



Vaikunth Mehta National Institute of Cooperative Management

(A Grant-in-aid Institution under Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India)

Ganeshkhind Road, Near Pune University, Pune - 411007, Maharashtra, India



Submitted By

MsSubhadraPattanayk

R

oll No 5617

Submitted By

Mrs Subhadra Pattanayak

Roll No 5617

INDEX

CERTIFICATE.....	3
DECLARATION.....	4
EXECUTIVE SUMMARY.....	5
5. Rational for the study	7
5.1 Study of Computerization of Primary Agriculture Credit Societies (PACS)	7
5.1.1 Introduction.....	7
6. Objective of the study	10
6.1 Title of the Project.....	10
6.2 Objective of the Study	10
6.3 Scope of the Study.....	10
7. Review of Literature	11
7.1 Computerization of PACS-various initiatives.....	11
7.2 Justification for computerization of PACS	12
7.3 Outcome from the PACS Computerization.....	13
7.4 Computerization of PACS Challenges	14
7.5 Vision for PACS post-computerization	16
7.6 Costs of PACS Computerization.....	17
7.7 Objectives of Computerisation.....	18
8. Research Methodology.....	18
8.1 Data Collection Sources.....	18
8.2. Sampling plan	18
9. Profile of the PACS.....	19
9.1 Impact of computerization on PACS of Dhenkanal District.....	21
9.2 Screen shots of VSoft software	37
10. Data Analysis and Interpretations Using Various Charts & Graphs.....	43
11. Findings.....	48
12. Bibliography.....	51

ACKNOWLEDGEMENTS

I would like to place on record my sincere thanks to Dr. Hema Yadav, Director, Vaikuth Mehta National Institute of Cooperative Management for her constant motivation in completing this work successfully.

I also wish to express my gratitude to Prof. S.Y. Deshpande, Head, Centre for Cooperative Management and Programme Director, 56th Post Graduate Diploma in Cooperative Business Management Course, VAMNICOM, PUNE, for his help in my dissertation.

At the outset, I gratefully acknowledge the constant encouragement, able guidance, incisive comments, adept and meticulous correction and academic acumen of my research guide Dr.Y.S Patil, Professor, VAMNICOM, PUNE, which helped me to carry out the dissertation work successfully. Her goodwill, bounteous wishes me are highly instrumental in the accomplishment of the dissertation. I sincerely and whole heartedly thank her for all the help and cooperation that I have received from her during the course of my dissertation study.

I am grateful to all the 80 PACS under Dhenkanal District and the AUCCB Angul LtD Odisha for their cooperation in data collection.

My thanks and appreciations also go to my colleagues, friends and family members in developing the dissertation and people who have willingly helped me out with their abilities.

Mrs Subhadra Pattanayak

Dr.Yashwant S Patil

Professor
Vaikunth Mehta

National Institute of Cooperative Management,
Pune, Maharashtra.

CERTIFICATE

This is to certify that the Dissertation entitled “***A study on Computerization of PACS and LAMPS and its impact on the functioning of Co-operatives in Odisha***” is an original research work carried out by Mrs Subhadra Pattanayak under my guidance and supervision. No part of this work has been submitted for any other degree earlier.

Date: 13.02.2023

Place: Pune

Dr.Yashwant Patil

DECLARATION

I hereby declare that the dissertation entitled “*A study on Computerization of PACS and LAMPS and its impact on the functioning of Co-operatives in Odisha.*” is the outcome of research work carried out by me under the guidance of Dr.Yashwant Patil, Professor, Vaikunth Mehta National Institute of Cooperative Management, Pune, Maharashtra. I further declare that this dissertation has not been submitted previously for the award of any degree either in this Institute or any other Institute.

Date: 13.02.2023

Place: Pune

Mrs Subhadra Pattanayak

Trainee Officer

EXECUTIVE SUMMARY

Computerizations of Primary Agricultural Cooperative Societies

Research Supervisor: **Dr. Yashwant Patil** Trainee Officer: **Mrs Subhadra Pattanayak**

PACS are one of the fundamental last mile delivery and value chain enablers of the rural credit system. In addition to the core functions of channelizing credit over a period of time, they have been entrusted with other key functions such as fertilizer distribution, agriculture input distribution, agriproduce procurement, marketing, trading, etc. The modern technology which has created aspirations of a connected and seamlessly functioning rural economy enjoins PACS to be brought to speed up its functioning to make the system efficient, transparent, amenable to operational efficiencies based on data analytics and customer experience so as to enable policy makers to have visibility for channelizing the resources for a quicker delivery of the desired state. The PACS are at different levels of maturity in adoption of advancements in telecom and digitization due to many factors including shortage of funds, lack of standardization in hardware and software and lack of a centralized, secure and monitorable common infrastructure to oversee and ensure smooth functioning. Pursuant to the above state of affairs, the MoC, GoI has started an initiative to be implemented by NABARD to bring a comprehensive approach to standardize the computerization of PACS. The Centrally Sponsored Project for 'Computerisation of PACS' will interalia include procurement of National Level PACS Software (NLPS), empanelment of System Integrators(SIs) for supporting installation, maintenance and service of the software, and also a project management office.

The Cooperative sector plays a vital role in the economic development of the country and hence it has been recognized as an integral part of our national economy. The Cooperative movement, which is the largest Socio-economic movement in the world, has contributed significantly to the alleviation of poverty, creation of productive employment as well as the enhancement of social integration in the country.

Odisha is the first state to implement an integrated Core Banking Solution (CBS) Project covering all the three tiers of the Short Term Credit Cooperative Structure i.e. State Cooperative Bank, District Central Cooperative Banks and Primary Agriculture Cooperative Societies. With computerisation of the PACS, the farmers are now able to draw their sanctioned loans from the ATM networks of National Payments Corporation of India (NPCI) having 2.14 lakh ATMs of all Banks across the Country. Vaidyanathan Committee laid emphasis on infusion of Information Technology in STCCS at all levels commencing with PACS. In pursuance of the same, computerization of PACS was initiated on an ambitious note in the year 2012 when the Chief Minister of Odisha Naveen Patnaik launched the computerization of Primary Agricultural Co-operative Society (PACS) under the supervision of Cooperation Department. This programme aimed to computerize all 2708 PACS in the state and convert PACS as One Stop Shops for all the requirements of the farmers. According to the Co-operation Department, Core Banking Solutions (CBS) in Cooperative Banks and PACS, the proceeds of the paddy procurement operations to the extent of around Rs 8000 crores credited directly to the farmers account. Now the farmers of the State are empowered to access credit through the ATM networks. Odisha is the first state in the country to introduce such a foolproof system to ensure transparency through technology and network. However, the project remained either incomplete or a halfway through but in the year 2020 out of 2708 PACS 2063 came to the Core banking solutions platform.

Hence, computerisation of PACS was taken up on an accelerated and mission mode so as to be relevant to their stake-holders and to face the challenges of competition. From the point of view of higher financing agencies and the regulators, computerization of PACS will provide real time information for taking informed decisions and for formulating appropriate policies. Computerization will also make the decision making at the PACS level faster and reduces the drudgery of staff in maintaining record of their operations manually. Without losing further precious time computerization of PACS should be taken up on top priority basis. While state as a unit can be considered for achieving scales of economy of computerization, individual districts may also be allowed to computerize their PACS if it will accelerate the process. With computerization, PACS members do not have to deal with any scams. Computerization helps in direct linkage of PACS with district banks, district banks with state cooperative banks and state cooperative banks with NABARD and all schemes of farmers reach farmers directly through PACS. Very few states in the country have been able to accomplish this task so fa4

5.

