UNITED REPUBLIC OF TANZANIA

MINISTRY OF AGRICULTURE

TANZANIA COOPERATIVE DEVELOPMENT COMMISSION

GUIDELINES ON ACQUISITION OR DEVELOPING A CORE SACCOS SYSTEM IN TANZANIA

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EXECUTIVE SUMMAY

The Guidelines on Acquisition or Developing a Core SACCOS System in Tanzania provide a structured framework to guide Savings and Credit Cooperative Societies (SACCOS) in selecting, acquiring, or developing a robust and efficient Core SACCOS System. These guidelines aim to enhance operational efficiency, security, compliance, and service delivery in line with regulatory requirements and best practices in financial technology.

A Core SACCOS System is a centralised platform that facilitates essential financial operations, including member account management, loan processing, savings administration, and reporting. Given the rapid digital transformation in the financial sector, Tanzanian SACCOS must adopt modern, secure, and scalable systems to ensure sustainability and competitiveness.

The document outlines critical considerations for system acquisition or development, including:

a) Regulatory Compliance: Adherence to the Bank of Tanzania (BoT) and Cooperative Societies Act requirements.

b) System Requirements: Key functional and technical specifications such as security features, scalability, interoperability, and user-friendliness.

c) Procurement Process: Guidelines on vendor selection, contract negotiation, and due diligence.

d) Implementation Strategy: Best practices for system deployment, testing, data migration, and staff training.

e) Cybersecurity and Risk Management: Measures to protect against fraud, data breaches, and system failures.

f) Governance and Oversight: The role of SACCOS leadership in ensuring successful system adoption and long-term maintenance.

By following these guidelines, SACCOS can enhance financial inclusivity, improve service efficiency, and mitigate risks associated with digital financial systems. The framework also supports informed decision-making, cost-effectiveness, and alignment with Tanzania's digital financial ecosystem.

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THE REGISTRAR OF COOPERATIVE SOCIETIES

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1. INTRODUCTION

The Acquisition or developing a Core SACCOS System (CSS) for Savings and Credit Cooperative Societies (SACCOS) guideline this is the guideline from the Tanzania Cooperative Development Commission that is made to guide SACCOS in the process of obtaining or creating a central software platform or a computerized systems that manages all SACCOS operations and services provided by the SACCOS.

The guideline is made to address the challenges faced by SACCOS on choosing and implementing a software solution that manages the financial operations of a Savings and Credit Cooperative Societies (SACCOS).

This Core SACCOS System (CSS) should act as the backbone of the SACCOS, handling essential tasks like:

Member Management:

i. Maintaining member accounts and profiles
ii. Tracking member deposits, withdrawals, and share capital contributions.
iii. Facilitating member enrolment and account opening
iv. Loan Management:
v. Processing loan applications
vi. Disbursing and managing loans
vii. Calculating interest, fees, and repayments
viii. Monitoring loan performance and delinquencies

Deposit and Savings Management:

i. Accepting and managing member deposits and savings
ii. Calculating and paying interest on deposits
iii. Facilitating withdrawal requests
iv. Accounting and Financial Management:
v. Maintaining the general ledger
vi. Generating financial statements and reports
vii. Handling cash and liquidity management

Transaction Processing:

i. Executing and recording all financial transactions
ii. Enabling real-time or batch processing
iii. Providing transaction history and audit trails

Reporting and Analytics:

i. Generating standard and custom reports
ii. Providing data analysis and business intelligence capabilities
iii. Supporting regulatory and compliance requirements

2. THE PROCESS OF ACQUIRING OR DEVELOPING A CORE SACCOS SYSTEM

Acquiring or developing a Core SACCOS System for SACCOS, should involves several crucial steps/processes and considerations:

Acquiring a Core SACCOS System means purchasing an existing software solution from a vendor that specializes in Core SACCOS Systems. Key aspects to consider:

- Vendor Selection: SACCOS should choose a reputable vendor with experience in providing Core SACCOS Systems tailored to SACCOS.
- Compliance: SACCOS should verify that the vendor's has a registered company mainland – Tanzania, approved by TCDC as ICT service provider, vendor's system complies with TCDC regulatory and reporting requirements.
- System Security: SACCOS should ensure the vendor has system audit – code review from a legitimate System Auditor or System Auditing Firm, vulnerability assessment and penetration reports (VAPTs) of not more than three (3) months from the current period of acquisition from the legitimate Security Analyst (Cybersecurity expert) or cybersecurity firm.
- Customization: SACCOS should adapt the purchased software fit the specific needs and operational processes of the SACCOS.
- Budgeting and Approval: SACCOS should have approved budget and letter of approval to acquire a Core SACCOS System from the Registrar Office (TCDC).
- Procurement and Procedures: SACCOS should comply with the procurement process when acquiring the Core SACCOS System.
- Implementation: Installing the software, migrating existing data, and integrating it with other systems used by the SACCOS.
- Support and Maintenance: SACCOS should ensure the vendor provides ongoing support, maintenance, and updates for the software.

