

## Innovative livestock technologies: making livestock farming more animal-friendly, sustainable & competitive

*3-Point Action Plan for the EU to unleash the full benefits of these technologies*

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Agriculture in Europe faces a number of important challenges: it needs to become more sustainable and productive, while it must at the same time remain profitable for farmers. This is particularly true for **livestock farming**. Modern and innovative livestock equipment and technologies are important parts of the solution to address and overcome these challenges. **To unleash the full benefits of these technologies dedicated EU support should be made available as explained in this paper.**

### **Innovative livestock technologies: clear advantages for animal welfare, the environment, & farmers**

Innovative livestock technologies include a wide variety of machines, farm management systems and other devices used for livestock farming. They range from advanced feeding systems to cleaning and milking robots. Technologies like these are available and beneficial for all types and sizes of farms. In the last years these technologies have progressed rapidly and now have proven benefits for the environment, animal welfare and farmers' competitiveness, as outlined in the examples below:

- **Animal welfare can be improved** by using technologies that contribute to early detection of diseases. This allows for earlier treatment of animals, making treatment more effective at an early stage and this way reducing animal sickness.
- **The environmental impact of livestock farming can be reduced significantly** by using new technologies that diminish emissions of livestock housing. This can be done by, for example, installing air cleaners on animal houses. In this way, air in the animal houses is chemically or organically 'cleaned' before it leaves the barn. These air cleaners can reduce ammonia emissions by up to 90% and significantly reduce the emissions of Particulate Matter. Another example is reducing ammonia and greenhouse gas emissions by installing a system which scrapes the manure from the floors.
- **Precision livestock farming technologies** used, for example, in milking robots allow for a better adjustment of feeding and treatment to each animal. This results in a higher milk yield with the same feed consumption. In the end, this will reduce the total feed consumption in the sector. Besides agricultural land absorbing CO<sub>2</sub>, part of the global greenhouse gas emissions in agriculture results from the production of animal feed. Using animal feed more efficiently will help to **reduce the carbon footprint of livestock farming**.
- The same precision livestock farming technologies will **increase the competitiveness of farms**. Farmers will need less feed to produce the same milk yields, meaning costs will go down.

- **Working conditions for farmers will be enhanced** as certain tasks can be automated and management software will provide support to assist in their operations. For instance, robots that are used to milk and feed cows will lower the workload and provide more flexibility to farmers. Moreover, this improves the attractiveness of farming which is important for young farmers in particular.
- Modern livestock technologies will increase productivity and optimise production. As demand for animal products is expected to increase significantly in the coming decades, the livestock technologies can play an important role in contributing to **feeding the growing world population**.
- **Advanced farm managements systems** on livestock farms will make it easier to trace product in the food supply chain. Increase traceability has a **positive impact on food safety** in Europe.

## EU support is needed to unleash full potential of innovative livestock technologies

Many innovative livestock technologies are readily available for farmers across Europe, while others are still being developed. However, certain structural drawbacks lower the uptake and further development of these beneficial technologies. To reap the full benefits of innovative livestock technologies for society, animals and farmers CEMA calls on the EU to acknowledge the benefits of modern livestock technologies and provide support. In particular CEMA asks the EU to follow the below 3-Point Action Plan to unleash the full potential of these technologies:

### 1. EU legislation must not hamper the development of innovative livestock technologies by setting disproportionate requirements

This is particularly important in the field of technical legislation and legislation concerning big data where rapid developments can be expected. The circumstances under which these technologies are used can be different as for other machinery or these new technologies are a combination of various technologies. This should be taken into account when developing EU legislation. One concrete example is the possible revision of the EU's Machinery Directive which should consider the specificities of robots used in animal houses that occasionally need to cross public road. With respect to big data CEMA believes the current legal framework is sufficient for the challenges of the future. On data sharing by livestock technologies CEMA, COPA-COGECA and FertilizersEurope worked on a code of conduct that will boost trust between partners and promote the sharing of data. This consortium believes that no mandatory legislation is necessary to enforce data sharing.

### 2. The EU should support research on precision livestock farming and big data in livestock farming

There is significant potential to further develop technologies in the field of precision livestock farming, internet-of-things and big data. However, resources for development are limited for the manufacturers, especially considering the large number of SMEs active in the agricultural machinery industry. Therefore, it is important that research on precision livestock farming and big data receives the necessary support at EU level by including these topics in EU funding programmes such as Horizon 2020.

### **3. Support innovative livestock technologies with proven benefits in the next CAP**

The Common Agricultural Policy (CAP) includes at the moment 'green' direct payments for agricultural practices beneficial for the climate and the environment. These payments so far focus on arable farming. However, as explained, livestock technologies can have large benefits for the environment and climate as well. Therefore, CEMA suggest to give farmers the opportunity to use 'green' direct payments to invest in certain livestock technologies that have a clear benefit for the environment. Positive side-effects that fit the CAP objective are the improved competitiveness of farmers and better working conditions for farmers.

#### **About CEMA**

CEMA ([www.cema-agri.org](http://www.cema-agri.org)) represents in total 4,500 manufacturers of agricultural equipment consisting of large multinational as well as numerous small and medium-sized enterprises (SMEs). The sector has a total annual turnover of €26 billion and provides employment for 135,000 people directly in the sector and another 125,000 persons indirectly in the distribution and service network.