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TOSHKENT AXBOROT TEXNOLOGIYALARI UNIVERSITETI  
NUKUS FILIALI



# «XALQ XO'JALIGI SOHASIDA ILG'OR TEXNOLOGIYALAR TADBIQI MUAMMOLARI»

MAVZUSIDAGI HUDUDiy ILMiy-TEXNIK KONFERENSIYASI

## MA'RUZALAR TO'PLAMI



Chorvachilikda ilg'or texnologiyalar  
va innovatsion yechimlar



Dasturlash, kiber xavfsizlik va qishloq  
xo'jaligi fan sohalari integratsiyasi



Ta'lim va ishlab chiqarishda innovatsiyalar,  
tahlil va prognozlash vositalari



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"Chorvachilik komplekslarini  
elektron boshqarishning mobil  
ilovasini yaratish" innovatsion  
loyiha doirasida olib borilgan  
ilmiy-amaliy tadqiqotlar  
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## **A GENERAL OVERVIEW OF MOBILE APPLICATION USAGE IN ANIMAL HUSBANDRY**

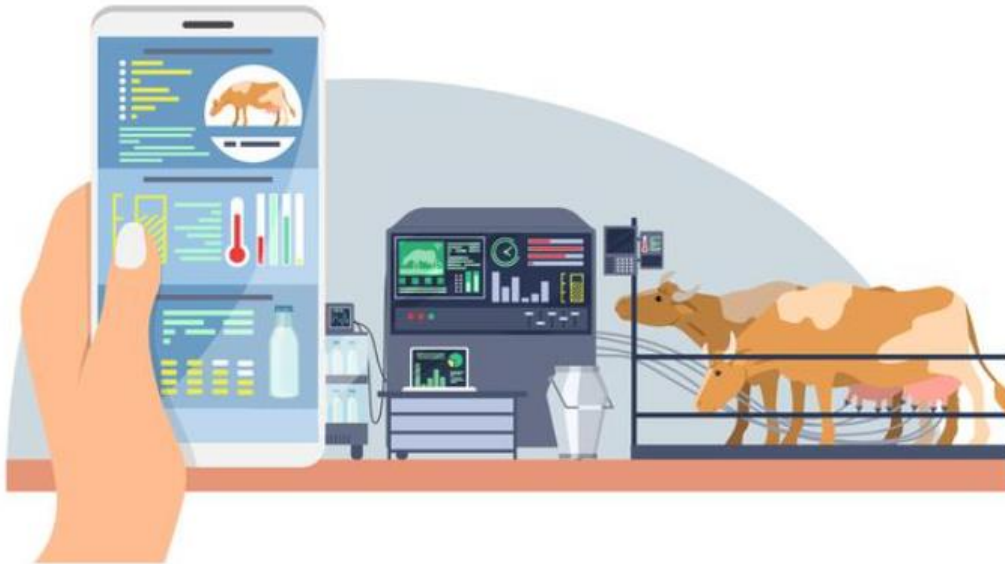
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**Abstract.** The advancement of mobile technology has opened new avenues for improving efficiency and productivity in various sectors, including animal husbandry. This article explores the burgeoning trend of utilizing mobile applications in the field of animal husbandry to enhance management practices, health monitoring, and overall agricultural sustainability. The study investigates the diverse range of mobile applications designed for livestock farming, covering aspects such as nutrition management, disease detection, breeding strategies, and data-driven decision-making.

Additionally, the study examines the role of data analytics and real-time monitoring facilitated by mobile applications in optimizing resource allocation, preventing diseases, and improving the overall well-being of livestock.

**Keywords:** Animal husbandry, agricultural sector, mobile applications, remotely monitor, sensors, GPS, record-keeping, medical history, breeding records, weather forecasts, market prices, animal health records, cyber-attack, secure, Internet, artificial intelligence, machine learning technologies, early detection of diseases, management.

**Introduction.** The advancements in technology have greatly impacted various industries, including the agricultural sector. The use of mobile applications in animal husbandry has revolutionized the way farmers manage their livestock. With the increasing demand for animal products and the need for sustainable farming practices, the usage of mobile applications has become crucial in modern animal husbandry.



