as it was to 'Mlangali village' to Chimala town in Mbarali district. Thus availability of facilitating financial services enables easy access to financial services (Prabha, 2013).

The online registration and opening of the accounts which could be facilitated by hand

phones, smart phones, tablets is not possible because of unsteady internet subscription, telecommunication network and in most cases in remote areas there is no electricity as rural population depend on biomass as the source of energy by >90% (BoT, 2016). Indeed disadvantageous micro enterprises, remote rural population is the group which is more affected by this problem as possessing such tablets, smart phones which are more expensive not affordable is a discrepancy. And this is the same reason why these types of users are not accessed to “Mobile apps” services such as internet Banking, online opening of accounts and thus being financially excluded say 81% for adult population and only 26% of agro processors being accessed to financial products (FSDT, 2016). The 14% of Tanzanian population having banks accounts is little to prove the facts why 71% of the Tanzanians are financially excluded (Baregu, 2017). Other issues such as financial ignorance, weak enforcements of rules, regulations governing the operations of financial institutions and microfinance count for the discrepancy underhand. Moreover informal operating mechanisms of business-users, not being insured are the reasons which makes them vulnerable to financial environmental shocks (variations) say business risks, liquidity risks, default risk and more other financial risks which are among other reasons for persistent financial exclusion.

Financial ignorance to most of users of financial services with $\beta = 0.012$, $t = 0.0952$, $p=0.02$ proved the facts why credits financing found to have no impact to the users. This is because the credits asked for instance by the households are not efficiently budgeted and allocated to the business for its performance. It was revealed that most of credits asked are used for consumptions (misallocated) such as buying food, paying for school fees, payment of different bills fall due while little being invested.

Literate user of financial service such as savings, budget it appropriately to be attained to expected outputs (returns). Financial illiterate user found not to plan for working capital and long term fixed capital. This means that a user is not used to plan and forecast for risks (exposures) which may cause variations over the targets or expected outputs. Ignorant users of financial services do not bother in keeping financial records of simply the cash inflows and outflows to observe the business do not survive in a foreseeable future. It is from this discrepancy where the study recommends the adoption of business correspondent model (RBI, 2010) which suggested on the importance of training indeed by opening the financial credits and Counseling Centers. RBI went further by proposing a special training to be conducted both to internal customers (Bankers) and external customers (users). Indeed the training and education programs concerning budgeting, efficient use of savings, deposits should be conducted from a grass-root that is primary school level. Youths should be taught on how to accumulate savings and significance of having savings/ fixed deposits accounts for betterment of their life in determinable future time.

Non- formal and non-easily identified user/business is vulnerable to impediments in accessing to affordable, sound and adequate financial products. It is the same reason why most of adults informal households (>15 years age), SMEs are much excluded financially

as by Mwombeki (2017) on his study on “the Accessibility of financial services by agricultural sector” in which it was realized that only 29% of formal credits is the one accessed by farmers. And 81% of adult population is excluded financially, 26.5% of agro-processors is the ones which is financially accessed to credits, savings and other financial services which is little as that of agri-firms= 15.9%. This trend over financial inclusion proves the fact that socio-economic transformation cannot be achieved. Most of micro and small firms are operating informally and they are not capable of running businesses to performance, no collateral, not insured and not guaranteed.

Their businesses are not registered and licensed with $\beta = 0.751$, $t=0.0599$ at $p=0.010$. This is a proof of why small enterprises other than the focus group of this study involved in mineral extraction, food processing (such as Mamalishe), trading and services (such as Bodaboda) providing firms are vulnerable to shocks (risks) due to environmental change (e.g. climatic change, disasters, fire outbreaks), economic changes (inflation, high exchange rates, deflation, depreciation), legal changes while the losses (variations) not be recovered. For instance during inflation, the cost of inputs (materials) increases while at the same time value of domestic currency falls. These market forces cause a consumer fail to afford to buy the financial products at that high inflated price or simply the purchasing power decreases. That means during inflation the expected return (r) is not attained and this therefore lead into increased financial, credit risks and default as now burrowers (business users) fail to repay the amount on time due to losses incurred from the business. Default and credit risks are sometimes because of rise in interest rate resulting into high exchange rate movement.