Rational for the study

5.1 Study of Computerization of Primary Agriculture Credit Societies (PACS)

5.1.1 Introduction

PACS are owned by farmers, rural artisans etc. and aim at promoting thrift and mutual help among the members; cater to their credit requirements and provide credit-linked services like input supply, storage and marketing of agricultural produce etc. The large out-reach of PACS to the Small & Marginal Farmers (SMFs) make them a systemically important class of agricultural credit purveying institutions. Further, there is a felt need to develop cooperatives as vibrant business enterprises by enabling them to provide multiple services to their members with support of technology in order to fulfil members' requirements. Keeping in view the above and to make PACS self-reliant in tune with 'Atmanirbhar Bharat Abhiyaan', the Government of India (GoI) will be implementing the Centrally Sponsored Project for Computerisation of Primary Agricultural Credit Societies for a period of five years from 2022-23 to 2026- 27. The NABARD will be responsible for implementation of the project at the central level under the guidance and directions of National Level Monitoring and Implementation Committee (NLMIC) and Ministry of Cooperation (MoC), Government of India (GoI). Further, NABARD will also act as a custodian on behalf of GoI for the common software and all the financial and personal data generated/captured on the software. For more clarity on background of the project, bidders may refer to scheme guidelines and other resources available on the Ministry of Cooperation's website -<http://cooperation.gov.in/>

The Government of India in its Union Budget 2017-18 made a provision of Rs. 1900 Crore towards Computerization of 63000 Primary Agriculture Credit Societies (PACS) out of a total number of about 93000 plus PACS. The budget allocated by Government of India constitutes 60% to 80% of the

implementation costs varying from State to State (depending on their geographical location) while the balance to be contributed by the State Governments and their STCCS. The program was scheduled to commence in the year 2017-18 and complete within a timeframe of 3 years ending year 2019-20.

It is, indeed, a significant move by Government of India aiming at creating a technology enabled level playing ground for these Rural Financial Institutions (RFIs) that serve the rural areas particularly the small and marginal farmers. It is also significant in view of bringing PACS in the fold of Financial Inclusion agenda, through such technology enablement. This measure also signifies reorganization of PACS as a vehicle for comprehensive rural development at large and agriculture in particular with emphatic focus on the development and welfare of small and marginal farmers.

Consequent to the announcement, certain States which had earlier embarked on Computerization of their PACS have shelved their efforts in anticipation of the commencement of Gol program, However, Odisha (in the year 2012) and Telangana (towards end of 2016) commenced implementation of their respective PACS computerization programs.

The Gol appointed NABARD as the nodal agency for Computerization of PACS. The mechanism for implementation and monitoring was also put in place with the creation of National-level Implementation and Monitoring Committee (NIMC) at the national level with Secretary Agriculture, Cooperation & Farmers' Welfare, Gol as the Chairman with members drawn from Ministry of Agriculture, NABARD as Convenor, NIC, Principal Secretaries of Agriculture & Cooperation and Managing Directors of State Cooperative Banks from select States (on rotation). To support the NIMC on technology matters, a National Level Technical Selection Committee (NLTSC) was also constituted

The NIMC conducted only 2 meetings so far and no measurable progress has been registered yet. It is pertinent to note that even after the lapse of almost 2 years of the timeframe provided for implementation of the program, there continues to be a stalemate even on defining of the contours of the program and its commencement. Even a preliminary move like conducting a study of successful models, if any, was not attempted.

It is against this backdrop, NITI Aayog initiated an exercise for understanding the present and future relevance of PACS, their contribution to and status in the agriculture and rural development and the need for accelerating their technology adoption. Commencing from March 2018, NITI Aayog conducted meetings under the chairmanship of Member on the subject drawing participants from Department of Agriculture, Cooperation & Farmers' Welfare, GoI; NABARD, NCDC, NeGD, NSDC, VAMNICOM, NIRB, NAFSCOB, TCIL and Cooperative departments of Odisha, Tamil Nadu and Telangana. Simultaneously, field visits by representatives of some of the above organizations to Uttar Pradesh, Odisha and Telangana facilitated an in depth understanding of the SICCS, its potential to develop the rural economy in general and agriculture economy in particular.

A group comprising representatives from Ministry of Agriculture, NeGD, VAMNICOM, Pune; NIRB, Bangalore; TCIL and Adviser Agriculture, NITI Aayog conducted the field visit of Karimnagar district of Telangana. The team studied in detail the positive impact of convergence in product and service delivery achieved through computerized PACS in Telangana.

As part of the study of such an important sector, the group explored the availability of demographic and statistical data on PACS. It was a surprise that barring the data compiled by the National Federation of State Cooperative

Banks Ltd, MUMBAI (NAFSCOB), there was no other source of information on PACS. NABARD, which provides crores of rupees of refinance to SICCS, does not even compile any data on PACS, which actually disburse the agriculture credit to the farmers. The access to NAFSCOB databank voluntarily made available by them to the group through their web portal.

It, therefore, became an imperative to make a detailed study of the PACS with reference to:

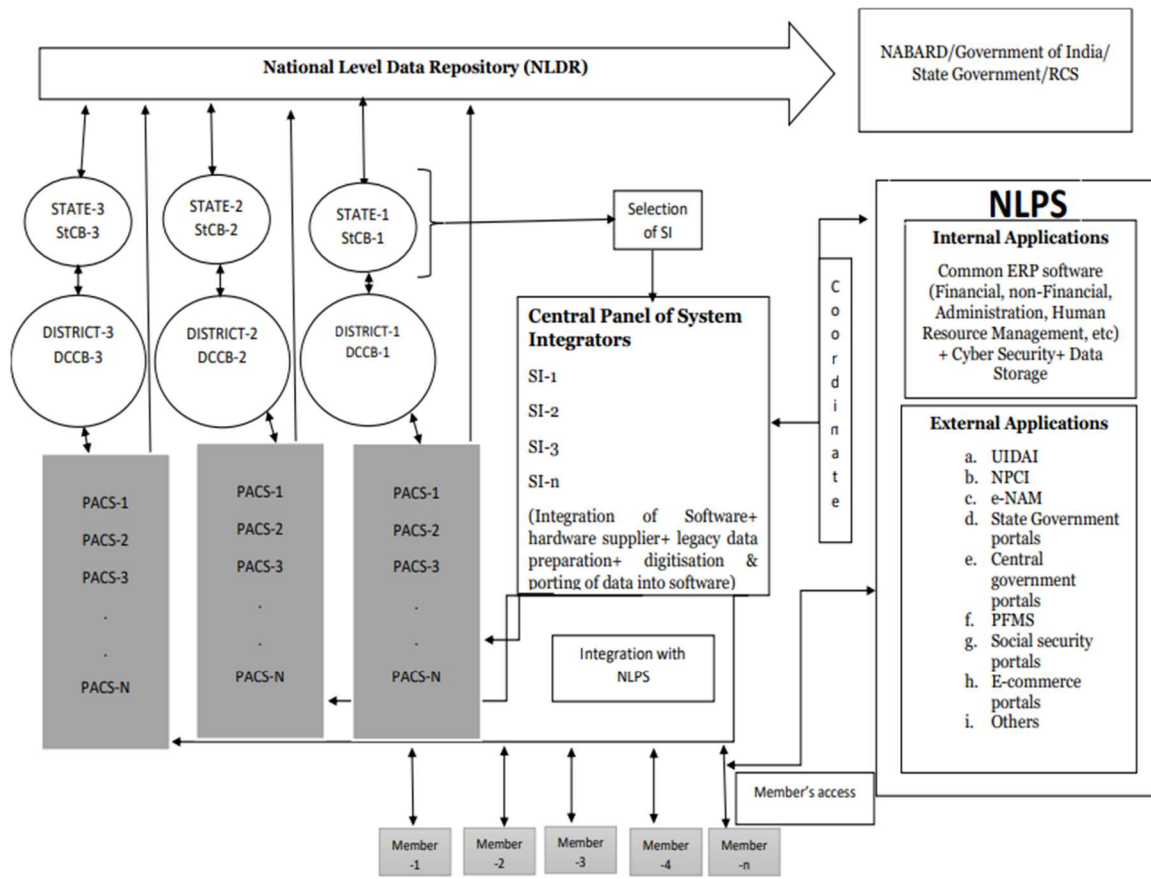
- i. PACS, their businesses and business processes
- ii. Infrastructure available and required (Office, internet connectivity, etc)
- iii. State of accounts and records. Their audit. Adherence to NABARD's CAS and MIS.
- iv. Availability of digital literates in the PACS and the need for augmenting skilled HR.
- v. Training facilities available and the gap to be bridged and the available agencies to impart training
- vi. Standardization of processes.
- vii. Facilities available/required at the data convergence points like DCCBS and SCBs.
- viii. The lacunae in the previous models sponsored by NABARD as part of the implementation of Revival Package (Prof. Vaidyanathan Committee)
- ix. Existing models of PACS computerization in different states like Odisha, Telangana TN and any other States

Further, the capabilities of the software deployed in the PACS to generate the following essential reports for any random dates since their computerization has been verified among others:

- i. Disbursement/Advances Report

- ii. NPA report
- iii. Overdue report- instalment wise
- iv. Loans recovery report
- v. Interest Subvention and subsidy report (State and Centre component duly bifurcated)
- vi. Common Demand Report - All Individual members' all loans outstanding (ST, LT and any other).
- vii. Report on Loan disbursement, Repayment schedule, demand and collection thereof of any randomly selected member MT/LT loan account (the report is meant to establish the capture of loan account data from the date of the first disbursement).
- viii. Provision for conduct of Statutory Audit with Audit Statement generated through software deployed, since delay in conduct of Statutory Audit has been a major deficiency.

