



Benefits of Precision Livestock Farming

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Introduction

Precision livestock farming (PLF) is a method of rearing livestock that uses contemporary technologies to collect data on each animal on a farm and use that data to optimize management techniques by lowering input costs or enhancing overall farm -productivity. While being aware of and responsible for its environmental effects, PLF enables farmers to improve production, expand their farms, enhance productivity and satisfy the rising demand for animal products. The PLF focuses on the use of information and communication technology (ICT) to boost livestock production efficiency while also promoting improved animal and human welfare. If the PLF's primary adoption concerns are resolved, it has the potential to transform the livestock industry. As livestock production intensifies, precision farming improves the farmer's capacity to maintain contact with specific animals. Using PLF, a lot of data can be gathered quickly, which will help in monitoring animal welfare.

Benefits of precision livestock farming

PLF's fundamental tenet is the streamlining of animal data gathering and subsequent interpretation in order to quickly remedy any problems that are discovered. When animal monitoring is automated, data is continuously logged for each individual animal, making it possible to identify behavioral changes, detect estrus, identify early disease and forecast disease among other things. This enables the farmer or farm manager to pinpoint the problem and create solutions in line with it.

On farms that keep expanding in size, precision livestock farming is a clever technology that makes it possible to monitor individual animals more carefully. The health of animals must be the primary concern in livestock production, not only because it affects human health, but also because each animal has an



inherent right to exist in a healthy environment. Precision livestock farming techniques recognize this concept and aim to improve the health and welfare of animals by utilizing technologies for disease detection and early warning systems.

The PLF technology also lessens the negative effects of farming operations on the environment. A significant contributor to environmental problems like global warming and deforestation is livestock raising. While there is technology in place to limit methane emissions from farms, boosting farm productivity ensures that more results can be obtained on less land, which helps to lessen the significant deforestation caused by livestock farming.

It is impossible for a farmer to keep track of all the animals as the number of farmers' declines and the number of animals on a farm rises. PLF makes it feasible by minimizing farm work and providing farmers with simple access to vital and trustworthy information. Automatic feeders, GPS tracking, and other technologies further reduce the need for many farm laborers. Because of the decrease in farm labor, the farm is more scalable, more productive, and more profitable.

Conclusion

Precision livestock farming has a great deal of potential for addressing the industry's current urgent problems, such as the rising demand for livestock products, the declining number of farmers, the scarcity of available land, and environmental concerns. The two most crucial effects on a farmer's level are a rise in productivity and profitability as well as the capacity to devote his or her limited time to only the most crucial tasks. Technologies for precision livestock farming have been tried and tested, and they are commercially available for individual farmers to employ in accordance with their demands. Moreover, precision livestock farming holds forth the promise of a future where both animal welfare and food security are guaranteed thanks to big data analytics and the rapid growth of technology.