Multiple coefficient determinant of socio-economic transformation. Socio-economic transformation is the improvement in social and economic welfare. It is with social and economic transformation in which individuals are alleviated from poverty. Social transformation is associated with increasingly access to better social services such quality education, health services, water, transport, electricity. Social transformation is first fostered by being accessed to basic human needs such as food, shelter and clothes. But all of these social needs are thorough fulfilled when an individual is economically well-off due to increase in per head income, sales revenue, more productions, investments, savings, and growth of agro- processing (industrial) sector called economic transformation. More results were shown in Table 3 below

Table 3. Logit analysis

N=210	Value	df	P-value
Likelihood ratio Pearson X ²	1.301	1	0.42
	0.910	1	0.51

From Table 3 above the results for maximum livelihood =1.301 at $p =0.42$ and Pearson Chi- square of 0.910 at $p= 0.51$ indicates a test and re-test reliability to be held. This is the

fact that in the intention or condition where the majority small holders' farmers are not accessed to financial services, then accessibility is with a very few large scale farmers say Kapunga farming company Limited and Raphael processing Company Limited. And even if these small farmers, processors and traders of rice are accessed it is not adequate and affordable for them to attain social and economic transformation. It is with few user-groups accessed to finances where the clear demarcation over marginal physical productivity, surplus agricultural products, sales and access to quality social services were revealed. The high income earners, larger farmers, firms which was marginally good, formally operating and financial literate and easily accessed to adequate and sustainable financial services were able to acquire a land of 1 acre before and 3.5 acres after then continuous. The fertilizers acquired and used per hectare increased from 1 to 2 bags of 200kgs to 3 to 4 bags of 200kgs per hectare.

Before being accessed to adequate financial credits, the yield was between 6 to 10 bags of 250kgs but following accessibility to adequate, affordable and sound financial services, the firm was able to harvest 35 to 45 bags of 250kgs size per hectare. This is a proof over the fact that if firm, users, the households, small holders' farmers will be accessed to adequate and low costing financial credits then their businesses will grow from its micro and small size to medium and large sizes. Without that then it will be a business as 'usual' in a manner that small holders' farmer will continue conducting their farming activities at subsistence level which then will not alleviate them from poverty at 48% for rural agricultural population (NBS, 2016).

It is a clear distinction shown what a logit analysis test has disclosed in which for Tshs80,000 of fertilizer per bag for 6 to 10 bags harvested before being used to quality seed, fertilizers and good agronomic services then sales was small between Tshs.480,000 and Tshs.800,000 per year. Thus per head income was between Tshs1,315 and Tshs2,192 per day which is then less 1USD (for 1USD = Tshs2,300 for 2018 exchange rate in average). This compels with the actual results following access to adequate and sound financial services of which the yield was between 35 to 45 bags as an agricultural harvest or outputs equals to 2,800,000 to 3,600,000

which is almost 5 times of the agricultural surplus or sales over β coefficient experiment 1 and t- test experiment 2. From improvement in sales the same was revealed with the per capita income which increased from Tshs7,671 to Tshs9,863 per day. Indeed the continuity of the facts was revealed from the field in which for these small scale farmers, processors who are at least able to be accessed to even little finances then before or they totally not accessed to these services they were able to take only one meal or lunch but after start accessing to even little they were getting under unsteady provisions at least they were able to take 2 to 3 meals per day i.e. breakfast, lunch and dinner. The discrepancies above are also explicitly disclosed in Table 4 below.

Table 4. Multiple Correlation of financial inclusion against socio-economic transformation

Financial inclusion	Pearson correlation	0.08	Socio-economic transformation
	Sig.	0.01	
	N	210	

From Table 4 above, the results derived from running the structural equation model, $SET = f(A, AD, AF, Sa, Su)$ with Pearsons' correlation, $r = 0.08$ at $p = 0.01$ shows a weak association that exist between financial inclusion and socio-economical transformation. This is because access to adequate, lowly quality financial products, safe and sustainability is still a challenge addressed by this study to be attained to socio-economic transformation. Non-satisfactory product moment coefficient = 0.08 especially with disadvantageous low income earners, the households and MSMEs is because most of these category of customers are operating informally and they are financially ignorant to be accessed to adequate and sound financial products. It is because of accessibility to in adequate, high costing financial products and inefficient financial services/products that lead into its inefficient allocation for business performance. More other factors that contribute to absolute financial exclusion say 81% of adult rural population as it was also reported by FSDT (2016) on absence of efficient facilitating financial infrastructures, unsteady internet subscription, electricity and telecommunication network; non-use of e-banking, wire payment and mobile banking services. Moreover weak enforcement over rules and regulations governing financial Institutions and microfinance count as one of the factor towards financial exclusion though this is not a focus of this study. Since most of micro-enterprises accessed to informal micro credits, loans and saving associations as well as savings this therefore means accessibility to long term, adequate, affordable and efficient financial services is in dilemma. This is also a reason why MSMEs, the households and financial illiterate users are accessed to informal and inadequate savings, and highly costing borrowings failure to achieve socio-economic transformation. This was reported by one of the small holder farmer who said 'the credits provided are subjected to high cost of burro wings (interest = 21% -27%) of which most of small holders' farmers cannot afford'.