To obtain the real time governance of PACS and LAMPS functions, the Government of Odisha decided to digitalize the records, data and service delivery mechanism of all its PACS and LAMPS. First among all the states to initiate this step of Computerization back in the year 2016, at this juncture the state has successfully computerized 2700 plus PACS and LAMPS. All these 2708 PACS and LAMPS have started their day-to-day business activities digitally across the state. This step of Computerization has inculcated the spirit of professionalism in the work culture of the PACS and LAMPS. The PACS and LAMPS after successful digitalization can now function at par with the commercial and scheduled banks.



Framework of NABARD's National Level Data Repository

6. Objective of the study

6.1 Title of the Project:

A study on Computerization of PACS and LAMPS and its impact on the functioning of Co-operatives in Odisha.

6.2 Need and Significance of the study:

- 1.The research study will be useful to understand how computerization ensures transparency and accountability of the PACS.
- 2.This study will help in releasing the pros and cons of implementing such a step of computerization.
3. The study will further throw light on evolving the software to meet the new demands of the PACS and LAMPS for a seamless service delivery.

6.3 Objective of the Study:

Until introduction to the computerization in PACS the PACS were conducting their operations manually and in traditional manner. In that environment the human relations approach was with a difference to suit the then requirements. However, with the adoption of total computerization the entire face of the PACS has undergone a sea change. Consequently the manual approach has also changed to a great extent. It is on this backdrop this study has been undertaken with the following broad objectives.

- 1.To evaluate the process of computerization of PACS in Odisha and its impacts.
- 2.To find out the gaps in implementation and suggest suitable recommendations to take remedial policy decisions.
- 3.To find out ways to enhance the regulation and administration by the authorities.
- 4.To study how computerization can speed up the audit process.

6.4 Scope of the Study:

The study encompasses the whole gamut of PACS operations normally conducted in the present day PACS set up. It has covered resource mobilization as well its deployment and at the same time a wide range of services. Particularly the existing human resources who were either to or not to exposed to computer environment as

well as new generation human resources who have been brought up in computer friendly environment are working together. So the cultural differences in the initial period are bound to be there. The study attempts to take a stock of the situation obtained in the subject PACS under study.

1. The study will focus on PACS Computerization in Dhenkanal district.
2. The study will explain scope and opportunities for the society once computerized.
3. The study will cover the bottlenecks and challenges and suitable suggestions.

7. Review of Literature

7.1 Computerization of PACS-various initiatives

The first attempt at the National Level for Computerization of PACS was made as part of the implementation of the "Revival Package" 2006 with NABARD as the Nodal Agency and under the aegis of Ministry of Finance, Government of India. A software then being experimented in Tamil Nadu was chosen for Nation-wide roll out without considering its suitability for PACS. Such software, as discussed in the S NIMC (under "Revival Package") meeting held on 2nd June, 2010, only catered to CAS and MIS and was not assessed for its suitability to PACS operations nor for its replication across the Country, Compact Disks (CDs) of the said software were circulated to States by NABARD for implementation through Software Deployment Agencies (SDAs), as chosen by individual States. While a calling bids for SDAs for each fragment component of the implementation process in each State was itself a daunting task, the SDAs where chosen, possessed neither the knowledge of the domain nor the software being deployed. Consequently, more than a decade of precious time was wasted by States in the unsuccessful 3 pilot PACS chosen, with constant coordination issues between the Software Provider and the SDAs. The whole attempt led to a natural death without even single State completing at least the pilots.

7.2 Justification for computerization of PACS

The existing systems and procedures followed in the operation of PACS are fraught with several challenges. The issues faced by various stakeholders are detailed below:

1. Issues faced by Farmers are as follows:

- i. Undue delays in sanctioning credit mostly due to inefficient record keeping and non-updation of member data periodically.
- ii. Farmer buying from the open market adulterated inputs like seed, fertilizer, pesticides, etc.

2. Issues faced by Societies are as follows:

- i. Inadequacies and inaccuracies of the book-keeping. Inability to have standard bookkeeping practices resulting in fraud and embezzlement cases.
- ii. Lack of standard reporting to DCCB/Apex Bank. In absence of authentic bookkeeping practices, the reports generated for policy making are mostly inadequate.
- iii. Information as required by other institutions from the societies is in non-standard format hence are time consuming and cumbersome.
- iv. Inability to do multiple businesses different from basic activities which otherwise can enhance profitability of the societies.
- v. Difficult to maintain the Stock inventory manually for fertilizers, seeds, pesticides, food grains, etc.

7.3 Outcome from the PACS Computerization

The expected outcomes from the PACS computerization project are as follows:

1. Bring in transparency and timeliness in the operations of the PACS
2. Improvement in the service provided to the PACS members
3. Generation of Normal Credit Limit (NCL) application, by PACS to District Central Co-operative bank (DCCB) /State Co-operative bank (StCB)
4. Maintenance of Digital Member Register (DMR) at the DCCBs/StCB level and synchronization of the same with PACS software to be made more effective and accurate
5. Enhanced availability of quality Management Information Systems (MIS) to the stakeholders viz., CCBs/StCBs, State Government, NABARD and Union Government for better monitoring and control
6. Expeditious Compliance with all the regulatory requirements in operations and reporting
7. Greater digitalisation of rural financial systems and accelerate the move towards digital India
8. Generation of data for PMFBY portal from the computerised PACS systems
9. Faster calculation of the interest subvention for the agricultural borrowers
10. Quicker production of accurate financial statements at the end of the financial year, thereby, reducing the time taken for auditing and help the management to take informed decisions to improve the business.
11. Enhanced customer satisfaction through faster availability of credit and non-credit products.

7.4 Computerization of PACS Challenges

- Weak infrastructure (uninterrupted power and internet availability), Poor skill level and adaptability issues.
- Incomplete and inconsistent books and records of PACS.
- Availability of computer infrastructure and internet.
- Data preparation by conducting Special Audit to update the Books and Records and to establish Opening Balances.
- Dedicated trained manpower to enter legacy data – follow double entry system
- Customization of ERP.
- Mandating End of Day (EOD) process for all the PACS to ensure continued usage of ERP.
- Secretaries working in Primary Agricultural Credit Institutions are very old in age and they feel depressed about computerization.
- Although the secretaries of the institutes have Accounting knowledge, they are not technically fully competent academically
- There is no complete network connectivity so offline work is done in many places
- There are many such organizations in Maharashtra. Although they want to computerize the organizations which cannot afford the monthly salary of their secretaries, they cannot do so.
- At present, many development service organizations are engaged in various business activities to earn other income and its business policies are decided by the five committees of the organization.
- The staff of the organization has less knowledge of English so it will be necessary to give importance to the local language
- Many organizations have been computerized but they need proper guidance
- Computerization has become a thing of the past in many organizations as the existing services are not available from the software companies.

