Performance Monitoring in a Dairy Farm

Some Points:

- Minimum 30% of animals in production should be of first lactation.
- First lactation animals should produce at least 70% of Milk in the farm in any given time.
- Individual cows should have at least 280 days lactation period.
- Minimum 60% of the cows in the herd should breed within 60-90 days after previous calving. Cows breeding after 140 days or more should not be in any case more than 5%.
- There should not be a single death due to contagious diseases.
- Calf mortality up to 6 months of age should not be more than 5% per year.
- Non functional teat should not be more then 1% of the total (Total teats = Number of cows x 4)
- Total cost on feed should not exceed 70% of net income through sale of milk.
- At any given time, Seventy percent (70%) of animals should be in milk where as 20% should be dry pregnant and 10% should be dry empty.
- On any given day, average days in milk (of all animals in milk) should be 150 to 160 days: On any day, count the number of days (respect to each animal) in milk from date of calving and take the average for all the animals in milk.
- Sixty percent (60%) of the animals should breed upon first insemination (A I) it self.

Some Tips:

- Every year try to improve the daily average milk yield by 15 to 20% (Achievable only through good management)
- Use semen of those bulls which can give progenies with at least 1.5 times of potential of milk production than your herd average, but in any case it should not have the capability of giving progenies with more than twice the potential of milk production. (e.g. if your herd average is 3000 liters per lactation, use bulls having potential of giving progenies with 4500 to 5500 liter herd average NOT bulls having potential of producing progenies giving 6500 liters or above)
- Give incentive to the labor for correct detection of heat (estrous), Good growth rate of calves, feed and fodder saved etc.
- Cull non-profitable animal e.g. Animals with breeding problem, Animals producing not up to the average. Every year cull 20-30% of animals from the herd and replace them from own grown young stock. Do not cull animals if you do not get better replacement. A regular breeder can be retained even if it is producing 20% less then herd average.
- If animals are required to be purchased for replacement:
  - Purchase them from within 20 –25 kms area.
  - Know their Sire
  - Take utmost care that they are health

(Courtesy: http://kashvet.uni.cc/)
Hygienic Milk Production: Focus On Quality

- Have definite schedule within the herd for daily milking and always stick to it.
- Clean the byre at least half an hour before milking.
- Milking pots or cans should be thoroughly clean and dry. Ensure that such pots are round in shape and without any joints.

- Wash the udder with lukewarm water, in which you can add few crystals of potassium permanganate. (Amount sufficient to change the color)
- Massage (light) the udder while washing.
- Ensure that person entrusted with the job of milking is aware of importance of personal hygiene: clean hand and trimmed nails are must.
- Dry the udder with clean cloth from the tip of the teat upward.
- Always ensure that milking is performed with full hand method (Not with folded thumb), quickly, completely and comfortably (Animal should feel comfortable). Milking should be by gentle squeezing of teats NOT by dragging or giving jerks to teats.
- Complete the process from washing to Milking within 8 minutes.
- After milking dip the teats in disinfectant solutions e.g. 1% "Instaclean Solution"

Some Tips:

- Always milk animals in calm and quite atmosphere preferably play light music (if possible)
- Animals that have recently calved and animals giving more milk should be milked first then the animals giving less milk or in the last phase of lactation. Animals with diseases or with mastitis should be milked separately at the end.
- Animals giving up to 10 liters of milk should be milked twice a day. The frequency needs to be increased to thrice in case of production ranging from 12-15 liters. Employ two persons for simultaneous milking in case the production is more then 16 liter per day.
- Milk from animals with medication in teat (s) should not be mixed with other milk.
- Milk should be strained through muslin cloth (Four layers) or through thin nylon mesh. Cool the milk (by putting ice around the milk can) and transport it to the retail center or collection center of the cooperative society as early as possible.
- Ensure that, water used in cleaning of utensils is clean and free from contamination.

Milk is a good media for growth of microorganism. A single contamination may render it unfit for human consumption. Low quality affects shelf life of the milk besides there may be change in flavor, taste, or nutrient composition. Quality production ensures profitability as you can get premium price for quality milk besides you can also create good will amongst your customers. (Enhanced brand image)

(Courtesy: http://kashvet.uni.cc/)
Government of India through its various nodal agencies is trying its best not only to increase milk production in the country but also to create awareness for quality control at various levels of production. Note that only quality can make us a world leader in Milk production. This is also essential for survival of the domestic industry in the light of changing market scenario.

(Courtesy: http://kashvet.uni.cc/)