5. Conclusion

Financial inclusion is the function of accessibility, adequacy, affordability, sound and sustainable financial services. It was revealed that financial institutions' management innovation, financial literacy, formal operating mechanisms of businesses and presence of facilitating financial infrastructures are the contributing factors for financial inclusion. It was further found that insignificant financial inclusion of say 71% of Tanzanian adult population being financially excluded) the same discrepancy revealed from field area was due to the facts that the accessed financial products are not adequate, they are of high cost, not appropriate and effective to meet the users' need indeed with micro-enterprises,

the households and disadvantageous remote-rural population users. Following this discrepancy this study recommends the following to be taken into practice by all stakeholders (e.g. Financial Institutions, Central Bank, policy makers) involved in financial sector to reverse the situation: Strong enforcement of Banking and Financial Institutions Act 2006 and regulations of 2005 (Ammended in 2011 and 2010 respectively): Promotion of Financial Inclusion Policy of 2013, Strong enforcement of Microfinance Policy framework of 2000, Diversification of financial products, Differentiations of financial programs/products, Use of innovative and safe technologies such as Mobile banking, credit cards, wire payment, Registering and licensing businesses Training on the efficient use of financial products, Provision of financial management education and training, The government should ensure a steady environment of financial facilitating infrastructures such as internet, telecommunication network, road and electricity both in rural and urban areas, Inventions over agent banking, and opening of bank branches, Enforcement and control of security markets operations.

References

- Aker, J. (2014). Mobile Banking in Nigeria and Financial Inclusion. Accessed on 27th, June 2017 from World Wide Web <http://www.researchgate.net/publication/263325793>.
- Arp, F. (2018). Is microfinance the answer to poverty? Global Agenda. World Economic Forum. Retrieved from <http://www3.weforum.org/agenda/2018/01/the-34-b>.
- Bank of Tanzania (2016). Monthly Economic Review. Retrieved on 1st January 2016 from World Wide Web <http://www.bot.go.tz/MERDEC2016>
- Baregu, M. (2017). Finance access by Agricultural sector in Tanzania. Dar es Salaam, Financial Sector Deepening Trust.
- Brown, A. *et al.*, (2015). Financial Inclusion and Microfinances in Tanzania. Dar es Salaam, Inclusive Growth: Tanzania Country Report.
- Brune, A. (2015). Financial Inclusion and Economic growth in Malawi. Retrieved from <http://www.researchgate.net/publication/325663958>.
- Cheng, X. & Degryse, H. (2010). The impact of bank and non-bank financial institutions on local economic growth in China. *Journal of Financial Services Research*, 37(2-3), 179-199.
- Financial Sector Deepening Trust (2016). Growth of financial Inclusion in Tanzania, Causes and Impacts. Retrieved from <http://www.fsdt.or.tz/financial-sector-deepening-trust-f>
- Fink, G. *et al.*, (2014). Access to short term credits and its impacts towards investments and increasingly agricultural output and revenues in Zambia. Retrieved on 20th June 2017 from World Wide Web <http://www.povertyactionlab.org/evaluation/impact-f>.
- Galor, K. & Zeira, A. (1993). Perfection of Financial market, free flow of information

and Financial Inclusion. Retrieved from <http://www.store.ecta.ro/article>.

Global Financial Development Report (2014). Financial Inclusion. Washington DC 20433, International Bank for Reconstruction and Development : The World Bank.

Jack, B. & Suri, C. (2014). Mobile Money Services inventions in Kenya. Retrieved from <http://www.mdpi.com/pdf>.

Knapp, T. R. (1990). Treating ordinal scales as interval scales: An attempt to resolve the controversy. *Nursing Research*, 39, 121-123.

Lewis, A. (1954) as cited by Wutyzy, K. (2011) and Wutyzy, K and Kilama, B. (2014). Socio- Economic Transformation Theory. Retrieved from <http://www.researchgate.net/publication/286609301>.

Mankiw, G. & Ball, L.M. (2011). *Macroeconomics and the Financial System*. Retrieved from http://www.academia.edu/Macroeconomics_9thEdition_by_N_Gregory_Ma.

Mpango, P. (2013). Socio-Economic Transformation for Poverty Reduction: Eight Key Messages for Unlocking Tanzania's Potential. REPOA Brief Number 37.

Mwombeki, B. (2017). Finance access by Agricultural sector in Tanzania. Dar es Salaam, Financial Sector Deepening Trust.

National Bureau of Statistics (2011). Unemployment estimates for the Year. Retrieved on 9th December 2014. from wikipedia <http://www.nbs.go.tz/nbs/takwimu/references/Ta>.

Prabha, R. Dayal S. & Bhist H.S. (2013). A study on the efficacy of business correspondent model, The Association of community development finance institutions, Citi group RBI (2010) RBI bulletin, RBI, Mumbai.

United Nations (2003). The Goals of financial Inclusion. Retrieved from <http://www.microfinancegate.org/sites/default/files/mfg-en-paper-b>.

United Nations Development Programme (2012). Financial Inclusion in India. Retrieved from <http://www.inndp.org/operations/projects/closed>.

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