- Primary Credit Institutions have been given autonomy under the Act, so District Banks are required to have the institution's permission to collect their data including computerization through them.
- In case of embezzlement, the secretary of the organization is indifferent about computerization
- It is necessary to bring technical awareness among the digestive committee working in rural institutions as it opposes the expenditure incurred due to educational backwardness.
- Institutions are indifferent to computerization when they are managing.
- Some organizations are only able to get certain reports from the locals. But the Cooperation Department of Odisha, tackled the challenges well as a result of which today 2600 PACS are running online.

7.5. Objective of Computerisation of PACS

- To bring in efficiency, accountability, transparency at PACS and improve profitability.
- To bring in accuracy and uniformity in the conduct of business, accounting with entries originating at the transaction level and reporting thereof through standardization of processes, implementation of Common Accounting System (CAS), Generation of consolidated Financial Statements, Management Information System (MIS), Generation of reports at National Level, State level and as per the requirement of other stakeholders such as Gol/NABARD/ State Govts., etc. and Geographic Information System (GIS)/ Geo-tagging of PACS infrastructure and compliance to stipulations.
- To transform PACS into multi service entities offering to members in particular and the rural population in general, an array of services covering agriculture and allied activities; financial and non-financial products.

- To seamlessly connect PACS with the higher-tier institutions and Government departments in the domains of agriculture, banking and rural development for dissemination of knowledge to grassroots.
- To leverage on the unique strength of PACS captive member base to design and offer personalized products and services and thereby improve the socioeconomic landscape of rural India. To ensure accurate delivery of funds and subsidies through DBT to the targeted beneficiary groups.
- To enable PACS to integrate onto various Govt's platforms which are operational or which may become operational in future. To enable PACS to provide doorstep banking services to facilitate easier access to banking services.
- To enable PACS to utilize digital acceptance infrastructure like Point of Sale (POS)/mobile POS(mPOS)/QR Code readers/Green PIN solution/BHIM Aadhaar Pay device etc. in the establishments run by PACS like fertilizer shops, Seed Processing Units etc., to facilitate cashless/digital transactions.
- To expand financial services to unbanked and underbanked villages/areas, improve the overall performance and efficiency of PACS and STCCS, increase rural employment opportunities and reduce migration to urban areas.
- To enable PACS to efficiently integrate into agri value chain through ecommerce platforms such as Open Network for Digital Commerce (ONDC).

7.6 Vision for PACS post-computerization

It is the noble intention of the GOI to develop PACS as vibrant, proactive and member centric service providing institutions meeting every financial and service requirement of their members in particular and the rural community at large, while being transparent and accountable in their operations and management, adhering to the principles of good governance and ensuring seamless integration of all stakeholders. Such transformed institutions will be able truly realize the goals of becoming Multi Service Organisations and vehicles of rural development in general and agriculture in particular.

It is also a fact that different departments of the Government of India's and of state governments design and implement several programs for the welfare of farmers as well as for development of agricultural and rural economy. But most often these programs run in parallel lines and are implemented by different functionaries at the field level lacking in coordination and convergence of purpose and result. Through an appropriate computerization of PACS, all these programs of different governmental departments and agencies can be harnessed on to a common platform so as to derive the best benefit for the stakeholders. Simultaneously, a comprehensive information system can be facilitated helping informed decision making based on real time data.

7.7 Costs of PACS Computerisation

A Centrally Sponsored Project on 'Computerization of PACS' has been approved by the Cabinet Committee on Economic Affairs (CCEA) 29th June, 2022. This project envisages computerization of about 63,000

functional PACS over a period of 5 years with a total budget outlay of Rs. 2516 Cr with a central share of Rs. 1528 Cr. Out of the total budget for the project, the shares of Government of India, State Governments and NABARD are Rs. 1528 crore, Rs. 736 crore and Rs. 252 crore respectively.

The state Govt of Odisha, originally sanctioned Rs 35 crore for computerization of 2600 PACS in the state, which was subsequently enhanced to Rs 48.77 Crores for extension of CBS implemented in OSCB and DCCBs to the computerization of PACS with connectivity to the data center established at the state level.

8. Research Methodology

8.1 Data Collection Sources:

Data collected from the PACS of Dhenkanal District. Data was readily available as all the 80 PACS of Dhenkanal had carried out the exercise for switching over to the Computerization.

8.2. Sampling plan:

No separate sample was required to be taken as the exercise is required to be carried for the organization as a whole and not in part. So the entire data for the district were collected.

9. Profile of the Dhenkanal District

- Name: Dhenkanal District
- Number of PACS: 80
- Number of other PACS: 37
- No. of Members : 104325
- Share Capital: 29.096Cr.
- Investment: 7.18 Cr
- Member Loans : 38.4155 Cr.
- Loans from DCC Bank : 43.71Cr.
- Deposits : 16.4Cr.
- Profit : 5.40 Crore
- Area of operation : Dhenkanal District
- Core Business:
 - ✓ Provide Agricultural & Non Agriculture credit facility
 - ✓ Fertilizer
 - ✓ Seeds
 - ✓ Godown and storage facilities
 - ✓ Public Distribution System(PDS)

Software Provider for PACS Computerization

- VSoft Software Pvt.Ltd.

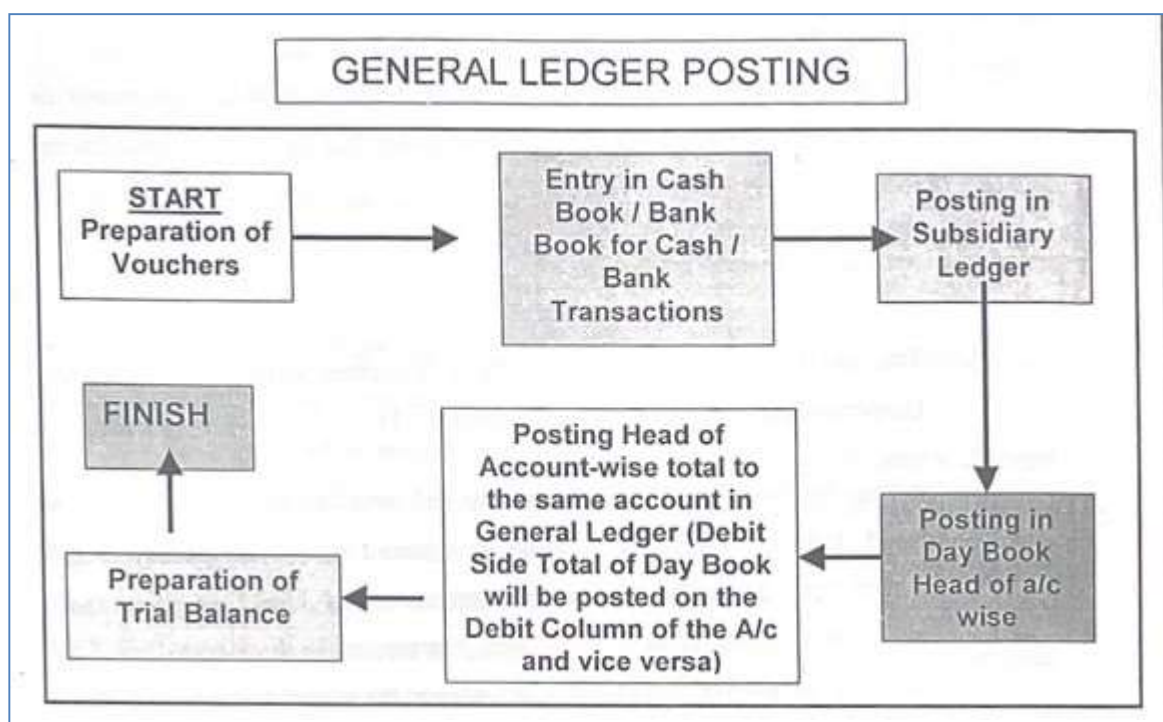
With competition intensifying in the sector, VSoft's offering provides a powerful and flexible platform to transform daily operations at PACS. The user-friendly software automates processes thereby improving efficiency and increasing profitability. Simply put, the solution enables credit societies to focus more on the business of finance and less on managing the IT.

