

## ENERGY CONSERVATION PROCEDURE ADOPTED IN MYSORE MILK UNION

During the year 2000-2001, the energy management and conservation was started under the able guidance of National Dairy Development Board Institute of Rural Management, Anand (IRMA) and Karnataka Milk Federation. They conducted training programmes for the members of all the Milk Unions of Karnataka. This created an awareness among the employees and initiated them into the process of energy conservation. Periodic presentations of the progress were reviewed and valuable suggestions were provided. The steps taken for the conservation of energy by Mysore Milk Union is as given below.

High capacity motors in condensers of ammonia compressors are replaced with lower capacity motors without affecting the performance of the condenser.

Condensate recovery method is adopted.

Installed new pasteurizer with auto temperature control system. Also with new pasteurizer, motor capacity is reduced from 10HP to 6HP.

Installed new curd milk pasteurizer with auto controls in place of batch type curd pasteurizer.

Installed auto temperature controls for old milk pasteurizer.

Replaced two old 5 Klph capacity cream separators with 15HP motor with new 10 Klph cream separator with 10HP motor.

Replaced 7.5HP horizontal type feed water pump of boiler with 3HP vertical pump, thereby saving energy of 4.5HP.

During the year 2003-04, the total investment made for the above, is Rs. 43.00 Lakhs and money saved by conserving energy is Rs.8.58 Lakhs. We expect to recover the amount invested in four years.

Besides the existing fire extinguishers, inspection and certification of the pressure vessels by an authorized person, recognized by the Inspector of Factories and Boilers, has been initiated.

### **ACTION TO BE TAKEN / UNDER PROGRESS.**

- ❖ Providing auto controls to refrigeration system.
- ❖ Installation of mechanical pouch filling machines.
- ❖ Providing automatic firing system controls to Boilers.
- ❖ Insulation of boiler outer surface as well as uninsulated pipe lines.
- ❖ Replacement of old Evaporative ammonia condenser with plate heat exchanger type.
- ❖ Planned Rain Water Harvesting Project
- ❖ Proposed to conduct Energy Audit