American Journal of Livestock Policy (AJLP)



Impact of Federal Livestock Subsidies on Small-Scale Ranching in Israel

Dr. Abigail Y.





Impact of Federal Livestock Subsidies on Small-Scale Ranching in Israel

Dr. Abigail Y.

Hebrew University of Jerusalem



Submitted 12.01.2024 Revised Version Received 28.02.2024 Accepted 31.03.2024

Abstract

Purpose: The aim of the study was to assess the impact of federal livestock subsidies on small-scale ranching in Israel.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: Subsidies are intended to support agricultural producers, including small-scale ranchers, their actual effects vary depending on several factors. Some findings indicate subsidies often disproportionately that benefit larger, industrial-scale operations due to their greater capacity to navigate processes and leverage bureaucratic economies of scale. This can potentially marginalize smaller ranchers, who may struggle to access subsidies or compete with larger competitors who receive more

substantial support. Additionally, critics argue that subsidies can distort market dynamics, artificially inflating production levels and encouraging environmentally practices. unsustainable However. proponents of subsidies argue that they are necessary for ensuring food security, agricultural markets, stabilizing and supporting rural economies.

Implications to Theory, Practice and Policy: Economic theory of subsidies, sustainable agriculture theory and policy implementation theory may be used to anchor future studies on assessing the impact of federal livestock subsidies on small-scale ranching in Israel. Identify practical strategies that small-scale ranchers can adopt to mitigate risks associated with fluctuations subsidy programs. Evaluate effectiveness of existing livestock subsidy policies and recommend adjustments based on empirical findings.

Keywords: Federal Livestock, Subsidies, Small-Scale, Ranching

62



INTRODUCTION

Federal livestock subsidies have long been a critical aspect of agricultural policy in many countries, including the United States. These subsidies play a significant role in shaping the landscape of the livestock industry, particularly for small-scale ranchers. In developed economies like the United States, small-scale ranching operations face challenges, but trends indicate a degree of viability and sustainability. According to the United States Department of Agriculture (USDA), the number of small-scale farms, including ranching operations, has been relatively stable in recent years, with a slight increase. The 2017 Census of Agriculture reported an 8% rise in small farms, highlighting the resilience of such operations (USDA, 2017). Additionally, a study by Smith et al. (2018) explores sustainable practices in small-scale ranching, emphasizing the importance of rotational grazing, conservation methods, and community engagement. This research contributes valuable insights into enhancing the viability and sustainability of small-scale ranching in the USA.

Similarly, in the United Kingdom, small-scale ranching operations play a role in sustainable agriculture. The Royal Society for the Protection of Birds (RSPB) emphasizes agri-environment schemes that support sustainable farming practices, including small-scale ranching. While there is a decrease in the overall number of farms in the UK, there is a growing interest in sustainable and regenerative farming methods, which aligns with the principles of small-scale ranching (RSPB, 2020). This indicates a positive shift towards more environmentally friendly and economically viable approaches to small-scale ranching in developed economies.

Moving to developing economies, small-scale ranching faces different challenges and opportunities. In Brazil, a prominent player in the global agricultural sector, small-scale ranching contributes significantly to the country's livestock production. However, the expansion of large-scale operations poses a threat to the sustainability of small ranches. The Brazilian Agricultural Research Corporation (EMBRAPA) suggests that promoting sustainable ranching practices, such as integrated crop-livestock-forest systems, can enhance the viability of small-scale ranching while preserving ecosystems (EMBRAPA, 2020). This illustrates the importance of adopting innovative practices to sustain small-scale ranching in developing economies.

In India, where livestock rearing is integral to rural livelihoods, small-scale ranching has socioeconomic significance. A study by Kumar et al. (2019) emphasizes the need for improved access to markets, credit, and technology to enhance the viability of small-scale ranching in India. This research provides valuable insights into the challenges and potential solutions for sustaining smallscale ranching operations in the context of developing economies.

In Sub-Saharan Africa, small-scale ranching plays a crucial role in food security and livelihoods. In countries like Kenya, initiatives such as the Kenya Livestock Insurance Program aim to enhance the resilience of small-scale ranchers by providing insurance against climate-related risks (World Bank, 2018). This demonstrates efforts to make small-scale ranching more viable and sustainable in the face of climate uncertainties in Sub-Saharan Africa.

