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Table 3: Loan amount categories (n = 110)

Loan size limit	Frequency	Percentage
0 – 1 000 000	35	31.8
1 000 000 – 2 000 000	24	21.8
2 000 000 – 5 000 000	46	41.8
> 5 000 000	5	4.5

The study's results (Table 3) imply that only (4.5%) of the farmers' group had applied for a greater loan amount (>5 000 000/=) compared to others. In light of these results, it is observed that only a small number of farmers are eligible to apply for a larger loan amount. Weber and Musshoff (2012) and Baele *et al.* (2010) demonstrated that farmers who request bigger loan amounts have a reduced chance of receiving a loan, but once the credit is granted, larger loans are substantially less rationed in volume. Ruete (2015) reported that for the agriculture sector to grow, it needs access to capital, hence the transition from subsistence to commercial agriculture necessitates funds. Further, Rabson (2019) reported in the literature that if agriculture loans are raised then farmers will be able to improve their agricultural yields or output even more.

5.3 Activities on which the paddy farmers used the accessed loans

The study findings, as presented in Table 4 provide a summary of how farmers used the loan during the cropping season. According to Table 4, all (100%) of the smallholder farmers used the loan for paddy cultivation only. It has been shown that (94.5%) of the farmers used the amount of the loan applied in land preparation, while the remaining (5.5%) did not use the applied loan in land preparation activities due to the small amount of loan given to them, as shown in the quote below:

The amount of loan given is not enough to cover all expenses involved in paddy production. In other phases such as land preparation, I'm forced to prepare the farm using my own personal savings or other sources with the aim of using the loan applied in the latter phases' paddy production (A 40-year-old male FGD participant, Mkindo, 27th August, 2021).

Nevertheless, the majority (98.2%) used the loan for tilling purposes, while very few (1.8%) did not. Again, 96.4% of the farmers reported having used the loan to purchase agricultural inputs as supported by the quote below:

This is among the very important stages in the use of loans. The aim of acquiring a loan is to support us to buy agriculture inputs that we could not afford on our own. Other paddy farming stages might be challenging but, we can strive to overcome them. However, the issue of purchasing inputs is a very hard challenge to overcome due to increased expenses such as transportation since some of the inputs are not available in our localities hence, requiring one to travel. Generally, the loans are required and are very helpful. (a 56-year-old male FGD participant Mkindo 27th August 2021).

The findings of this study are in line with the findings of Ullah *et al.* (2020), who reported that enhancing smallholder farmers with loans is very useful to the group since it enables farmers to adopt improved agricultural technologies that result in the creation of opportunities for improvement in smallholder farmers and their farms through increased productivity.

The results (Table 4) show that almost all (98.2%) of the farmers used a certain amount of the applied loan for weeding, while a few (1.8%) did not. Also, the majority (94.5%) used the loan for harvesting while the remaining few (5.5%) did not. About 94.5% of the farmers used the loan for transportation, while the remaining (5.5%) did not. Finally, almost all (96.4%) of the farmers borrowed money to hire labour, while the remaining few (3.6%) did not.

Table 4: Activities for which paddy farmers used loans during the 2020/2021 cropping season

Activity	Yes	No	Rank
Paddy Production	110(100)	0	1
Land preparation	104(94.5)	6(5.5)	2
Tilling	108(98.2)	2(1.8)	3
Purchasing Inputs	106(96.4)	4(3.6)	4
Weeding	107(98.2)	3(1.8)	5
Harvesting	104(94.5)	6(5.5)	6
Transportation	104(94.5)	6(5.5)	7

Hire labour	106(96.4)	4(3.6)
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NB: Numbers in brackets indicate percentage.

5.4 Challenges faced by smallholder paddy farmers in accessing bank loans

The first challenge that was common for the majority of the smallholder farmers who participated in the study was the high-interest rate from the respective financial institutions. The study's finding is in line with what has been reported in the literature (Konlambigue, 2015; Njuguna and Nairo, 2015; Mershal and Ayenew, 2018; Onwunali, 2018), where it is argued that the high-interest rate on loans is among the biggest challenges that smallholder farmers come across in accessing credit from banks because it has the potential to significantly reduce anticipated profits they are anticipated to make. The argument is supported by what was said by one of the key informants, that:

"Interest rates are a major problem facing smallholder farmers. The rate is too high for farmers. They literally gain very little or no profit. Sometimes, among them, they even fail to repay their loans in full, which results in one's collateral being sold. This kind of situation happens time to time. With high-interest rates, bank loans are of no use. They benefit a few but, it's a tragedy for many. "(Key Informant, Dakawa, 10th September 2021).