Developing a Core SACCOS System involves creating a custom software solution tailored specifically to the SACCOS requirements. Key aspects to consider:

- Requirement Analysis: Conducting a thorough needs assessment to define the specific functionalities and features required by the SACCOS.

- Project Planning: Creating a detailed project plan outlining the development process, timelines, and resource allocation.
- Development Team: Assembling a team of developers, project managers, and SACCOS experts to build the system.

- Agile Development: Using an agile development methodology to allow for iterative progress and continuous feedback.

- Testing and Quality Assurance: Conducting comprehensive testing to ensure the system is reliable, secure, and meets all requirements.

- Implementation: Deploying the system, migrating data, and ensuring it integrates seamlessly with other systems used by the SACCOS.

- System Security: SACCOS should ensure the system is audited – code review by the legitimate System Auditor or System Auditing Firm, vulnerability assessment and penetration reports (VAPTs) is conducted according to the SACCOS Security Policy by the legitimate Security Analyst (Cybersecurity expert) or cybersecurity firm).

- Budgeting and Approval: SACCOS should have approved budget and letter of approval to develop / implement a Core SACCOS System from the Registrar Office (TCDC).

- Ongoing Support: Providing continuous support, maintenance, and updates to keep the system running smoothly and adapt to changing needs

2.1. Needs Assessment

- *Evaluate Requirements:* SACCOS should identify the specific needs and requirements of their business operations. This includes understanding the size, scope, and complexity of operations or business operations.

- *Stakeholder Involvement:* SACCOS should engage key stakeholders (board members, credit committee, supervisory committee, management, staff, members, and other stakeholders) to gather their input and ensure the system meets their needs.

2.2. Budgeting and Cost Analysis

- *Initial Cost:* SACCOS should consider the upfront cost of acquiring or developing the system, including hardware, software, and implementation costs.

- *Ongoing Costs:* SACCOS should assess ongoing maintenance, support, and upgrade costs.

2.3. System Features and Functionality

- *Core Features:* SACCCOS should ensure the system supports essential core functions like member management, loan processing, savings and deposits, accounting, and reporting.

- *Scalability:* The system should be able to grow with the SACCOS, accommodating more members and transactions over time.

- *Customization:* SACCOS should check if the system can be customized to fit specific operational processes and regulatory requirements.

2.4. Vendor Selection (for Acquisition)

- *Reputation and Experience:* SACCOS should choose vendors with a good reputation and experience in providing Core SACCOS solutions to SACCOS.

- *Support and Training:* SACCOS should ensure the vendor offers comprehensive support and training for your staff.

- *System Security:* SACCOS should ensure the vendor has system audit – code review and vulnerability assessment and penetration reports (VAPTs) of not more than three (3) months from the current period of acquisition.

- *Compliance:* SACCOS should verify that the vendor's system complies with TCDC regulatory and reporting requirements.

2.5. Development Process (for In-House Development)

- *Project Planning:* Develop a detailed project plan with timelines, milestones, and resource allocation.

- *Team Composition*: Assemble a skilled development team with expertise in SACCOS' systems, software development, and project management.

- *Agile Development*: Use an agile development approach to allow for iterative development and continuous feedback.

2.6. Data Migration

- *Data Integrity:* Ensure that data migration from existing systems is accurate and maintains data integrity.

- *Testing:* Conduct thorough testing to identify and resolve any issues before going live.

2.7. System Integration

- *Interoperability*: The new system should integrate smoothly with other existing systems (e.g., payment gateways, mobile banking, regulatory reporting systems).
- *APIs:* Use APIs for seamless integration and data exchange.

2.8. Security and Compliance

- *Data Security:* Implement robust security measures to protect member data and financial transactions.
- *Regulatory Compliance:* Ensure the system complies with all relevant regulatory and legal requirements.

2.9. Training and Change Management

- *Users Training:* SACCOS should provide comprehensive training for all users to ensure they are comfortable with the new system.
- *Change Management:* SACCOS should develop a change management strategy to handle the transition smoothly and address any resistance to change.

2.10. Testing and Quality Assurance

- *User Acceptance Testing (UAT):* SACCOS should conduct UAT to ensure the system meets the end-users' needs.
- *Quality Assurance:* SACCOS should implement rigorous QA processes to ensure the system is reliable and bug-free.