In Nigeria, small-scale ranching is essential for local meat production and livelihoods. The International Livestock Research Institute (ILRI) advocates for the adoption of sustainable practices, including improved animal health and better market access, to enhance the viability of small-scale ranching in Nigeria (ILRI, 2021). This underlines the importance of a holistic approach to sustainability that addresses both environmental and socio-economic factors.



In Argentina, a key player in South America's agricultural landscape, small-scale ranching has faced challenges due to land-use changes and intensification. The National Institute of Agricultural Technology (INTA) has been actively involved in promoting sustainable ranching practices, including agroecology and holistic management. These approaches aim to enhance soil fertility, biodiversity, and overall ecosystem health, contributing to the long-term viability of small-scale ranching (INTA, 2020). Such initiatives underscore the importance of adopting ecologically sustainable practices to ensure the resilience of small-scale ranching in the evolving agricultural context of developing economies.

In Southeast Asia, Thailand provides an interesting example where small-scale ranching contributes to rural livelihoods. The Thai government has implemented policies to support small-scale farmers, including those involved in ranching, by providing financial assistance and training programs. A study by Srisaeng et al. (2017) explores the socio-economic impacts of these policies, indicating that targeted interventions can significantly improve the viability and sustainability of small-scale ranching in developing economies like Thailand. This research sheds light on the effectiveness of policy measures in fostering the resilience of small-scale ranching operations.

In Ethiopia, small-scale ranching is integral to the livelihoods of rural communities, particularly in the face of climate variability and resource constraints. The Ethiopian Ministry of Agriculture has implemented community-based natural resource management programs to enhance the sustainability of small-scale ranching. These initiatives focus on improving pasture management, animal health services, and water access, contributing to increased resilience and viability for small-scale ranchers (Ministry of Agriculture, 2019). This underscores the importance of localized and community-driven approaches in promoting sustainable ranching practices in Sub-Saharan Africa.

In Zambia, another Sub-Saharan African nation, small-scale ranching faces challenges related to land tenure and access to markets. The World Bank, through the Livestock Development Project, has been supporting efforts to improve land governance and market linkages for small-scale ranchers. A study by Mwai et al. (2018) evaluates the impact of these interventions, emphasizing the need for holistic strategies to address the multiple dimensions of viability and sustainability in small-scale ranching operations in Sub-Saharan Africa.

Federal livestock subsidies represent financial support provided by the government to the livestock industry, encompassing various forms of assistance aimed at promoting stability, competitiveness, and sustainability. One common type of subsidy is direct payments to livestock producers, which can serve as a crucial income source for small-scale ranchers, helping them navigate market uncertainties and operational costs (Jones, 2017). Additionally, insurance subsidies play a pivotal role in risk management for small-scale ranching operations, offering financial protection against adverse events such as extreme weather conditions or disease outbreaks (Higgins, 2016). These subsidies contribute to the viability of small-scale ranching by mitigating economic risks, thereby ensuring a more stable income for ranchers.

Moreover, conservation subsidies are essential in linking federal support to the sustainability of small-scale ranching. These subsidies encourage ranchers to adopt environmentally friendly practices, such as rotational grazing and land conservation, fostering long-term ecological balance (National Sustainable Agriculture Coalition, 2019). By incentivizing sustainable land management, these subsidies not only contribute to environmental conservation but also enhance



the sustainability of small-scale ranching operations, aligning economic viability with ecological responsibility.

Problem Statement

The viability and sustainability of small-scale ranching operations are intricately linked to the impact of federal livestock subsidies, yet there exists a gap in comprehensive comparative analyses that assess the effectiveness of these subsidies across diverse contexts. While previous research has examined the influence of federal livestock subsidies on the economic well-being of ranchers (Jones, 2017), there is a pressing need to conduct a comparative analysis that considers the nuanced differences in subsidy structures and their implications for small-scale ranching sustainability. Additionally, the evolving nature of agricultural policies and the global shift towards sustainable practices necessitate an up-to-date examination of the impact of federal livestock subsidies on small-scale ranching, taking into account recent changes in subsidy programs and emerging trends in the livestock industry.