Table 5 also shows that collateral demand was another major challenge whereby financial institutions demanded high-value collateral before they can grant a loan. The findings conform to what has been reported in literature (Nyairo, 2015; Isaga, 2018; Mbuga, 2019) that agribusiness entrepreneurs lack credit histories and accounting information that banks can use to determine their credit worthiness, thus the need for collateral. The demand for collateral in some ways puts off many smallholder farmers from applying for credit from banks. The statement below supports the above:

"Banks that give out loans require high-valued assets as collateral, and the amount of loan that is given to us does not even match the value of the collateral that you have put up. Later, if you are

unable to repay your loan on time, they will either sell your asset at the price they desire to repay them your money, or they will sell your asset for a very low amount that you obtained as a loan. This is a problem for us; at the very least, the loan amount should correspond to the asset we put up as collateral" (a 47 years male FGD participant, MKINDO, 26th August 2021).

Another challenge was the loan repayment period, which was a challenge for some of the paddy farmers. Generally, the repayment period is in the form of installments, which complicates payment as some farmers depend on the farm harvest to pay their loans. Failure to timely pay the loan results in an increase in its interest rate. The study's findings are in line with the findings of Lemesa and Gemechu (2016) and Mershal and Ayenew (2018), who reported that banks' lending terms and conditions, such as payback periods, hinders small farmers from obtaining finance. Therefore, probabilities in favour of accessing formal credit utilization diminish, implying that the payback period is advantageous for farmers if it coincides with the harvesting season or when the farmers receive revenue to repay their loan.

Another challenge was loan inadequacy, which was mentioned by some of the farmers, whereby the complaint concerning the amount of loan applied was too small to satisfy their paddy farming needs. Echoing this, one of the FGD participants said,

"The amount of loan given to us is quite small compared to the one we requested, for example, the total expense cost of cultivating to harvesting one acre within our locality is approximately nearly Tshs. 1 250 000/= but unluckily for my case I have applied for a bank loan of Tshs. 2 500 000/= but I was given Tshs. 584 000/= which is not enough to compensate for my farming expenses
(a 36 years male FGD participant, MKINDO 27TH August 2021).

The study's finding is in line with what has been reported in the literature by Duy *et al.* (2012) and Anang, *et al.* (2015) that financial institutions contract loans of small amounts to

farmers to support them, which does not allow them to invest enough in their farm activities to increase their productivity. Generally, the acquisition of larger loans makes it possible for farmers to apply adequate inputs required for production, hence raising productivity.

Table 5: Challenges facing smallholder farmers in accessing Bank loans

Challenge experienced	Frequency	Percentage
High-interest rate	60	37
Collateral demand	36	22.2
Loan repayment period	17	10.5
Loan inadequacy	39	24.1
Poor business plans	10	6.2

The last major challenge was a poor business plan. Smallholder farmers lacked a proper plan in their loan application hence, making them ineligible to acquire loans from banks. The observation is supported by the quote below:

“Among the things we consider in loan application procedures is business plans. Therefore, some of the smallholder farmers who come to our bank to acquire a loan have no proper business plan. Hence, it is very difficult for us to process a loan for that individual. Sometimes the majority of them are not even farmers. Due to mob pressure, they are pressured to apply for a loan which they end up using for non-farming activities such as betting, which is not beneficial for them. The result is us attempting or even selling the collateral at stake.

(Key Informant, CRDB, 11TH September 2021)

The study’s findings are in line with what has been reported in the literature (Madafu, 2015; Dzadoze *et al.*, 2012) that a lack of business plan is among the biggest difficulties that hinder most smallholder farmers in accessing bank loans and this is one of the key reasons for farm credit application rejection.

6.0 Conclusions and Recommendations

6.1 Conclusions

The study aimed at determining the relationship or association between smallholder paddy producers’ farmers and their access to credit from banks. It is concluded that loan acquisition among smallholder farmers varies as a few of them can benefit from being granted a greater loan while the majority receive an average to the minimum loan amounts. It is further concluded that the provision of bank agricultural loan services to smallholder farmers in the Mvomero District was affected by several factors, with the high-interest rate factor being the most mentioned by the majority of the respondents, showing that it was the major problem that affected the smallholder farmers in accessing loans. Lastly, it is concluded that the majority of all of the smallholder farmers who participated in the study used the loan for paddy cultivation only.

