The development of precision livestock farming (PLF) on dairy farms modifies the duration of work, the content and the nature of the tasks carried out by farmers, their mental workload, and the relationship between farmers and their animals. However, if the tools are not adapted to farmers' needs and skills, labour, PLF can also lead to negative impacts on farmers and animals. It is therefore critical to consider the different dimensions of farmers' work to facilitate their adoption of these new technologies.

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THE IMPORTANCE OF AGRICULTURAL MAINTENANCE

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Abstract. The article describes the importance of farm machinery maintenance activities to avoid delays in vital agricultural processes. It highlights the main aspects of maintenance management to increase work efficiency in your farm facility.

Keywords: maintenance activities, agricultural processes, assets, farming equipment, advance planning.

Agriculture relies heavily on physical assets, including machinery, mobile equipment, and buildings. It's important to keep everything running properly in order to avoid delays in vital agricultural processes. Seeding, harvesting, fertilizing and other processes are bound to strict timelines, and the equipment used to carry them out needs to be ready for operation on time. As such, maintenance plays a vital role in keeping farms going year after year.

The role of maintenance in agriculture is to ensure farm equipment operates when it's needed. Machines used in agricultural processes must be ready for operation on time – otherwise, there could be significant losses to the farm as a whole [1].

In addition, facilities meant to process and store foodstuffs must be kept safe, clean, and structurally sound in order to guarantee that the farm's product is safe for consumption. Specifically, agricultural maintenance fulfills these purposes:

- preventing breakdowns and accidents;
- keeping planting, fertilizing, harvesting, and so forth on schedule;
- maintaining the quality of end products by calibrating thermometers, sensors, etc.

Maintenance activities in agriculture are very diverse. They include maintenance and repair of machines, equipment and vehicles, maintenance of farmyards and buildings, silos, bins, and tanks, maintenance of electrical installations, as well as maintenance of drainage and irrigation systems and roads. The types of assets that need to be kept up depend on the farm's size and level of specialization. Because of the wide variety of maintenance tasks on farms, there are many different hazards involved [2].

There are some factors that contribute to the high number and the severity of the accidents in farming. Farmers often carry out a lot of maintenance work by themselves. This increases the risk of accidents because, on the one hand, the farmer may not have competences in specific maintenance tasks and on the other, machines and vehicles in agriculture are becoming more and more sophisticated, thus requiring qualification in maintenance and repair.

Farming equipment can be either mobile (tractors, harvesters, and plows) or fixed in place (conveyor belts, mixers, pasteurizers). Regardless, each piece of equipment needs to be checked on a regular basis to make sure it operates reliably.

The exact frequency with which you'll need to perform routine checks on your equipment depends on its level of usage, weather conditions, applications, etc.

Every so often, the fluids used in equipment should be changed out as well, like when they begin deteriorating or accumulating contaminants.

Some of the fluids farmers need to check on include: engine oil (daily), transmission fluid (daily), coolants (annually), hydraulic fluid (every couple of years).

Lubrication is a vital aspect of keeping farming equipment running efficiently and reliably. Typically, any moving parts on your equipment will need greasing on a periodic basis. Lubrication time frames vary for each piece of equipment, your general climate conditions – for instance, extremely wet conditions can drastically reduce lubrication intervals – and the level of usage it sees.

To keep machines operating efficiently, various filters are used to clean contaminants out of fluids, such as fuel and lubricants. Oil filters are typically changed whenever you switch out the oil. Air filters, need to be replaced as often as they get clogged.

Routine checkups are recommended for bearing maintenance, as is regular lubrication. The time intervals for bearing checks depend on your equipment and hours of usage, how well you manage its lubrication, and your surrounding climate.

Vehicles and moving equipment all need their own routine upkeep, and those tasks are often simple and straightforward. For instance, vehicles may need spark plugs and batteries changed out every so often.

Cleaning is another important task that should be carried out on a regular basis. Simple cleanup tasks can be done daily, while more thorough scouring is often handled weekly or monthly.

Advance planning for maintenance tasks can help prevent accidents by blocking out a specific time for the task to occur –such as when machinery isn't in use – and by making sure you have the right tools on hand. Planned maintenance also helps reduce the incidence of unplanned maintenance tasks that may result from a machine breaking down.

Maintenance plays a vital role in agriculture by keeping equipment in reliable, running shape. With sound planning and safety practices, farmers can carry out maintenance tasks on their equipment and buildings with minimal risk to their safety.

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EXTRAORDINARY WAYS OF USING HIGH-TECH DRONES IN SMART AGRICULTURE

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Abstract. The article is devoted to the development of drone technology to assist with agriculture in new extraordinary ways. It considers prospects for the use of precision farming.