2.11. Go-Live and Post-Implementation Support

- *Pilot Run:* SACCOS should consider a pilot run to test the system in a real-world scenario with a small group of users before full deployment.
- *Support:* SACCOS should ensure ongoing support is available to address any issues that arise post-implementation.

2.12. Continuous Improvement

- *Feedback Loop:* SACCOS should establish a feedback loop to gather input from users and continuously improve the system.

- *Upgrades:* SACCOS should plan for regular system updates and upgrades to incorporate new features and enhancements.

3. ICT POLICIES AND PROCEDURES

The following are the ICT policies and procedures the SACCOS should have when implementing a core banking system:

3.1. ICT Policies:

i. Information Security Policy
ii. Vendor Management Policy
iii. Ant-Money Laundry Policy
iv. Independent Review and Audit Policy
v. Acceptable Use Policy (AUP) Policy
vi. Software Management Policy
vii. Outsourcing Policy
viii. ICT Asset Management Policy
ix. Social Media Policy
x. Interoperability and Integration Policy
xi. Technology Risk Management Policy
xii. Internet Usage Policy

3.2. Standard Operating Procedures (SOPs):

i. Incident Response Plan
ii. IT Governance Framework
iii. Vendor Management Procedures
iv. Transaction Monitoring and Reporting
v. ICT Risk Register
vi. Information Systems Asset Register
vii. Electronic Devices Disposal Procedure
viii. Server and Network Hardening Checklist
ix. System User's Matrix

4. APPENDIX

1. SYSTEM SCOPE

SYSTEM FUNCTIONAL AND FUNCTIONALITY REQUIREMENTS

i. Membership
ii. Contribution
iii. Loans
iv. Accounting and finance
v. Asset management
vi. HR system and payroll system
vii. Manage communication
viii. System user
ix. System audit trail
x. Reports
xi. System setting
xii. Procurement

Kindly note that the Requirements have been marked with letter (M) which means Mandatory, (N) Necessary and (D) Desired

1.	Membership	i. Membership Application	a. The system should allow the user or applicant to fill an application form – [M] b. The system should be able to capture at least the following information • First name • Middle name • Last name • Date Of Birth • Place of birth • Gender • Marital Status • Email • Permanent Address • Phone number • NIDA number • TIN number • Proof of payment for membership application [M]
		ii. Member Application Status	a. The system should maintain application status and generate automatic notifications (SMS or E-Mail) - [M]. i. Check and reviewed ii. Approval or rejection.

		ii. Registration	a. The system should allow the user or applicant to fill the following details [M] • Next of kin • Upload member Passport size • Proof of payment for Member's shares • Digital signature [D] b. The system should allow the applicant to review his/her application.
		v. Member Status	a. The system should maintain Member Status [M] as per in relation to: - • Active, dormant, approaching to.... • 50% of the shares and the remaining balance within 24 Months • Savings as per SACCOS Bylaws • Membership Exit/Withdraw in accordance to regulations and Bylaws
2.	Contribution	i. Shares	Members share <u>Compulsory shares</u> a. System should capture share products such as (number of shares, and value per share linked to General ledger mapping, etc.) b. System should manage compulsory shares based on the limits of the Cooperatives Society Act (*currently*: not above 20% of total shares - configurable) c. System should monitor the progress of member's share contributions as per Cooperatives Society Act (*currently*: within 24 months - configurable) d. Members Shares management including withdrawal, and reconciliation must be a key feature of the system and abide to SACCOS bylaws [M] *Note*: They are non-withdrawable until seization of membership <u>Voluntary and Other shares</u> a. System should allow a user to define and manage voluntary and other shares based on Microfinance legislation and SACCOS bylaws. [M] b. In the event of default, the system should enable the SACCOS to seize voluntary and other shares by netting the loan value in default against the member's and guarantors' deposits.

		ii. Dividend (Compulsory shares)	Dividend's payouts The system should be able to capture the following details: a. System should compute dividends based on the compliance of capital adequacy (Microfinance Act), Annual General Meeting resolutions, and Registrar approval. [M] b. System should compute the dividends (price per share) based on the total amount set aside from the profit generated for the year against total value of shares [M] c. System should allow processing and posting of dividends into respective member's accounts. [M] d. The system should be able to deduct any member's dues prior to payout. [M]
		iii. Savings	a. The system should manage members' savings including receipt and withdrawal, interest calculation, and reconciliation. [M] b. System should allow a user to manage compulsory savings and define other types of savings based on SACCOS policies [M] c. The system should be able to hold savings that are used as collateral for a loan from being withdrawn [M] Note: Savings that are used as collateral shall not be reused as a guarantee for another loan [M]
		iv. Deposit	a. Deposits management including receipt and withdrawal, interest calculation, and reconciliation must be a key feature of the system. [M] b. System should allow a user to manage deposits based on SACCOS policies [M] c. The system should be able to hold deposits that are used as collateral for a loan from being withdrawn [M] d. Deposits that are used as collateral shall not be reused as a guarantee for another loan [M]
3.	Loans	i. Loan Application	a. The system should allow the application form with features as per Microfinance Regulation (2019) such as:- [M] • Applicant's full name • Birthdate, • Marital status, • Place of residence/business, • Occupation,