6.2 Recommendations

Based on the study findings and the conclusions, the following are recommended:

Tanzania’s government should create a conducive environment for commercial banks to be able to promote the development of the agriculture sector. Further, the expansion of state-owned financial institutions, particularly the Tanzania Agriculture Development Bank, should also be encouraged for them to be able to carry out agriculture-friendly policies. Financial institutions should lower interest rates, through the use of a participatory method involving income calendars to prepare repayment schedules, improve lending requirements to reflect the environment of smallholder farmers, and consider the amount of loans provided to smallholder farmers. And lastly, smallholder paddy farmers should learn how to prepare business plans to enable them to access bank loans to enhance their productivity and maximize their profit.

References

- [1] Amos, J. (2014). Exploring for improving rice production to reduce hunger poverty in Kenya. *World Environment* 4(4): 172 – 179.

- [2] Anang, B. T., Sipiläinen, T., Bäckman, S. and Kola, J. (2015). Factors influencing smallholder farmers' access to agricultural microcredit in Northern Ghana. *African Journal of Agricultural Research* 10(24): 2460 – 2469.
- [3] Arouna, A., Fatognon, I. A., Saito, K. and Futakucha, K. (2021). Moving toward rice self-sufficiency in sub-Saharan Africa by 2030: Lessons learned from 10 years of the coalition for african rice development. *World Development Perspectives* 21(100291): 1 – 15.
- [4] Baele, L., M. Farooq, and S. Ongena. (2010). Of religion and redemption: evidence from default on islamic loans. *Journal of Banking and Finance* 44: 141 – 159.
- [5] Balasubramanian, V. M. Sie, R. Hijmans, A. and Otsuka, K. (2007). Increasing Rice Production in Sub-Saharan Africa: Challenges and opportunities. *Advances in Agronomy* 94(1): 55 – 133.
- [6] CFC (2012). *Rice Sector Development in East Africa*. European Cooperative for Rural Development, Europe. 73pp.
- [7] Chauke P. K., Motlhatlhana, M. L., Pfumayaramba, T. K. and Anim, F. D. K. (2013). Factors influencing access to credit: A case study of smallholder farmers in the Capricorn district of South Africa. *African Journal Agriculture Research* 8(7): 582 – 585.
- [8] Duy, V. Q., D'Haese, M., Lemba, J., Hau, L. L. and D'Haese, L. (2012). Determinants of household access to formal credit in the rural areas of the mekong Delta, Vietnam. *African Asian Studies* 11(3): 261 – 287.
- [9] FAO (2010). Policies and Institutions to Support Smallholder Agriculture. Committee on Agriculture. 22nd Session. Food and Agriculture Organization Rome, Italy. 13pp.
- [10] Fishcler, M. (2020). *Contract Farming in Tanzania's Central Corridor*. Helvetas Swiss Intercooperation, Switzerland. 10pp.
- [11] Hoff, K. and Stiglitz, J. E. (1990). Imperfect information and rural credit markets—puzzles and policy perspectives. *The World Bank Economic Review* 4(3): 235–250.
- [12] Isaga, N. (2018). Access to bank credit by smallholder farmers in Tanzania: a case study. *Africa Focus Journal* 31: 241 – 256.
- [13] Kirby, M. A., Mobin-ud-Din, M., Mohammed, K. and Tasneem, C. (2017). Agricultural production, water use and food availability in Pakistan: Historical trends, and projections to 2050. *Agricultural Water Management* 179: 34 – 46.
- [14] Konlambigue, M. (2015). Improving smallholder farmers' access to finance in ssa: Challenges and opportunities. *Seven Multi-Year Expert Meeting on Commodities and Development*. Alliance for Green Revolution in Africa. 15 – 16 April 2015. Geneva. pp. 1 – 18.
- [15] KT (2014). Expanding Rice Markets in the East African Community Region. Kilimo Trust, Tanzania. 64pp.
- [16] Madafu, E. (2015). Access to bank credit by smallholder farmers in Tanzania: Challenges, opportunities and prospects. A Case of Mvomero District Prospects. Dissertation for Award of MSc Degree at Mzumbe University, Morogoro, Tanzania. 125pp.
- [17] Makingi, G. and Urassa, J. K. (2017). Socio-economic factors influencing use of improved technologies by smallholder paddy farmers in Kilombero District, Tanzania. *American Journal of Agricultural Research* 2(4): 1 – 13.
- [18] Matthew, B. and Ross, L. (2010). *Research Methods, A practical Guide for Social Sciences*. Rotolito Lombarda, Italy. 490pp.
- [19] Mbuga, S. (2019). Credit financing challenges on farm entrepreneurship in Tanzania: Empirical evidences from smallholder paddy farmers at Dakawa Ward in Mvomero district. *Journal of Co-operative and Business Studies* 4(1): 160 – 171.
- [20] Mershal, D. and Ayenew, Z. (2018). Financing challenges of smallholder farmers: A study on members of agricultural cooperatives in Southwest Oromia Region, Ethiopia. *African Journal of Business Management* 12(10): 285 – 293.
- [21] Msangi, H. A. (2017). *Examining the inverse relationship between farm size and efficiency in Tanzanian agriculture*. Dissertation for Award of MSc Degree at Sokoine University of Agriculture, Morogoro, Tanzania. 81pp.
- [22] Mukasa, A. N. and Salami, A. O. (2015). *Gender Productivity Differentials Among Smallholder Farmers In Africa: A Cross-Country Comparison*. Working Paper No. 231. African Development Bank Group, Cote d'ivoire. 45pp.
- [23] Musingazi, I. (2016). The Impact of Access to Agricultural Services on Maize Productivity in Uganda. Uganda Christian University, Mukono, Uganda. 38pp.
- [24] Mwidge, A. and Katambara, Z. (2020). Smallholder farmers' adoption drivers for the system of rice intensification practice: The Case of Mkindo Irrigation Scheme, Tanzania. *Journal of Research and Development* 1(2): 148 – 150.
- [25] Njuguna, D. and Nyairo, N. (2015). Formal conditions that affect agricultural credit supply to smallscale farmers in rural Kenya: Case Study for Kiambu County. *International Journal of Sciences Basic and Applied Research* 20(2): 59 – 66.
- [26] Onwunali, C. (2018). Assessment of the Financial Products and Services Extended to Smallholder Farmers: A Case Study of the MIVARF Programme in Iringa Region, Tanzania. International Fund for Agricultural Development, Rome, Italy. 65pp.
- [27] Rabson, M. (2019). *The impact of agricultural loans on small scale farmers' output. A case study of Gomba District*. Dissertation for Award of MSc Degree at Kampala International University, Dar es Salaam, Tanzania, 47pp.
- [28] Ruete, M. (2015). *Financing for Agriculture: How to Boost Opportunities in Developing Countries*. International Institute for Sustainable Development, Canada. 13pp.
- [29] Rugumamu, C. P. (2014). Empowering smallholder rice farmers in Tanzania to increase productivity for promoting food security in Eastern and Southern Africa. *Agriculture Food Secure* 3(7): 1 – 8.
- [30] Skees, J. R. and Barnett, B. J. (2006). *Enhancing Microfinance Using Index-Based Risk-Transfer Products*. University of Kentucky, Lexington, USA. 29pp.
- [31] Thiyagarajan, T. M. and Gujja, B. (2012). *Transforming Rice Production with System of Rice Intensification Knowledge and Practice*. National Consortium on System of Rice Intensification, India. 216pp.
- [32] Tsusaka, T. W., Ho, T. D. N. and Kuwornu, J. K. M. (2021).