This article aims to explore the various ways in which mobile applications are used in animal husbandry, their benefits, challenges, and the potential for future development.

**Benefits of Mobile Applications in Animal Husbandry.** Mobile applications have numerous benefits in animal husbandry, making them an essential tool for modern farmers. One of the primary advantages is the ability to remotely monitor and manage livestock.

Through the use of sensors and GPS technology, mobile applications can provide real-time data on the location, health, and behavior of animals. This allows farmers to identify and address any issues promptly, leading to better animal welfare and productivity [4].

Moreover, mobile applications also offer features such as record-keeping, which allows farmers to track and manage important information about their livestock, such as breeding records, medical history, and feed consumption [6].

This data can be easily accessed and analyzed, providing valuable insights for making informed decisions and improving overall farm management.

In addition, mobile applications also provide access to weather forecasts, market prices, and other relevant information, enabling farmers to plan and strategize effectively. This can help in reducing losses and increasing profits, making animal husbandry a more sustainable and profitable business.

You can consider the cattle management by the example of Vac App [5].

**Challenges and Limitations.** Despite the numerous benefits, the usage of mobile applications in animal husbandry also presents some challenges and limitations. One of the significant challenges is the cost associated with acquiring and maintaining the necessary technology. Many small-scale farmers may not have the financial resources to invest in mobile applications and the required equipment. This can create a gap between large and small-scale farmers, affecting the overall development of the industry.



**Figure 1.** Locating and monitoring mobile app



**Figure 2.** Locating and monitoring mobile by the example of sheep

Furthermore, the lack of technical knowledge and skills among farmers may also hinder the successful adoption and usage of mobile applications. Training and support are essential for farmers to utilize the full potential of these applications, but this may not always be available or accessible.

Data privacy and security is another concern when using mobile applications in animal husbandry. Farmers need to share sensitive information such as animal health records and financial data, which can be vulnerable to cyber-attacks if the application is not secure.

**Future Developments.** Despite the challenges, the potential for further development and advancement in mobile applications for animal husbandry is immense. With the increasing availability of affordable smartphones and internet connectivity, the usage of mobile applications is expected to grow significantly in the coming years.

There is also a growing demand for sustainable and ethical farming practices, which can be achieved through the use of mobile applications. For instance, applications that provide information on the origin and production process of animal products can help consumers make more informed and ethical choices.

Future mobile applications can also integrate artificial intelligence and machine learning technologies to provide more accurate and predictive data for farmers. This can help in early detection of diseases, improved breeding programs, and efficient resource management.

**Conclusion.** In conclusion, the usage of mobile applications in animal husbandry has brought numerous benefits and has the potential for further development. The ability to remotely monitor and manage livestock, record-keeping, access to information, and improved decision-making are some of the advantages offered by these applications. However, challenges such as cost, technical knowledge, and data security need to be addressed for the successful adoption and usage of mobile applications in animal husbandry. With the rapidly evolving technology, it is essential for farmers to embrace and adapt to these advancements to ensure the sustainability and growth of the animal husbandry industry.

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## CHORVACHILIKDA IOT QURILMALARIDAN FOYDALANISH VA MA'LUMOTLAR TAHLILINI TIZIMLASHTIRISH

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**Annotatsiya.** Global qishloq xo'jaligi sektorida Narsalar Interneti (Internet of Things - IoT) texnologiyalarining paydo bo'lishi bilan transformatsion o'zgarishlar jadal amalga oshirilmoqda. Ushbu maqolada chorvachilik sanoatida IoT qurilmalaridan foydalanishni o'rganilgan va chorvachilikni boshqarishni yaxshilash uchun ma'lumotlar tahlilini tizimlashtirish yondashuvlari keltirilgan. Chorvachilikda IoT qurilmalarining integratsiyasi chorva mollarini yanada samarali nazorat qilish va boshqarish imkoniyatini beradi, hayvonlar farovonligini yaxshilash, resurslardan foydalanishni optimallashtirish va umumiy mahsuldorlikni oshirishga yordam beradi.