			• Loan purpose, • Economic sector, • Loan amount requested, • Collateral offered, • Number of dependents, • Place of employment, • Current income, • Expenses and assets, • Other outstanding loans, b. Systems should be able to compute outstanding loan [M] c. System should capture the loan amount (if its fully secured should not exceed 10% of total core capital and 5% if it's partial) [M] d. The system should have a loan calculator [N] e. Send notification to the applicant upon receiving a loan application [N]
		ii. Appraisal	a. The system should consider the multiplier factor as per SACCOS Loan policy [N] E.g. • All appraisals are subject 1/3 rule applicable of (basic salary plus other allowance for salary based) [N] • Disqualify members who are less than 3 months old and have not attained a defined amount of shares capital [N] b. The System should provide a recommendation of the apprised application [N] c. The system should support appraising a range of different loans, each with different eligibility criteria and appraisal process. [N] d. Generate or send notification to loan applicant on the approved amount within seven days of application [N]
		iii. Collateral and Documentation	a. The system should be able to capture and compute savings, voluntary shares, time deposits and other acceptable collaterals of the loan applicant as per policy against loan applied. [M]

		iv. Guarantors	a. System should capture guarantor details and compute available amount for guarantee. [M] b. The system should be able to compute savings, voluntary shares, time deposits and other acceptable collaterals of the loan guarantee as per policy and compare against loan guarantee amount requested. [M] c. The system should be able to allow uploading of collateral details/ownership documents that are legally certified. d. System should send notification to loan guarantors and applicant [N] <u>Note:</u> Guarantor must provide consent for loan guarantee [M]
		v. Loan agreement	a. System should generate loan agreement with the following parameters [M] • Loan amount • Nominal or stated annual interest rate • All other fees charged • Effective annual interest rate that includes all fees charged • Loan repayment schedule that includes the number of installments, total amount of each installment indicating principal, interest, and fees components separated, and due date of each payment. • Sum of each payment until the loan is fully paid • Interest rate computation method • Late payment penalty • Debt recovery fees, charges or expenses • Notice of security interest for collateral used to secure a loan • Signatures of both the borrower and the microfinance service provider • Requires savings or share amounts and if these funds may be used to pay past due to loan payments
		vi. Approval	a. The system should allow creation of approval levels [N] b. The system should indicate loan approval status (Approved, Pending or Rejected) [M] c. The system should allow remarks on approved and rejected loans [M] d. The system should display loan schedules with

			remarks on amounts qualified [M]
		vii. Loan issuing/ Disbursement	a. The system should allow automation of loan disbursement processes [D] b. The system should allow various modes of payments e.g. internal transfer, Cheques, Bank accounts, and MNO wallets. [D] c. The system should produce loan repayment schedules based on reducing balance method (showing loan amount, number of installments and Principal, interests repayments). [M]
		viii. Loan Repayment/ Collection	a. The system should allow different loan repayment modes including Cash, internal SACCOS transfer, automated deduction from member deposit account, SACCOS/bank transfer, cheque deposit and Mobile money. [M] b. Should be able to send a text message or E-mail reminders to borrowers. [N] c. System should allow loan clearance i.e. loan month's interest plus accrued interest since last check-off if any. [M] d. System should allow Partial repayment. [M] e. System should be able to generate a loan repayment track schedule. [M]
		ix. Delinquency	a. The system should be able to calculate penalties for late loan repayments [N] b. System should be able to include grace period if any [N] c. System should be able to do loan classification and provisions by considering loan aging [M] Note: i. SACCOS shall classify its loan portfolio into the following categories:- • current; • especially mentioned; • substandard; • doubtful; and • loss. ii. The criteria for classifying loan portfolio shall be as follows