9.1 Impact of computerization of PACS of Dhenkanal District

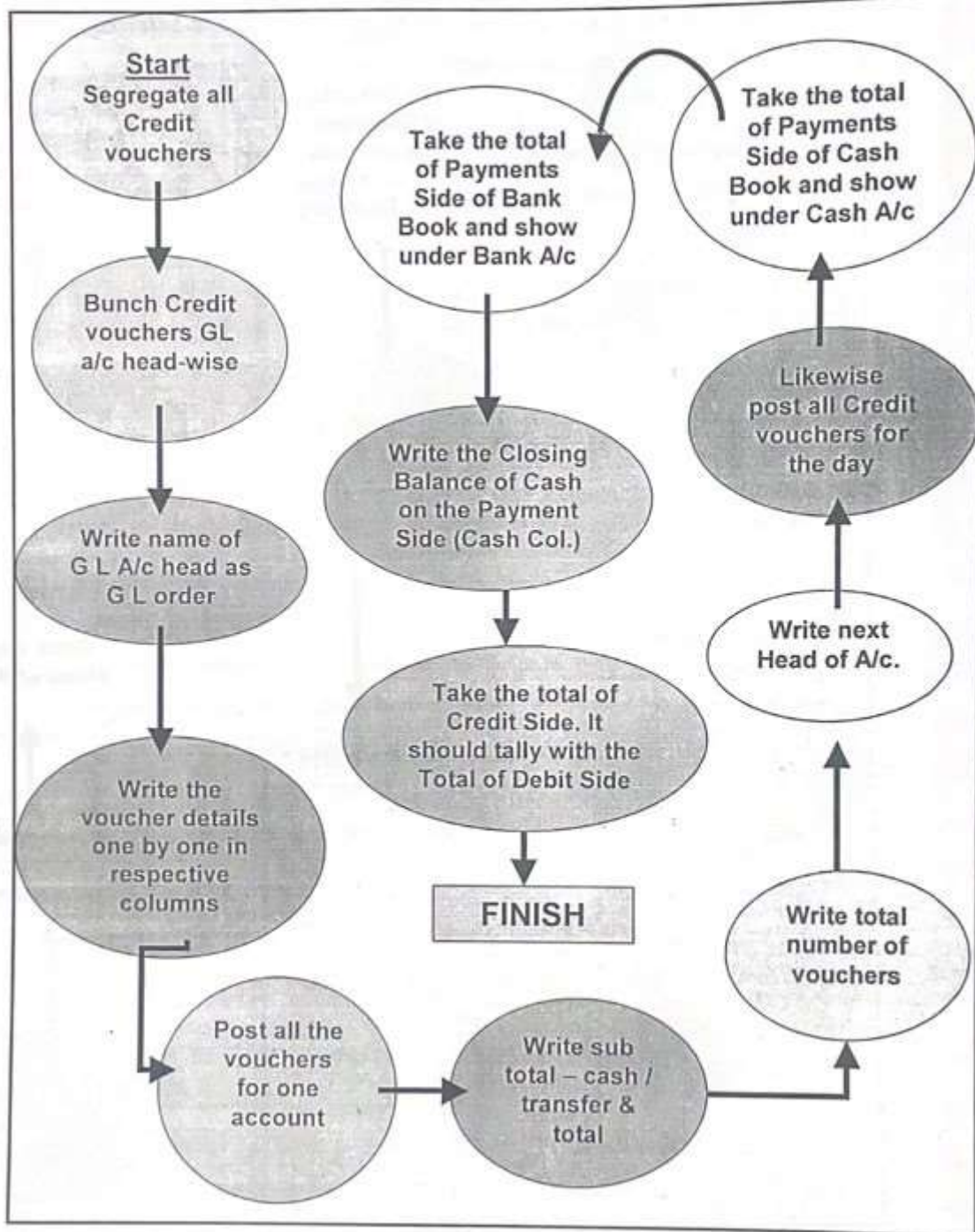
Prior to computerization the PACS had to maintain the handwritten records and registers, the same transaction had to be recorded in different books, so a lot of time is wasted and wrong entry is made in a book e.g. If a member wants to distribute crop loan, he has to register in more than eleven books, e.g. Debt, Debt Register, Debt Account, Account Deposit Account, Daily, General Ledger & Balance

Vaidyanathan committee has introduced the common accounting system(CAS).Due to this society has to maintain the records in various ledgers and registers.

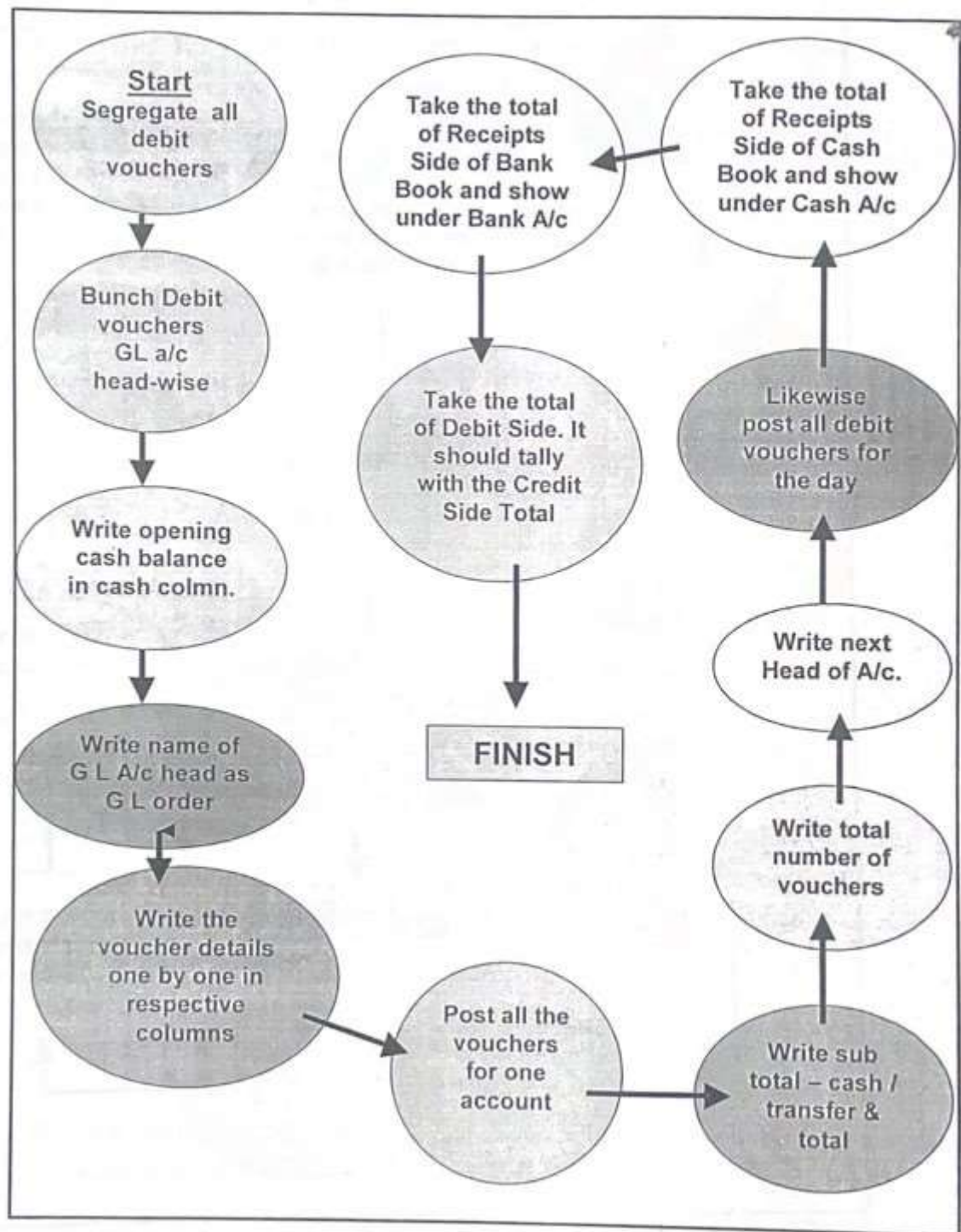
Following are the screen shots showing the transaction flow of the entries which are done in a manual way

