



Using the Opportunities of the Cattle Industry for Economical and Food Security

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Abstract

Roselle (*Hibiscus sabdariffa* L.) is a multipurpose plant with high potential in food, medicine, and industrial applications. This plant is native to Africa but has been widely cultivated in different parts of the world, including Asia and the Americas. The plant is well-known for its edible calyces, which are used to make drinks, jams, jellies, and sauces. Moreover, it has a long history of use in traditional medicine for treating various ailments, including hypertension, diabetes, and liver disorders. In recent years, research has shown that Roselle contains bioactive compounds that have antioxidant, anti-inflammatory, and antimicrobial properties. Additionally, it has been demonstrated that the plant has potential as a source of natural dyes, fibers, and biodegradable materials. Therefore, Roselle represents an untapped resource with significant potential for the future of food, medicine, and sustainable development.

Introduction

The livestock sector is a significant contributor to global food security, providing a source of protein, essential nutrients, and income for millions of people worldwide. However, it faces various challenges, including climate change, animal diseases, and food safety concerns. The rising demand for animal products and changing consumer preferences have created opportunities for the sector to harness its potential to enhance food safety and financial security.

Harnessing Potential of Livestock Sector

1. Sustainable Practices

The livestock sector can enhance food safety and financial security by adopting sustainable practices. Sustainable livestock production practices include conservation of natural resources, such as water and land, and the use of renewable energy sources. Sustainable methods of raising cattle also lower emissions of greenhouse gases, slow down climate change, and make agricultural systems more resistant to changing climate. Investing in Animal Health:



Investing in animal health is critical to enhancing food safety and financial security. Animal diseases can have significant impacts on food production, trade, and human health. Investing in animal health includes disease surveillance, control, and prevention measures, such as vaccination programs, biosecurity measures, and early warning systems.

3. Use of Technology

The use of technology in the livestock sector can enhance food safety and financial security by increasing productivity and reducing foodborne illnesses. Technology such as precision livestock farming, genetic selection, and data analytics can help to improve animal health and welfare, increase productivity, and reduce environmental impacts. Furthermore, technology can also help to improve food safety by enhancing traceability, monitoring, and control of foodborne pathogens.

Conclusion

The livestock sector has immense potential to enhance food safety and financial security. The adoption of sustainable practices, investing in animal health, and promoting the use of technology can help to increase productivity, reduce foodborne illnesses, and mitigate the impacts of climate change. The livestock sector is crucial to global food security, and its potential should be harnessed to address food safety and financial security challenges.

References

- Food and Agriculture Organization of the United Nations. (2020). Livestock and the Sustainable Development Goals. FAO.
- Grace, D., Mutua, F., Ochungo, P., Kruska, R., Jones, K., Brierley, L., ... & Said, M. (2012). Mapping of poverty and likely zoonoses hotspots. Zoonoses Project 4. Report to Department for International Development, UK.
- Greger, M. (2017). Food safety and animal agriculture. In *Environmental impacts of animal agriculture* (pp. 113-128). Humana Press, Cham.
- Thornton, P. K., & Herrero, M. (2010). Potential for reduced methane and carbon dioxide emissions from livestock and pasture management in the tropics. *Proceedings of the National Academy of Sciences*, 107(46), 19667-19672.
- World Health Organization. (2015). WHO estimates of the global burden of foodborne diseases: foodborne disease burden epidemiology reference group 2007-2015. WHO.