

# NIC's Cooperative Core Banking Solution

## Rural Banking Made Closer

The CCBS, developed by NIC is a key lever for financial inclusion support to the rural population through DBT, MGNREGA Payments, scholarships, inclusion of various schemes such as PMJDY etc. CCBS facilitates easy monitoring of fund disbursement to the targeted beneficiaries account and maintains updated position of funds.



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**T**he Government of India and its Reserve Bank focus on financial inclusion as the foundation for inclusive growth. Two third of Indian population lives in the rural sector and a majority of them are not part of the mainstream banking through this population contributes immensely to our country's economy. Thus, a need was felt to have a systemic approach to take advantage of the technology advancements to enhance effectiveness of rural cooperative credit structures. This is in particular to the delivery of payments and credits to rural citizens on various social sector schemes those have led to the development of Cooperative Core Banking Solution (CCBS).

National Informatics Centre has taken up this task and developed this System with an objective of bringing banking services closer to rural masses.

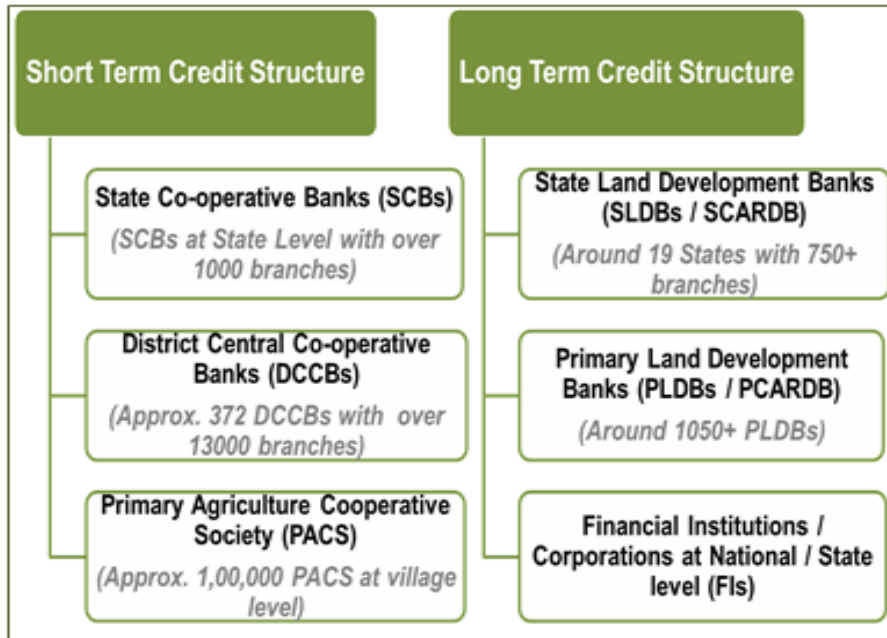
### COOPERATIVE BANKS- AN OVERVIEW

In India, Cooperative banks have been operational since more than a century now and are considered among the important financial institutions in the country. Cooperative banks play a vital role in rural financing and micro financing. These banks in India are registered under the Co-operative Societies Act and are regulated by Reserve Bank of India.

Cooperative Credit Structure prevalent in India is bifurcated into Short Term Cooperative Credit Structure (STCCS) & the Long Term Cooperative Credit Structure (LTCCS). The



Web portal homepage of CCBS



Cooperative Credit Structure in India

STCCS is a 3 tier structure comprising the State Cooperative Banks (SCBs), District Central Co-operative Banks (DCCBs) & Primary Agriculture Co-operative Society (PACS). The LTCCS is a 2-tier structure consisting of State Land Development Banks (SLDBs / SCARDB) & Primary Land Development Banks (PLDBs / PCARDB) &

Financial Institutions/Corporation at National/State level (FIs).

### COOPERATIVE CORE BANKING SOLUTION (CCBS)

To overcome the challenges faced by cooperative banks and to make financial inclusion a reality, the National Informatics Centre has

developed this web based Banking Software and has been offered as 'Software as a Service' (SaaS) to the banks. Hosted at the National Data Centre of NIC, the CCBS software, as a product has been customized for Short Term as well as Long Term credit structure.