Factors influencing smallholder rice farmers' vulnerability to climate change and variability in the mekong delta Region of Vietnam. *The European Journal of Development Research* 34: 272–302.

- [33] Ullah, A., Mahmood, N., Kachele, H. and Zeb, A. (2020) Factors determining farmers access to and sources of credit: Evidence from rain-fed zone of Pakistan. *Journal of Agriculture* 10(586): 1 – 13.
- [34] UNDP (2015). Sustainable Development Goals. [<https://www.undp.org/sustainable-development-goals>] site visited on 20/10/2021.
- [35]
- [36] URT (2012). *Budget Speech 2011/2012*. Ministry of Agriculture, Food Security and Cooperatives, Dar es Salaam. 25pp.
- [37] URT (2017). *Mvomero District Investment Profile*. Regional Administration and Local Government, Morogoro, Tanzania. 50pp.
- [38] URT (2018). *The Economic Survey of 2017*. Ministry Finance and Planning, Dodoma, Tanzania. 238pp.
- [39] Vitor, D. (2018) Theoretical and conceptual framework of access to financial services by farmers in emerging economies: implication for empirical analysis *Acta Univ. Sapientiae, Economics and Business* 6: 43–59.
- [40] Weber, R. and Musshoff, O. (2012). Microfinance for agricultural firms: credit access and loan repayment in Tanzania. Paper Prepared On The 123rd EAAE Seminar Price Volatility and Farm Income Stabilization Modeling Outcomes and Assessing Market and Policy Based Responses. 23 – 24 February 2012. Dublin. pp. 1 – 21.
- [41] Werner, R. A. (2016). A lost century in economics: Three theories of banking and the conclusive evidence. *International Review of Financial Analysis* 46: 361–379.