			<table><tr><td>Number of days past due</td><td>Classification</td></tr><tr><td>0 to 30 days</td><td>Current</td></tr><tr><td>31 to 90 days</td><td>Especially Mentioned</td></tr><tr><td>91 to 180 days</td><td>Substandard</td></tr><tr><td>181 to 365 days</td><td>Doubtful</td></tr><tr><td>More than 365 days</td><td>Loss</td></tr><tr><td></td><td></td></tr></table> iii. The minimum amount of provisions for each category of classification shall be as follows: - <table><tr><td>Classification</td><td>Provisions</td></tr><tr><td>Especially Mentioned</td><td>10%</td></tr><tr><td>Substandard</td><td>30%</td></tr><tr><td>Doubtful</td><td>50%</td></tr><tr><td>Loss</td><td>100%</td></tr></table> d. System should be able to calculate loan portfolio at risk (PAR) [N] e. System should be able to calculate portfolio in arrears [N] <u>*Notes:*</u> • *SACCOS requires a robust and comprehensive system to manage delinquency:* • *The system should have the capability of issuing SMS alerts to delinquents;* • *Loan maturity time should not exceed 5 years*
		x. Defaulters	a. The system should be able to decline new loan applications to defaulters [M] b. The system should facilitate sending of warnings via SMS/email/ to the defaulter and the guarantors [N] c. The system should be able to re-amortize the loan balance remaining and distribute it to the selected guarantors in the percentage proportions per guarantor. [N] d. The system should retain a history of a defaulted loan. [D] e. The system should flag and unflag the member's account as a defaulter. [D] f. The system should allow for a returning defaulter to resume repayment of a defaulted loan. [N] g. Should be able to generate demand letters as designed by SACCOS. [N]

		xi. Re-Finance/Top Up/ Restructuring	a. The system should allow for top-up/restructuring when required. [M] Note: The system should not allow more than one restructuring of the same loan. b. System should generate a report of a restructured loan. [M]
		xii. Loan write-off	a. The system should allow to write-off a loan in accordance with SACCOS landing policy [M]
4.	Accounting and finance	i. Chart of Accounts	a. The system should provide a structure to build a Chart of Accounts (CoA) that is flexible at least five levels, consistent and common across the SACCOS transactions. The system should be delivered with a default CoA as per TCDC guideline. [M] b. The system should allow customization of chart of account. [M] Note: The chart of accounts should consist of Account code, name and nature of the account.
		ii. Core accounting features	a. The system should meet all SACCOS fundamental accounting needs with regard to loans and contributions (shares, savings. and deposits) as well as other standard accounting functions. These include accounts payable for suppliers, accounts receivable management, expense management for all employees, fixed assets, equity, registry, and payroll functionality. [M] b. The system should manage a fixed asset register [M] c. The system should be able to generate all the reports required by the Regulator, SCCULT (1992) LTD, and other stakeholders. [N] d. The system should adhere to the accrual concept [M]
		iii. Reconciliation	a. The system should support the reconciliation process of accounts and transactions [N] b. The system should generate transaction reference number to support the reconciliation process [N]
		iv. Group accounting	The system should support consolidated accounting and reports [N]
		v. Posting to ledgers	The system should allow automatic posting into respective ledgers [M]

		vii. Journal Entry	a. The system should allow journal entries and enforce the approval process. [M] b. The system should support the bulk posting of entries. [M]
		viii. General ledger	a. The system should allow creation of the general ledgers [M] b. The system should allow for sub-ledgers to track specific sub-segment activities of SACCOS [M]
		ix. Petty Cash	a. The system should allow the following: • Petty cash management based on SACCOS policy [M] • Impress float Reimbursement [M] • Petty Cash should have more than one authorizer [N] Notes: • *System should not allow requisition if surrender hasn't been done as per specifications* • *To give a report of all petty cash pending approvals* • *Should give a report at any time of un-surrendered petty cash* • *In the petty Cash reports, it should show the requested and surrendered dates and user*
		x. Budget Management	a. The system should allow the following: • Budget management as per registrar guideline [M] • Multi-level budgeting [N] • Provide for Resource re-allocation and supplementary budget with registrar approval [N] • Provide Standard reports as per TCDC guidelines and other stakeholders [N] • Automatically create budgets using prior year information or choose from other computation methods. (Allow for adjustments) [N] • Support budgeting and forecasting of statutory reports but also de- tailed reports such as cash management. [D] b. System should generate the planned budget per account code and per period e.g. annually, monthly,

