

*Editorial***Editorial Note on Dairy Industry Innovations****Deepak Parson ***

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EDITORIAL

India is the greatest producer and user of milk and milk products in the world. Despite this, India confronts a scarcity of milk and milk products due to rising demand from the country's rapidly developing middle class.

The National Dairy Plan Phase I (NDP-I), a Government of India Central Sector Scheme backed by the National Dairy Support Project (NDSP), aims to enhance milk production and market access for milk farmers, both of which are required to satisfy rising milk demand. The NDP-I is being implemented with a total investment of around US\$350 million, of which the Bank has provided a US\$219 million credit through the NDSP.

The NDP-major implementing agency is the National Dairy Development Board (NDDB). NDP-I is being implemented at a decentralised level by around 150 implementing agencies (EIAs) across the nation.

The project's innovative procurement techniques and improvements in upstream milk supply chains:

Strengthening the supply chain for milk procurement in villages: In India, there are over 15 million milk producers who are members of approximately 150,000 local dairy cooperatives. Because milk is perishable, any flaw in the upstream supply chain might lead to milk spoiling before it reaches the processing plants.-

Challenges include

Detecting the presence of potential adulteration calculating the milk buy price for each of the milk producers in real time at the purchasing point ensuring milk producers maintain cleanliness when transporting milk to collecting locations.

To tackle these issues, the NDSP provided funding for EIAs to acquire and install Bulk Milk Chillers (BMC) at village milk collecting locations, which save money on transportation, operations, handling, and processing. EIAs also acquired standardised Automated Milk Collection Units (AMCU) and Data Processor-based Milk Collection Units (DPMCU) at collection centres, as well as accompanying IT systems, to streamline milk collection and testing for quality of the milk delivered. Kits for testing for adulteration were also provided. These EIAs also bought Milk Cans and distributed them to producers in order to guarantee that milk was delivered to collection sites in a sanitary manner. Approximately \$50 million has been contributed to date to improve the upstream supply chain. Infrastructure for milk collecting and bulking at the village level has also aided in the speedier payment of milk farmers.

The NDSP also supported the creation of new village-level

cooperatives in order to bring in additional milk producers. Since the project's mid-point, 23,487 communities have been covered, with 660,935 new milk producers organising. This component is expected to provide yearly financial gains of US\$38 million once the NDSP is completed.

Framework agreements for decentralized procurement of equipment

Approximately 150 EIAs in India's 18 participating states require some basic goods on a regular basis (for example, Bulk Milk Cooling Unit). Because of this, and because EIA capacity varies, NDDB suggested using Framework Agreements (FA) for such things. FA was established up centrally by NDDB at NDSP, but it is run by EIAs, who issue purchase orders and distribute payments.

A series of training sessions were arranged for the EIAs because they had never utilised FA before. In compared to National Competitive Bidding or NCB, which takes approximately 120 days, and shopping, which takes around 3045 days, FA takes 1825 days to place purchase orders. It was also observed that FA got an average of 4.9 proposals, which is greater than the average for NCB in most Bank-financed projects. The use of FA has resulted in not only a faster procurement procedure, but also monetary savings of up to 15% in certain situations.

Procurement oversight and quality assurance

The NDDB contracted the services of a recognised inspection firm for quality monitoring of products bought by EIAs under FA agreements as part of the NDSP's decentralised procurement of equipment control. To reduce the risk of any defect in the quality of the goods delivered, a Quality Assurance Plan (QAP) was created for each item, and inspections began as soon as the equipment was manufactured. These proactive efforts resulted in the cancellation of FA for certain suppliers who were unable to conform to specified quality standards, in addition to the identification and correction of faults in products by the supplier. Civil works QA by a third party was also arranged. A NDDB-hired specialist was in charge of monitoring the procurement process' integrity at this stage. NDDB used these insights to develop an EIA capacity-building programme.

A web-based procurement Management Information System (MIS) was created to assist the NDDB in tracking the use of the

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FA setup as well as the overall progress on decentralised procurement. The MIS also made it easier for EIAs to share data with one another.