

## **AMCS: Improving Process Efficiency at DCS Level**

The future of India Dairy Cooperative rests on the foundation of prosperous village level institutions. Strengthening of the dairying as business focuses on expanding and reinforcing the cooperation and interdependencies at every level through innovative technology. NDDB remains committed to assist these institutions to strengthen their business and provide a greater market access to small milk producers. Village level institutions are the most critical component in the entire Dairy Value Chain which touches the life of millions of the small dairy farmers on a daily basis. Effective, efficient and transparent operation at the village level collection system is of utmost importance to ensure happy and satisfied producer members.

Automatic milk collection units have been in existence for over two decades and have transformed the milk collection arena in the country. There have been large scale changes in the AMCS during this period. They have changes from initial standalone DOS based solution integrated with Weigh scale and Milkotester with external cards to the current generation ones which are available in wide variety of choices. These choices includes choice of Operating system (Windows, Android) and also standalone or with limited data transfer capabilities. These changes have tried to make the system more transparent for the dairy farmer.

### **AMCS Application**

Operations at the village level needs to be transparent for ensuring faith of the farmer on the system. To further improve the efficiency and transparency, NDDB has developed a robust, integrated, multi-platform, multilingual software solution for complete operations including financial inclusion at Dairy Cooperative Society level. The solution is integrated at Union/Federation/National level to enable transparency and improve efficiency of operations. The solution is completely based on Open Source technology stack.

The software includes Application at DCS Level on windows, Linux and android platforms coupled with Portal at multiple levels. The system also provides android applications one each for farmer, DCS Secretary and Dairy Supervisor to provide information relevant to them. The application covers the complete operation of DCS (Business operations, Financial Accounting, Welfare Schemes, Share transactions, MCM, Audit etc.) apart from providing seamless integration with Union Systems. A single application supports multiple languages and all possible deployment scenarios.