The CCBS, developed by NIC is a key lever for financial inclusion support to the rural population through DBT, MGNREGA Payments, Scholarships, inclusion of various schemes like PMJDY etc. It facilitates easy monitoring of fund disbursement to the targeted beneficiaries of their accounts and maintains the updated position of fund.

### TECHNICAL ARCHITECTURE

CCBS application is hosted at the NIC's Data Centre. Following is the dataflow of the system:

### TECHNOLOGY USED

- **Technology:** Microsoft .net Framework 4.5 with WCF
- **Database Server:** Microsoft SQL Server 2012 Enterprise Edition
- **Web Server:** Internet Information Services Manager 8.0

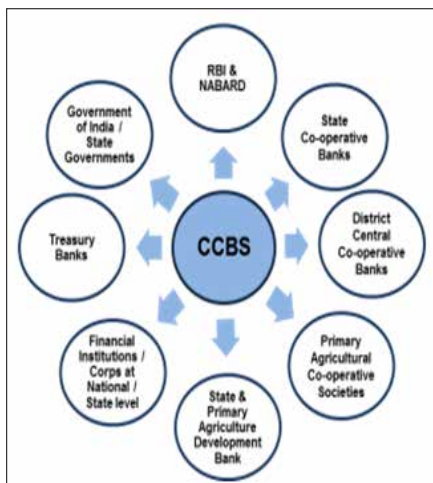


CCBS Architecture

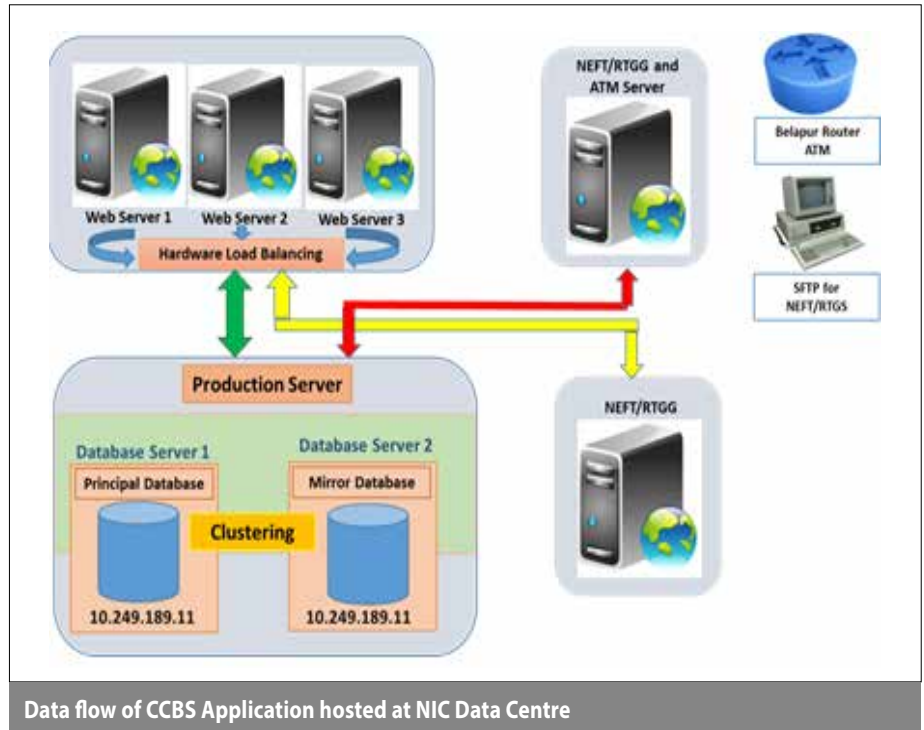
- **Reporting Server:** Microsoft SQL Server 2012 Reporting Services
- **System Software:** Windows Server 2012
- **Language:** C#

**INNOVATIVE FEATURES**

- Service Oriented Architecture (SOA) to provide interoperability with other e-Governance applications
- Use of cloud computing infrastructure - hosted at National Data Centre, Shastrri Park, Delhi
- Integration among all three layers of co-operative banking i.e. State, District & PACS level for monitoring & reporting
- Standardized approach to adopt common accounting system upto PACS level
- Inter-Bank transactions and Inter-Branch (at two different locations) transactions, simple & single click interest calculation and bank closing activity
- Capability to handle Direct Benefit Transfers through PACS level



