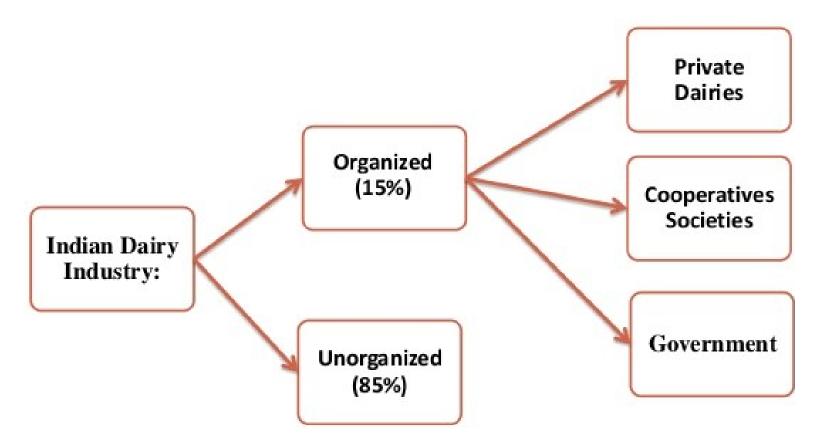


Microbiological quality of milk produced in organized and unorganized sector in India and comparative information in developed world

- India possess largest number of milch animals but their productivity in terms of milk output is very low. This requires appropriate policy measures (improved breeding programme, maximum use of artificial insemination; balance feeding, implementing disease control programme etc.)
- 2. The bacteriological quality of raw milk is also poor compared to developed and western nations.
- 3. Due to existence of unhygienic conditions at the place of milking and then improper subsequent storage conditions give rise to very high bacterial count. By arranging requisite training programmes for milk producers and providing incentives in the form of higher milk price, and technology up gradation in collection and storing raw milk will help to improve quality of milk.

## Structure of dairy industry in India





The organized sector comprises of dairy processing plants owned by cooperatives and private business. The unorganized sector comprises of halwais and milk vendors.

## Microbiological quality of raw milk in India (un-organized sector)

- The Indian practice of allowing the calf to suck a little milk before each milking,
- Practice of milking the animals on the streets for door-todoor delivery,
- Dirty udder and unwashed flanks of animals, particularly buffaloes which wallow in the mud,

Unwashed and contaminated hands of the milker, his

- dirty clothes and insanitary habits e.g., coughing, sneezing and blowing the nose with fingers etc. as well as in disease condition
  Filthy condition of the cattle stable which exposes milk to
- Unclean and defective milk vessels and polluted water supply in the villages.

manure contamination,

Unsynchronized transport arrangements, practice of putting leaves, paper and straw on milk cans to prevent spillage from open cans.
 Addition of dirty water to milk, insanitary conditions of

the open milk shops in streets

- Lack of suitable technical and educational facilities to create better understanding in the people.
  Lack of adequate control by the health authorities are only a few of the many sources and causes which
- unfortunately pollute the supply of market milk in India and help to keep its standard low compared to other countries.

  Few reports of work done on the microbiological quality
- of milk in India expose the defective, filthy and often dangerous methods continue to be employed in the production, handling and distribution of milk.

## Milk Processing in organized sector

- Of the total milk produced, only about 35% is processed. In India, the cooperatives and private dairies have access to only 20% of the milk produced.
- The organized dairy sector refers to the dairy units registered under the Milk and Milk Products Order, 1992, rev. 2002 (MMPO). These dairies have capacity of handling over 10,000 L of milk per day.
- The organized dairy sector has a good share in milk products market. But the products manufactured are mostly western-type in nature like table butter, cheese and different types of milk powders. Even though the organized sector has entered the market of indigenous milk products like ghee, shrikhand and paneer, these markets are mostly controlled by un-organized sector. The organized sector, especially co-operative dairy sector, disposes large portion of milk as processed liquid milk and only surplus is converted into products.
- As only limited amount of milk is processed and handled by organized sector, there exists a vast growth potential.

## Milk Processing in un-organized sector

- Approximately, 34% of the milk is sold in the unorganized market while 46% is self-consumed. This is in comparison to most of the developed nations where almost 90% of the surplus milk pass through the organized sector.
- The unorganized dairy sector comprises numerous, small and/or seasonal milk producers/traders that are not registered under the MMPO.
- They are involved in selling raw liquid milk, boiled liquid milk as well as manufacturing and selling mainly indigenous milk products like peda, burfi, rosogulla, khoa, paneer, ghee etc., usually at the local level, but have a major share in these milk products.
- There are no official records on number of such unorganized dairy units.

The organized dairy sector has been paying increasing attention on improving quality of products. Enforcement of rules is also concentrated mostly on this sector, while the unorganized dairy sector largely remains unattended. As a result business operators in the unorganized sector pay little importance to quality, except some reputed sweetmeat shop owners who maintain relatively good quality standards.