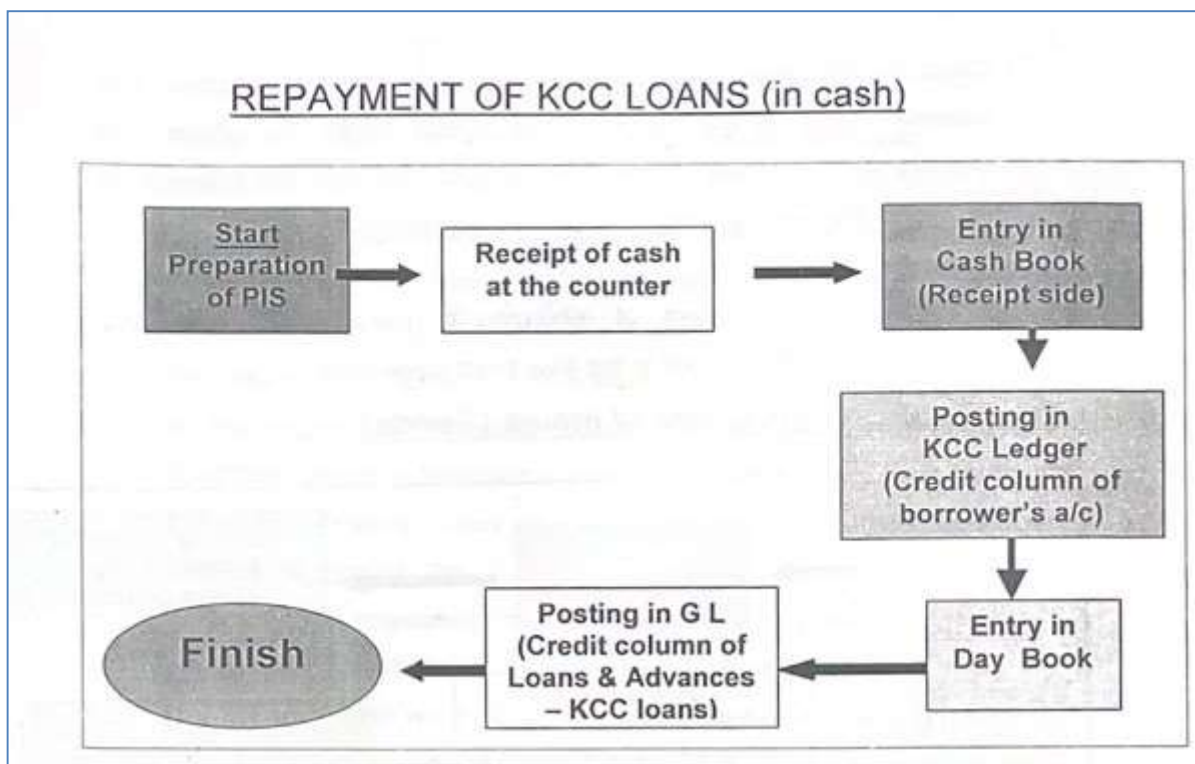
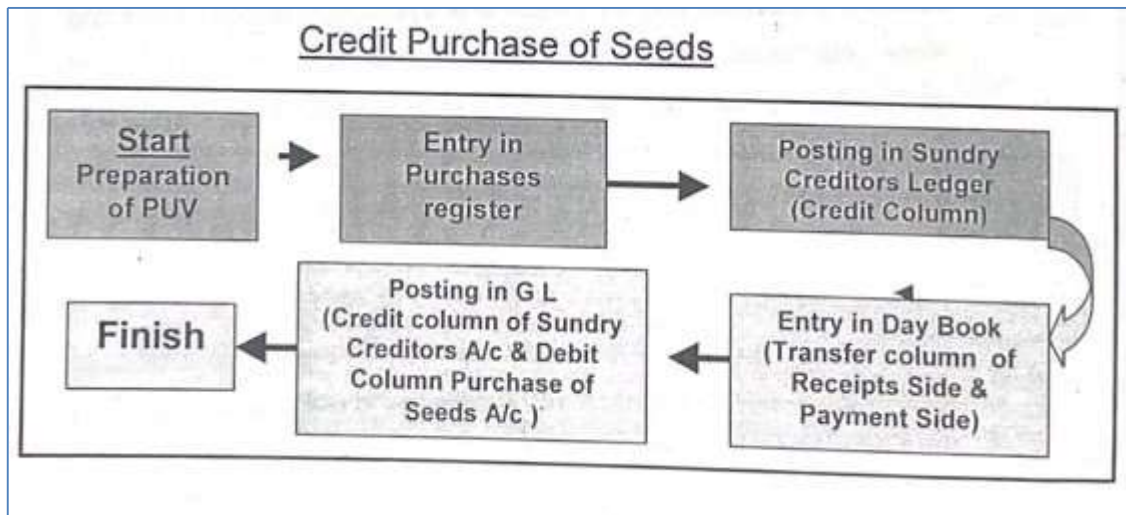


Writing of Payment / Credit Side of Day Book



Writing of Receipt / Debit Side of Day Book

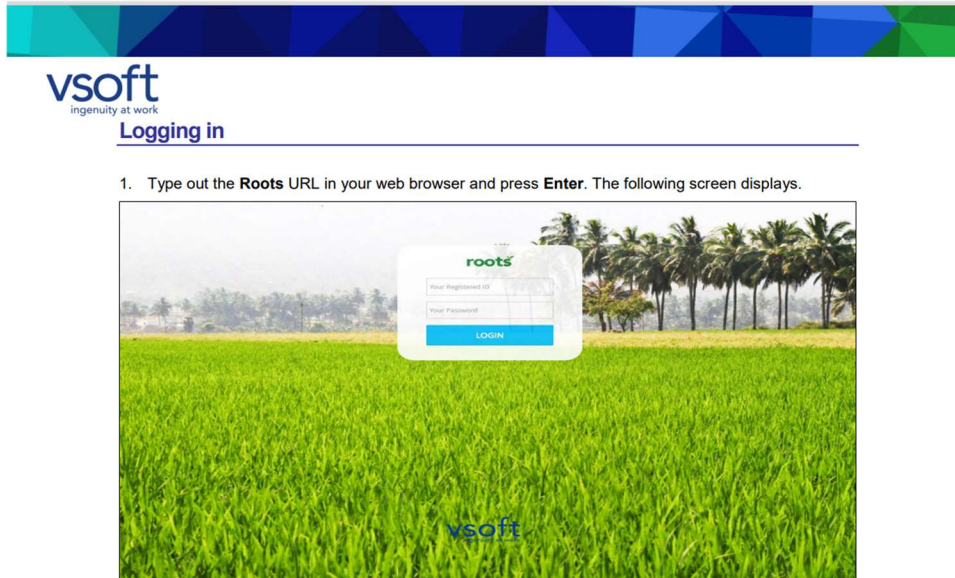




Following example is showing Impact of computerization of PACS of Dhenkanal District which shows before the computerization customer who is having different types of loan data has to be maintained in different registers and after the computerization whole data can be easily available on a single page. After introduction of Computerization, all these entries are posted in the Roots Application with just one click and there is no need of multiple registers for record keeping. This implies computerization has truly enabled the joint implementation of CAS and MIS altogether.