			and weekly or daily. c. System should be able to provide income statement and cash flow statement for the coming 12 or 24 months given the currently recorded transactions to support forecasting. b. System should accommodate submission of development budget [D]
		xi. Prior year Adjustments	a. All prior year adjustments to be subject to secondary approval [M]
		xii. Debtor/Creditor management	a. The system should support debtors and creditors management [N]
		xii. Investment Management	a. The system should manage SACCOS investments as per legislation [D] b. The system should be able to track and report on a portfolio of short-terminvestments made by the SACCOS to manage excess cash. [D]
5	Asset management	i. Tangible and intangibleAssets	a. The system should have a tangible and intangible asset module which includes a registry and calculation of depreciation based on a straight-line method or decline balance [M] b. Provide effective support for Fixed Assets management [M] c. Should serialize assets when captured [M] d. Should produce the number and value of assets at any time [M] c. Should include revaluation, Asset transfer and disposal [M]
6	HR System andpayroll	i. Manage Employee information	a. The system should support employee information management (actions such as add, update, delete, view, upload documents transfer of employees etc. should be included) [N] b. The system should provide an interface to allow the users to view communication notification. [N]
		ii. Leave Management	a. The system should support employee leave information management (actions such as add, update, delete, view, upload documents, leave rescheduling etc. should be included) [D]
		iii. Payroll Management	c. The system should support payroll management (actions such as create payroll, view payroll, bulk payroll [D]

8	System user Management	i. Roles and Privileges Management	a. System should provide an interface to define and create user roles [M] d. System should allow role assignments subject to approval [M]
		ii. User authentication	a. System should authenticate users (provide at least 2 factor authentication) [M] b. The system should send the email notification including the username,and auto-generated password to a registered email of the employee. [N] c. The system should be able to lock account if the login attempts is at most 3 [D]
9	System audit trail	i. System Audit Trail Management	a. The system should generate audit trail [M] b. The system should provide an interface to allow the authorized users to review audit trail [M] a. The audit trail should be able to throw exceptions [N]
10	Reports Management	i. Operational Reports A. Credit	a. The System should allow users to customize, view, generate and share various loan reports required by the SACCOS management, registrar or any other stakeholders. Some of the Reports required are such as: [M] • List of all loans and their positions • List of Disbursed loans • Loans on Arrears • List of guarantors • List of all collaterals • Loan classificationreport • Aging Analysis Report • List of interest accrued • Written off • Sectorial Report • List of loans by types • Expected re-payments • Portfolio at risk report <u>*Note:*</u> • *The system should be able to generate reports in the form of PDF, Excel depending on the type of report.* • *The system Should allow generation of reports on demand and accept date range input for report generation*

			• *The system Should be able to print and share the produced report by email.*
		B. Financial Statements & Other Reports	a. The System should allow users to customize and generate various financial statements and report such as:- [M] • Journal Book • Bank Book • Trial Balance • Statement of comprehensive income • Statement of financial position • Cash flow statement • Statement of change in equity • Notes to financial statements and disclosure • Budget comparison • Maturities List • All transactions list • List of all unreconciled entries (All accounts) Report on GL Account balances
		C. Standard Reports	a. The System should allow users to customize, Generate, View, Print and share various standard reports such as:- [M] • Member Balances • Member Activities • List of members with dues • List of non-active members • Products positions • List of all Members per type <u>*Note:*</u> • *The system should be able to generate reports in the form of PDF, Excel depending on the type of report.* • *The system Should allow generation of reports on demand and accept date range input for report generation* • *The system Should be able to print and share the produced report by email.*

		D. Parameters Report (Conditions and Values)	a. The System should allow users to customize, Generate, View, Print and share various standard reports such as:- [M] • List of all member types • List of all Loans products • List of all Contribution types • List of all fees and commission types (Tariff Table) • List of all GL/SL Categories Codes (COA) <u>Note:</u> • *The system should be able to generate reports in the form of PDF, Excel depending on the type of report.* • *The system Should allow generation of reports on demand and accept date range input for report generation* • *The system Should be able to print and share the produced report by email.*
		E. Compliance Reports	a. The System should allow users to Customize, Generate, View, Print and share Compliance Reports such as:- [M] • TCDC reports • List of borrowers' report for Apex organization • SACCOS Monthly Management Report <u>Note:</u> • *The system should be able to generate reports in the form of PDF, Excel depending on the type of report.* • *The system Should allow generation of reports on demand and accept date range input for report generation* • *The system Should be able to print and share the produced report by email.*
		F.Infrastructure Performanc e Reports	a. The System should allow users to Customize, Generate, View, Print and share Infrastructure Reports such as:- [D] • Exceptions Report (Financial) • Exceptions Report (Non-Financial) • System Uptime Report • System Utilization Report (space etc.) • List of all broadcasted messages • List of all system users with status

