



Technology in Dairy Farming

Ahmed Osam Shalaby

Professor, Mansoura University, Egypt

*Corresponding author. E-mail: aosmanshalabye@yahoo.com

Received 9 June 2021; Accepted 23 June 2021; Published 30 June 2021

There have been several advancements in the technology taking place throughout the world. The technology has been enough beneficial to the Dairy industry even. This has made the work of the dairy farmers easy and it is also timesaving.

Robotic milking equipment is one of the applications of robotics in dairy farming. Using this many cows can be milked at a same time. These machines wash, massage, and milk cows in a way that ensures maximum comfort for them. Here the cows can be milked at any time, it reduces the labour costs. It takes 5-8 minutes to milk a cow. This process is totally hygienic.

If the farmer has to look on a large herd of cattle it would be difficult for him to do so. This can be done by drown more efficiently. Drowns used here have long battery life and fly autonomously. They are even used to monitor the health and any other medical emergencies too. There are also other devices like RFID tags, Fit bits, Collar technology, Facial recognition technology, Swinging cow brushes. These are used to track the whereabouts, identify the inactive cows. There are also digitak feed monitoring solutions which help to detect the quality of feed, manage feed inventory and understand cattle's feeding pattern. This even helps to design diet for individual cow based on the weight, milk quality and yield and there by improve the productivity.

The Dairy farming has a disadvantage that it produces the Greenhouse gases which leads to global warming. This manure can be used to enrich the soil, which in turn can provide nutrients to the plants, thus by using this method we can even prevent the use of fertilizers. The potential of dairy biotechnology lies in the areas such as increasing disease resistance in livestock,

scientific feeding of cows, embryo transmit technology, artificial insemination, development of new molecules and vaccines for prevention and disease management of animals, dairy enzymes/proteins/probiotics, food-grade bio-preservatives, etc.

Swinging cow brushes are one of the gadgets which comforts the cows by brushing their body. This helps in improving the blood circulation among the cow and makes them stress free and healthy. There has been development of many apps where it made easy to sell and buy the milk and others milk products ,this software are also useful to track the location, data storage, profit calculation, alerts for cattle health activity.

Milk analysers are the devices used to check the quality of the milk. These are fit to milk meters and are helpful to detect the changes in the milk production and gives the warnings of health problems like mastitis, ketosis, nutritional deficiencies. So that the problem can be rectified and necessary action can be taken.

Milk contains many natural enzymes, and other enzymes are produced in milk as a result of bacterial growth. Enzymes are biological catalysts capable of producing chemical changes