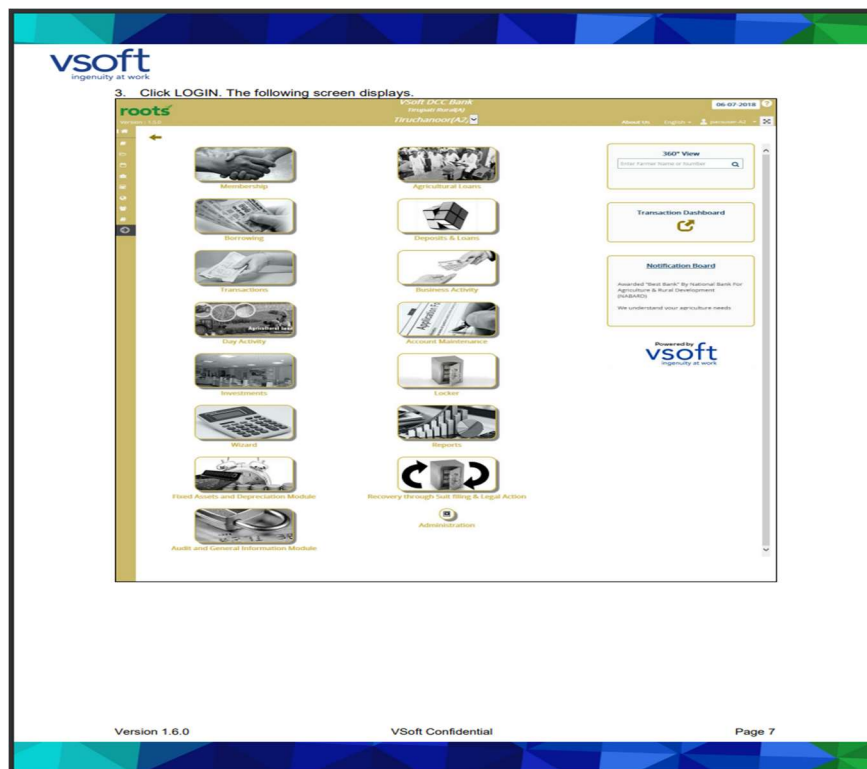
9.2 Screenshots of PACS computerization software

Login Screen



2. Enter your Registered ID and Password.

Home Page



Loan Disbursement



KCC Disbursement Entry

KCC Disbursement Entry allows you to add, and modify the type of Disbursement at PACS. An option is provided by which the user can select the mode of disbursement.

The options for mode of Disbursement are as follows

1. **Cash at PACS:** If selected this option, then the disbursed amount is given to the farmer in the form of cash.
2. **Transfer to farmer Sb Account in PACS:** If selected this option, then the disbursed amount is transferred to the saving account of the farmer in PACS.
3. **Cheque Payment at Bank Branch :** If selected this option, then the disbursed amount is paid in the cheque mode where the cheque number and the cheque date are entered.

Adding Details in KCC Disbursement

1. Log in using PACS user credentials.
2. Click **Agri Loans → Crop Loans → KCC Disbursement Entry**. The following screen displays.

Member Name	<input type="text" value="Enter Member Name"/>	Member Number	<input type="text" value="Enter Member Number"/>		
KCC Account No	<input type="text" value="Enter KCC Account No"/>	CCB Account No	<input type="text" value="Enter Account No"/>		
Sanctioned Amount	<input type="text" value="Enter Sanctioned Amount"/>	Insurance Premium Amount to be deducted	<input type="text" value="Enter Insurance Amount"/>	Share Amount to be Deducted	<input type="text" value="Enter Share Amount"/>
Drawable Amount	<input type="text" value="Enter Drawable Amount"/>	Interest Receivable	<input type="text" value="Enter Interest Receivable"/>	Principal Balance	<input type="text" value="Enter Principal Balance"/>
Kind Drawable Amount	<input type="text" value="Enter Kind Drawable Amount"/>	Kind Balance	<input type="text" value="Enter Kind Balance"/>	Kind Limit	<input type="text" value="Enter Kind Limit"/>
Amount	<input type="text" value="Enter Amount"/>	Mode Of Disbursement	<input type="text" value="--select--"/>		
Remarks	<input type="text" value="Enter Remarks"/>				

Save Reset

- To create a new disbursement entry, for assistance, see "Field Descriptions-Loan Disbursement".



5. Select the **Mode Of Disbursement** through which the amount is to be disbursed.

The screenshot shows the 'Loan Disbursement Entry' form. The 'Mode Of Disbursement' dropdown menu is open, displaying the following options: '-select-', 'Cash at PACS', 'Transfer to farmer SB A/c in PACS', and 'Cheque payment at Bank Branch'. The 'Amount' field is set to 8100. The 'Remarks' field contains 'Enter Remarks'.

6. If Cheque payment at Bank Branch is selected then additional fields of Check Number and Check Date are displayed

7. Enter the Cheque Date and Cheque Number values in the fields as in the following screen.

The screenshot shows the 'Loan Disbursement Entry' form with the 'Mode Of Disbursement' set to 'Cheque payment at Bank Branch'. The 'Cheque Number' field is empty, and the 'Cheque Date (DDMMYYYY)' field is set to '13/05/2018'. The 'Amount' field is set to 8100. The 'Remarks' field contains 'Enter Remarks'.

Reports

Post computerization it has become easy and convenient to generate reports for any and all kind of transactions held with the society. Following is one example of report of KCC account statement.

KCC Account Statement														
Bank		: VSEB DCC												
Pacs		: KALARAHANGA												
Member No	: 000101118000004	Name	: Suresh											
Address Line 1	: Dad													
Village	: KALARAHANGA													
Contact No	:													
Account No	: 00010111800000004													
Account Statement for the Period of				From Date	: 05/01/2015	To Date	: 14/12/2016							
Opening Balance				: 0.00	Share Balance				: 4000.00					
S.NO	LOC No	Crop Season Year	Business Date	Principle				Interest						
				Cash		Kiasd		Debit		Credit				
				Debit	Credit	Particulars	Balance	Debit	Credit	Particulars	Debit	Credit	Particulars	
1	11	paddy-Khariff_2015-2016	19-12-2015	18000.00		by cash:11	26900.00							
2	11	paddy-Khariff_2015-2016	31-12-2015								57.00		Interest Accrued posted Receivable	
3	11	paddy-Khariff_2015-2016	31-12-2015											
4	11	paddy-Khariff_2015-2016	08-02-2016								172.00		Interest Accrued posted Receivable	
5	11	paddy-Khariff_2015-2016	08-02-2016											
6	11	paddy-Khariff_2015-2016	11-02-2016								13.00		Interest Accrued posted Receivable	
7	11	paddy-Khariff_2015-2016	11-02-2016											
8	11	paddy-Khariff_2015-2016	13-02-2016								9.00		Interest Accrued posted Receivable	
9	11	paddy-Khariff_2015-2016	13-02-2016											
10	11	paddy-Khariff_2015-2016	17-02-2016								18.00		Interest Accrued posted Receivable	
11	11	paddy-Khariff_2015-2016	17-02-2016											
12	11	paddy-Khariff_2015-2016	09-03-2016								93.00		Interest Accrued posted Receivable	
13	11	paddy-Khariff_2015-2016	09-03-2016											
14	11	paddy-Khariff_2015-2016	29-03-2016								88.00		Interest Accrued posted Receivable	
15	11	paddy-Khariff_2015-2016	29-03-2016											
16	11	paddy-Khariff_2015-2016	30-03-2016	10000.00		by cash:11	44900.00							
17	11	paddy-Khariff_2015-2016	25-04-2016								182.00		Interest Accrued posted Receivable	
18	11	paddy-Khariff_2015-2016	25-04-2016											
19	11	paddy-Khariff_2015-2016	26-04-2016		370.00	towards	40530.00							
20	11	paddy-Khariff_2015-2016	26-04-2016									630.00	towards interest:11 towards principal:11	
21	11	paddy-Khariff_2015-2016	27-04-2016								13.00		Interest Accrued posted Receivable	
Total				28000.00	370.00						3123.00	630.00		