			Note: • The system should be able to generate reports in the form of PDF, Excel depending on the type of report. • The system Should allow generation of reports on demand and accept date range input for report generation • The system Should be able to print and share the produced report by email.
11	System settings	i.Organization profile	a. System should provide an interface to allow user to view and add office physical location including the following [N] • Year established • System Name • Logo • Website • Country • Currency • SACCOS name • Region, District and Ward • E-mail address • Phone number • Address
		ii.Notifications	a. System should be able to provide standard notification alerts. [N]
		iii. System version	a. System should provide an interface to allow user to view the current version. [D]
		iv. SACCOS Leadership settings	a. System should provide an interface to allow user to enter the following details of the leader: [M] • Member Details • Leadership Type (Board Member, Committee type, etc.) • Designation • Date of Appointment • Last date of leadership (read only) b. System should provide an interface to allow user to create user account for SACCOS Leader [N] • Select SACCOS Leader • User role • Notes c. System should send the email notification including the username and auto generated password to a registered email of the SACCOS Leader. [D]

		v. Financial year	a. System should provide an interface to allow user to set a financial year [M] • Starting date • Ending date
		vi. Switch to new financial year	a. System should provide an interface to allow user to switch the system to a new financial year when the year-ends according to date set. [M]
		vii. Currencies	a. System should provide an interface to allow user to enter the following details [D] • Name • Code • Symbol • Decimal
		viii. Members Relationship types	a. System should provide an interface to allow user to enter the following details [D] • Relationship type • Description
		ix. Members Collateral Types	a. System should provide an interface to allow user to enter the following details [D] • Collateral type • Description

1. PROCUREMENT [D]	The system should have the procurement module with the following functionalities i. Fully management of procurement activities ii. Budget links for control purpose iii. Process request for Internal and external Requisition iv. Notification mechanism to approvers v. Necessary reports to support the functionality vi. Procurement of Assets and Inventorial vii. Capturing and management of vendor details (Prequalified or Otherwise) viii. Processing of vendor related transactions. ix. Display vendor summary details. x. Navigation of vendor transaction information xi. Track and manage inventory/stores xii. Order management: - Should inventory reach a specific threshold, the system should prompt reorder

NON-FUNCTIONAL REQUIREMENTS

The non-functional requirements (NFR) are that specify criteria that can be used to judge the operation of a system. They specify criteria (quality characteristics) that judge the operation of the system rather than specific behavior.

1. General System Requirements

There are a number of general requirements that are not business process-specific but are important from the perspective of overall system functioning. These requirements de- scribe system capabilities that are necessary to support the design and how the systems should work.

Req ID	Function Description
NFR. 01	The system should support all the latest standard technologies. [N]
NFR. 02	The system should be flexible to interface or integrate with other systemssuch help desk support systems to track issues [N]
NFR. 03	The system should facilitate the presentation of data in tables, graphically,or in reports. [N]
NFR. 04	The system should support data export/import to readable formats, e.g.,CSV, Excel, and PDF. [M]
NFR. 05	The system should be developed using industry-standard developmenttools, which can be supported by local expertise. [N]
NFR. 06	The system should provide a feature for bilingual setup (English and Kiswahili). [N]
NFR. 07	It should be module-based. [D]

2. Operations System Requirements

Req ID	Function Description
NFR. 08	The system should be able to back up data automatically, at a schedulable frequency, and the backup data should be held at an offsite location so that it is recoverable in the event of a system or hardware failure. [N]
NFR. 09	The system should support synchronous and asynchronous updates, al-lowing the ability to work offline and upload later. [D]
NFR. 10	The system should be deadlock-free. Deadlock connotes a situation in which two or more competing actions are each waiting for the other to finish, and thus neither ever does. [N]
NFR. 11	The system requires minimum resources such as bandwidth. [N]
NFR. 12	The system should provide adequate archiving data feature. [N]
NFR. 13	The system should provide access to technical support for the applicationfunctions and technical system performance management indicated. [D]