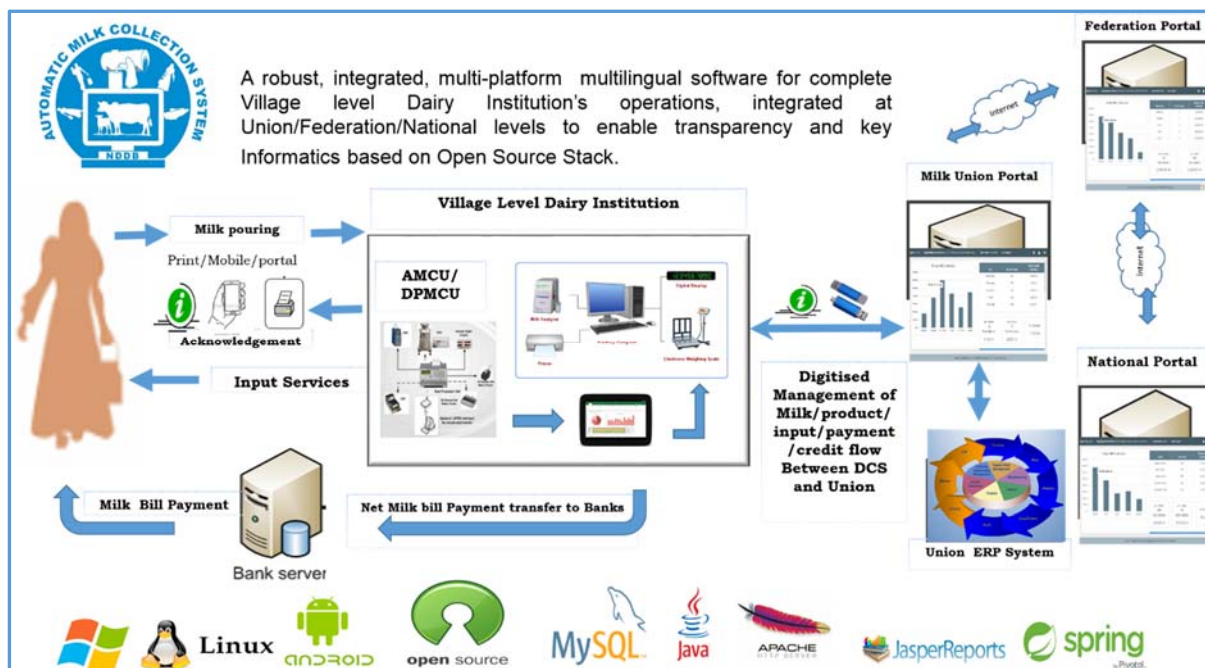
### **DCS Organisation**

The application software supports all available combination of society and member Organisation structure available in the country with little changes in the configurations options. Some of these includes One/Multiple Collection point for both Cow/Buffalo milk for a single/Multiple (group DCS) in a single/multiple premises with/without BMC/tanks. The software captures complete details of all members, pourers as well as management committee members. The application allows for capturing animal holding of members along with banking, education and family details.

### **Core Operations**

AMCS helps in milk procurement from members with minimal manual intervention by automating the milk collection process by integrating connected weigh scale and milk analyser. Multiple equipment can be connected with the application which also support one click changes to collect milk under varying deployment scenarios in order to ensure fast and efficient milk collection. The application also has numerous built-in configurable checks to ensure accuracy and effective control over collection process. AMCS provides for centralized

/ decentralized rate management along with related audit trail and provides for option for milk pricing under various pricing mechanisms. The application provides for local milk sales on cash or credit basis after integrating dynamic credit checks and dispatch to dairy.



The application tracks all essential parameters of bulk milk cooling operations and can also be integrated with data logger to update various parameters from monitoring devices. The applications helps to track diesel consumption as well as monitor complete BMC operations.

This application manages complete product trading operations at DCS level for local or central supplies of products along with managing rates, unit conversion, trade and consumer schemes and complete tracking and traceability of entire order to cash cycle.

## Support Operations

The application provides for organising meetings and managing complete meeting attendance, minutes and action taken records. Application also supports complete operations of Share management including transfer, issue certificates etc.

The software provides for managing staff of DCS, their attendance and basic level of salary processing.

## Finance and Audit

AMCS has provisions for periodic milk billing taking into account all other advances and trading with members to generate the net payable amount. The amount can be directly transferred to pourer bank account after integration with relevant banking system on case to case basis.

The entire application is integrated with accounting and all transactions in the application updates all necessary and relevant accounting entries in real time. The system provides for all necessary financial transactions as well and helps in preparation of necessary consolidated annual financial statements.

The software caters to rule based centralised audit mechanism to track all exceptional transactions to ensue reliability in the operations.

## **Portals**

The village level application system is tightly integrated with Central Union Portal for two way data synchronization on real time basis. All the transactions are updated at the central portal in real time basis to help improve the decision making at central level. The application portal also manages key relevant master data to ensure uniformity across the DCS chain. The portal also provides for interfaces to ensure seamless integration with relevant software at union levels to improve the process integration. The portal also manages the identity of the DCS, which ensures proper installation of software at correct premises after ensuring two factor authentication.

## **Android Applications**

The solution provides an android application for the farmer to provide them the updates about the data pertaining to relevant transaction in real time. The application provides for milk pouring and payment details apart from highlighting exceptions about manual collections or post transaction edit of any record.

An android application is also developed for officers at DCS level and dairy level to support transactions relevant to them. The application supports and provides for all relevant data updates in real time as well as options for relevant transactions including product order to dairy, milk received at plant, audit queries and their responses etc.

This solution would bring in transparency in operations and improve process efficiency. The application will equip farmer and other stakeholders with relevant information in real time to enforce accountability at every step and improve processes. This would lead to better returns to the farmer. The transparency and efficiency brought by the application is certain to strengthen the faith of the milk producer in the system and also reduce transaction cost for the cooperatives.