Report generated on *Fri Jan 12 12:20:03 IST 2018* by *paas-wcr*

Authorized Signature

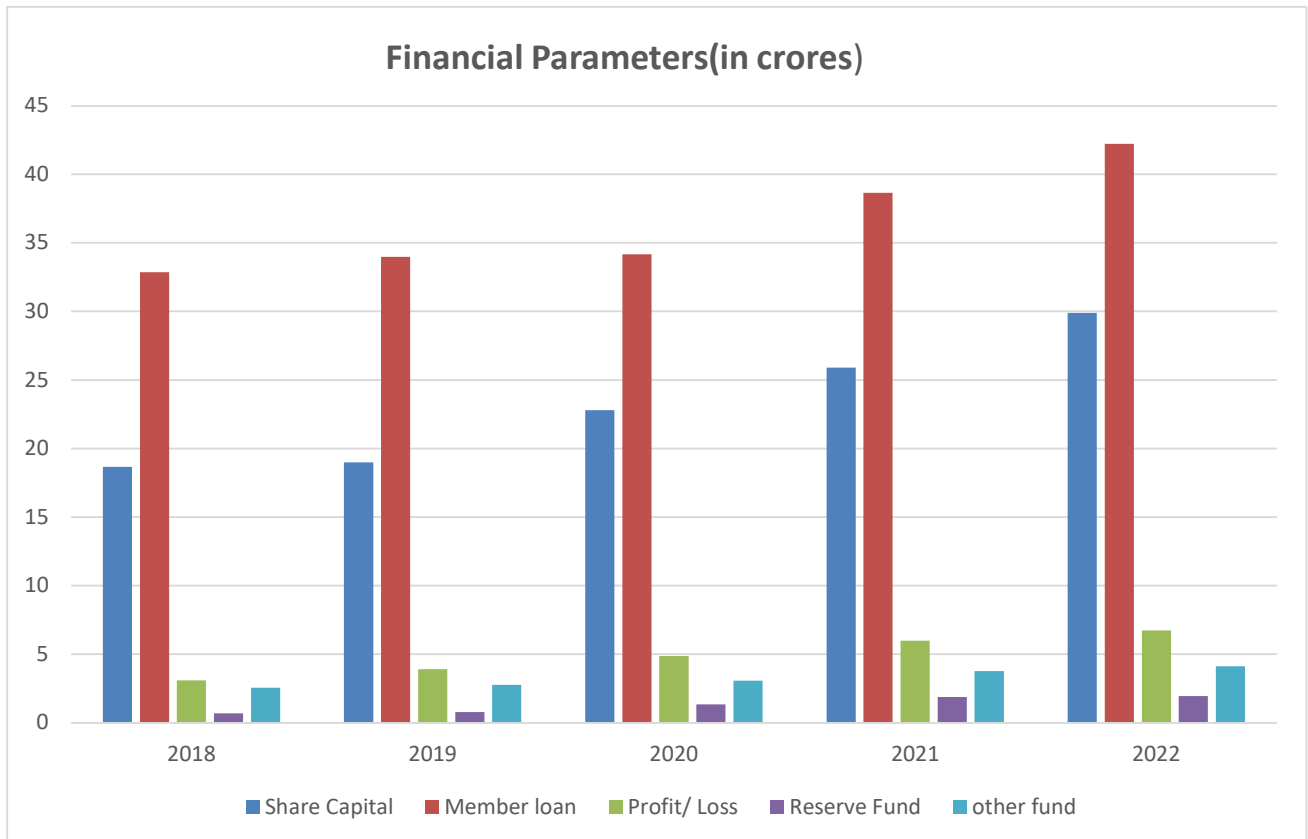
Click **Fast Print** to print the report.

Click **Close** to close the window.

10. Data Analysis and Interpretations Using Various Charts & Graphs

X axis- Years

Y axis- Rs. In Crore



Financial Position of the PACS under Dhenkanal District

Quantitative and Qualitative Data Analysis

- **Quantitative:-** 1) There is an increase in membership, loan amount, share capital, profit
 - 2) Interest calculation can be done accurately through the software/system.
 - 3) Preparing interest subvention claim is easily possible with different parameters without any mistakes.
 - 4) Day book, transaction scroll, receipts can be generated with just a click

- **Qualitative:-** 1) Improved Customer Service
 - 2) Maintained the accuracy in the accounting
 - 3) Various facilities are available like SMS, Reports, Share Certificates , Recovery Certificates , Debentures
 - 4) Overcome the manual work and no further back dated entries making the entire system accurate, transparent and seamless.

11. Findings

A. Benefits to Society Members after PACS Computerizations

1. Interest was levied at the time of manual withdrawal of interest on loan and deposit account. Computerization provides accurate interest rates and the effect of changing interest rates from time to time is credited to the loan account.
2. In the institutions with handwritten records, the society members could not immediately get the updated information of their share deposit and loan account. Due to computerization, this information can be given to the society members instantly and accurately, thus increasing the credibility of the member organization.
3. Statement of deposit and loan accounts is easily available to society members.
4. Society members can get their deposit and loan account status as well as recoverable amount by SMS to their register mobile number.
5. Due to computerization, the society members gets loan in time as the short and term loan approval process becomes faster and simpler.
6. Due to computerization enough time can be given to the society members so that all the services of the PACS can be informed to the members so that the member can avail all the services of the PACS.

B. Benefits to the Society after PACS Computerizations

1. In society with handwritten records, the same transaction has to be recorded in different books, so a lot of time is wasted and wrong entry is made in a book e.g. If a member wants to distribute crop loan, he has to register in more than eleven books, e.g. Debt, Debt Register, Debt Account, Account Deposit Account, Daily, General Ledger & Balance
2. As it takes time to write a handwritten file, any information is delayed and the information is presented incorrectly. Due to computerization, this information can be submitted immediately.
3. At present, as the same secretary is in charge of more than one society, it takes more time to write the records manually, so the members of the

Society do not get timely loan supply and also do not get many types of information required by district bank and government.

4. Loan disbursement adversely affects loan recovery in society that maintains handwritten records.

5. District Co-operative Bank Accounts as well as State and Central Government have to submit different types of information. Due to computerization, such information can be submitted immediately, Hence save the time.

6. It takes a long time to understand the profit and loss and balance sheet status of society which keeps a handwritten record. Therefore, management cannot submit sufficient and accurate information in time.

7. More reports are available from computerized society as all information can get with single click.

8. Since the society is computerized, there is less political interference in the work, for example, raising or lowering interest charges, depositing wrong checks, etc.

9. Computerization has reduced the work stress on the employees and increased the enthusiasm to work

10. With the introduction of non-credit computerization in the credit system of the society, it has become easier to provide services to the members. For example, Fertilizer Department, Sugar Department, Ration Department, etc. The managers of this department are different when doing business, so the secretaries had to work hard to coordinate and control the affairs of this department, but computerization has made it easier for the chief secretary to control the affairs.

11. The audit of the society is being done in a transparent manner

12. As per the Vaidyanathan Committee (CAS) recommendations made by the government to the development service society, the computerization of the records becomes perfect and accurate.

13. Economic growth of the organization due to computerization has made social profit by providing time service to society members.

C. Benefits to District Banks after PACS Computerizations

1. Due to computerization the bank to receive accurate and instant information from the society.
2. Loans can be disbursed to society members with less time.
3. The security of a bank loan can be verified immediately
4. The aggregation of all the information is immediate so that the information can be submitted to the headquarters and the government in time, thus saving manpower.

D. Benefits to the State Co-operative Bank after PACS computerization

As we know that Odisha has adopted one system and software connectivity among the three tiers of Cooperative Credit and Banking thus now making it much convenient for the state cooperative bank to monitor the activities of both its DCCBs, their Branches and PACS under them.

E. PACS can also give the digital services like Mobile Banking, Internet Banking to their members.

F. Benefits to the auditors after PACS Computerisation

As the entries are posted on daily basis in the Roots Application (PACS Computerisation) all the records are maintained in the server and database. With just one click the auditor can get the transaction details, the day book and other records and there are least chances of any unreconciled value as the system would not process any double entry or non voucher entry.

Proposed Action Plan

From the study it is evident that how computerization has benefitted the overall functioning as well as the business of all the PACS under the district that is studied. However, it is pertinent to mention that though there is a common software linking all the three tiers of cooperatives yet no dashboard or access in the software has been given to the Department consisting of the RCS, DRCS and ARCS to monitor, inspect and analyse the financial position of any PACS in real time.

Thus, the Government needs to further focus in manoeuvring the software further to make it more holistic and efficient in approach.

12. Bibliography

- Vaidyanathan Committee Report
- NABARD'S PACS Computerization Concept Notes
- VSOFT software Brochure and Roots application manual
- Request for Proposal (RFP) for Selection of a National Level PACS Software Vendor (NLPSV) of NABARD
- Ministry of Cooperation Department website
- Department of Cooperation of Odisha's website
- The Angul Central Cooperative Bank's website.