NFR. 14	The system should provide online help support (such as super user sup-port). [N]
NFR. 15	The system should be user-friendly and intuitive to use for experiencedand inexperienced users. [N]
NFR. 16	The system should have recovery procedures specified for all known orpossible failure conditions. Recovery systems are required that will: i. Recover the System within a reasonable period (continuity plan) ii. Inform the user as to the source of the problem iii. Inform the user as to the state of the transactions when service isrestored Leave no transactions in "mid-air." iv. Data directly affected by the system failure should be capable of re-covery to a consistent state. [M]
NFR. 17	The system should be centralized, web-based, and work in both the in-tranet and internet environments. [N]
NFR. 18	The system should support browser compatibility such internet explorer,chrome. [N]
NFR. 19	The system should not require to pay additional application software li-cense fee and third parties. [N]
NFR. 20	The system should include monitoring tools at the central location – re- porting activity and possible problems happening in real-time, in order to assure efficient processing. These shall support: i. Centralized client and server logging/event monitoring ii. Geo-located user activity logging and event monitoring iii. "Before critical" event notifications ("server CPU is above 70% for the last 15 minutes," "memory near full") iv. Automatic heuristics tests on clients (check network quality and speed if the main servers are not responding). v. Clients can report server-unreachable problems to monitor service if it is set up on a different location (network) than the main infrastructure. [D]
NFR. 21	The system should be fully documented, including user's manual, installation guides, administration manuals, and other documents, supported by the preparation of training manuals and setup of the hardware and soft- ware used in training classes. [N]
NFR. 22	The system should support users with a knowledgeable and responsive help desk, with remote access to computers for quick diagnosis and solution of issues. [N]
NFR. 23	The system should provide a menu of service options with navigation be- tween options and sub-options. [N]
NFR. 24	The system should be based on a system of unique identifiers, preventing the creation of duplicates, and issuing warnings if users try to do so. [M]
NFR. 25	The system should be error-tolerant and provide error handling with clear explanations on how to overcome the error. Users should be able to see the error described in a business-meaningful way. Each error should also have an associated error number to aid the Helpdesk. All errors encountered as well as being reported to the user should be recorded for quality management and

	reporting purposes. [N]
NFR. 26	The system should ensure that only complete transactions are saved to the database; incomplete pieces to be rolled back and report exceptions [M]
NFR. 27	The system should be able to detect the peak volume The system should be easily scalable to cater to “peak” processing volumes. [M]
NFR. 28	The system should enforce the processing of transactions in a sequential “workflow” way. [N]
NFR. 29	The system should accommodate concurrent users and multiple users with the reasonable response time. [M]
NFR. 30	The system should allow all notes to contain configurable logos. [D]
NFR. 31	The system should be available at all times, 24/7. [M]
NFR. 32	The system should be semiannually supported and maintained and at any- time when the demand arises. [M]

3. Security System Requirements

Req ID	Functional Description
NFR. 33	The system should be able to manage security, access, and authorization functions in much simpler. [N]
NFR. 34	The system should provide comprehensive security features such as in-built intrusion detective and preventive features. [D]
NFR. 35	The system should provide additional delegation of administrative rights, controls, enhanced audit, and other capabilities that would provide greater security in a way that is easy to manage. [D]
NFR. 36	The system should provide for automatic routine data integrity checks (vali-dation rules) and data cleaning. [N]
NFR. 37	The system should provide a system administrator point of control that will manage all configured security features of the system. [N]
NFR. 38	The system should be protected against information leakage and hooking.[N]
NFR. 39	The system should require each user to be authenticated by role before gaining access. [N]
NFR. 40	The system should provide unique user accounts with passwords (flexible password control) to control access to the system through the user account setup process and should align with national policy and standard operating procedures. [M]
NFR. 41	The system should force users to change their passwords at regular intervals specified by the system administrator, e.g., every 90 days. The system should ensure that password histories are maintained and that passwords are sufficiently secure that they cannot be guessed by other end users. Passwords should, at a minimum, be required to include both alphabetic and numeric characters. [M]

NFR. 42	The system should provide system users with module-based access controlto the various system modules through the user account setup process. [M]
NFR. 43	The system should restrict access to data based on the user's relationship to the organization, module-based access, message type access, and organization specific data-sharing relationships defined for data exchange purposes.[M]
NFR. 44	The system should support definitions of unlimited roles and assigned levelsof access, viewing, entry, editing, and auditing. [M]
NFR. 45	The system should be role-based, with sufficient security and protectionbased on defined roles and users granted permissions. [M]
NFR. 46	The system should be kept up to date on security updates. [M]
NFR. 47	The system should provide encrypted communication between components.[D]
NFR. 48	The system should provide alert/notification of security breaches to users. [N]

NFR. 49	The system should be authenticated overall modules for the entire duration of the session, and users will not be asked to log in again while the sessionstays active. [N]
NFR. 50	The system should permit the management of user accounts and their access roles. It will provide tools for creating the accounts, blocking them, updating user information, resetting passwords and removing locks from locked ac- counts. The module will be available only to system administrators. [N]
NFR. 49	The system should be authenticated overall modules for the entire duration of the session, and users will not be asked to log in again while the sessionstays active. [N]
NFR. 50	The system should permit the management of user accounts and their access roles. It will provide tools for creating the accounts, blocking them, updating user information, resetting passwords and removing locks from locked ac- counts. The module will be available only to system administrators. [N]

4. Scalability System Requirements

Scalability is the ability to cater to greater demands required of and/or imposed upon thesystem (e.g., support increased number of users and products) without affecting any of the other Quality of Service parameters. Scalability allows for the increased load on thesystem without affecting the basic elements of the system.