

## **A critical review of sustainable radio frequency identification (rfid)-based livestock monitoring and management systems: towards quality products and practices**

### **Abstract**

In the past few decades, technologies on smart farming have been introduced and implemented moderately. Issues such as food security, population growth, climate change, environmental impacts and economical problems have forced the relevant authorities to find new solutions to solve these problems. In this paper, a comprehensive view of the past, current and future RFID technologies are presented. These technologies could be integrated with other technologies such as wireless sensor network, cloud computing and other related technologies to make the process of identifying, tracing, tracking and monitoring individual livestock become more intelligent and productive.

**Keyword:** Smart farming; Animal identification; Farm management; Animal tracking system; Automated monitoring systems