Interfaces of CCBS



Data flow of CCBS Application hosted at NIC Data Centre

**MAIN MODULES**

- Customer management as per KYC norms
- Current Accounts and Saving Accounts
- Fixed/ Reinvestment/ Recurring Deposits & other Term Deposits
- Loans & Advances
- Cash Credits & Advances
- Clearing Operations & Lockers, Shares Management
- Head Office module (Borrowings & Investments Remittances Statutory Reserve Fund)
- ATM integration, RTGS, NEFT & ECS
- Inter branch transactions
- Operational MIS Reports-Day Book, Cash Book, Balance Sheet, Voucher, Statement, Ledgers etc.
- Statutory/ Compliance MIS for

RBI, NABARD, State Cooperative Departments and other Government agencies

To strengthen CCBS further, a number of advanced modules like, Treasury, Social Sector Payments are planned for implementation.

**IMPLEMENTATION STATUS**

- **State Cooperative Banks (SCBs):** All 49 branches including the head office of Meghalaya Cooperative Apex Bank (MCAB) and a SCB, are in core banking environment. CCBS at MCAB provides the ATM and NEFT/RTGS facility. RuPay credit card facility has been started for KCC account holders and DBTL (Direct Benefit Transfer) for LPG customers having account in bank has been enabled. PoS facility has been started for conducting transactions with any Merchant Banks. PMJBY /



Conferring of the 6th eNorth East Award 2016 for CCBS under the 'e-Financial Inclusion' category

PMSBY module of CCBS is under implementation

- **District Central Co-operative Banks:** All 61 branches including the head office of DCCB Raipur are operational in Core Banking environment. NEFT/RTGS, DBTL & ATM services are in operation. The PMJJBY / PMSBY module of CCBS is under implementation
- **Primary Agriculture Cooperative Society:** Rajasthan government has awarded the work of computerization of 750 PACS under Phase-I. 30 PACS are operational under 14 DCCBs and have been made online for making the transactions. Trainings have been conducted for all the PAC managers. Computerization of 5 PACs in West Godavari district of Andhra Pradesh has been started. The PACS computerization phase is in pipeline at Meghalaya and Chhattisgarh States
- **Punjab State Cooperative Agricultural Development Bank:**

Implementation of customized CCBS at 89 Branches of Punjab State Cooperative Agricultural Development Bank is in progress. 53 primary units are performing day-to-day operations. The bank is engaged in providing loan/advances for Long Term and fall under LTCCS

- **Financial Institutions / Corporations at National / State level:** Implementation and customization of CCBS for the head office and three branches of Delhi Financial Corporation is in progress. Automation process of National Scheduled Castes Finance and Development Corporation (NSFDC) has been initiated
- **Treasury Banks:** Exploring State Bank of Sikkim for banking as well as treasury operations

## FINANCIAL INCLUSION SUPPORT

- DBTL support
- Inclusion of the schemes like Pradhan Mantri Suraksha Bima

Yojana Scheme, Pradhan Mantri Jeevan Jyoti Bima Yojana Scheme and Pradhan Mantri Jan-Dhan Yojana

- Interface with Bank on Move and Point of Sale
- Better monitoring of agriculture and non-agriculture loans
- Support for cashless Dhan-Kharidi in Chhattisgarh
- SMS alerts for every transactions on registered mobile numbers

## AWARDS & RECOGNITION

NIC-CCBS project has been appreciated nation-wide and has been receiving several awards since its inception. Prominent awards include 6th eNorth East Award 2016, SecureIT 2015 Award, CSI-Nihilent e-Governance Award 2014 and SKOCH' 2014 - Merit of Excellence.

## WAY FORWARD

CCBS has currently been implemented at more than 200 locations in Meghalaya, Chhattisgarh, Rajasthan & Punjab and under implementation at more than 800+ locations in Rajasthan & Punjab. The development of advanced banking modules like Internet banking, Mobile Banking, Mobility Banking (Bank on Move), Business Intelligence, Open APIs, Workflow Configuration, Cloud Computing, Aadhaar based integration and development of multi-lingual module is in process.

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