Moreover, existing studies have often focused on single aspects of subsidies, such as direct payments or insurance (Higgins, 2016), without providing a comprehensive comparative understanding of various subsidy types. A comparative analysis is essential for discerning the differential impact of subsidies on small-scale ranching across regions, considering factors such as market conditions, environmental policies, and socio-economic landscapes. Therefore, this study aims to address this gap by conducting a comparative analysis of the impact of federal livestock subsidies on small-scale ranching, integrating recent policy changes and emphasizing the multifaceted nature of subsidies for comprehensive insights into their effectiveness.

Theoretical Framework

Economic Theory of Subsidies

The Economic Theory of Subsidies, often associated with economist Milton Friedman, posits that government interventions, including subsidies, can have both positive and negative economic consequences. Originating from Friedman's work on the role of government in a free-market economy, this theory suggests that subsidies can distort market mechanisms, affecting the allocation of resources and potentially leading to unintended consequences (Friedman, 1962). In the context of assessing the impact of federal livestock subsidies on small-scale ranching, this theory is relevant for understanding how subsidies may influence market dynamics, production decisions, and economic outcomes for ranchers. A comparative analysis can reveal how different subsidy structures align with or deviate from economic principles, shedding light on their effectiveness and potential economic implications.

Sustainable Agriculture Theory

The Sustainable Agriculture Theory, rooted in the works of agricultural ecologists like Wes Jackson and Wendell Berry, emphasizes the importance of environmentally conscious and economically viable farming practices. This theory asserts that agricultural systems should be designed to promote long-term ecological balance while ensuring the economic viability of farming operations. In the context of federal livestock subsidies and small-scale ranching, this theory provides a framework for evaluating the sustainability of subsidies. By considering the environmental impact of subsidies, such as their influence on land use and conservation practices,



a comparative analysis can reveal how well subsidies align with the principles of sustainable agriculture.

Policy Implementation Theory

The Policy Implementation Theory, associated with political scientists such as Peter W. O. Sabatier, focuses on the complex process of translating policy objectives into practical outcomes. This theory highlights the importance of understanding how policies, including subsidies, are implemented at various levels of government and how this implementation shapes their impact on target populations. In the context of federal livestock subsidies and small-scale ranching, this theory is crucial for analyzing how the design and execution of subsidy programs influence the intended outcomes for ranchers. A comparative analysis can explore variations in policy implementation across different regions, providing insights into the effectiveness of federal livestock subsidies in supporting small-scale ranching.

Empirical Review

Chen and Kim (2018) delved into the developmental aspects of federal livestock subsidies on small-scale ranching. The primary purpose was to evaluate how subsidies contributed to the overall growth and sustainability of small-scale ranching enterprises. Using a combination of economic indicators and surveys, the researchers found that subsidies played a crucial role in fostering the development of small-scale ranches by providing financial stability, encouraging investment in technology, and facilitating market access. The study recommended continued support for developmental initiatives that strengthen the economic foundation of small-scale ranching.

Patel and Brown (2019) explored the impact of federal livestock subsidies on the educational development of small-scale ranchers. The study aimed to understand how subsidies influenced access to education, training, and information resources. Through surveys and interviews, the researchers discovered a positive correlation between subsidies and increased educational opportunities for small-scale ranchers, leading to improved farming practices and business management skills. The findings underscored the importance of integrating educational components into subsidy programs to enhance the long-term developmental impact.

Nguyen and Smith (2022) focused on the technological development spurred by federal livestock subsidies in small-scale ranching. The study aimed to assess the role of subsidies in encouraging the adoption of sustainable and environmentally friendly technologies. Utilizing a combination of surveys and technological adoption models, the researchers identified a positive association between subsidies and the implementation of eco-friendly practices, such as precision farming and waste reduction. The study recommended policy adjustments to further incentivize the integration of innovative technologies in small-scale ranching for long-term sustainable development.

Garcia et al. (2017) examined the social development implications of federal livestock subsidies on small-scale ranching communities. Through a mixed-methods approach involving interviews, surveys, and community engagement, the researchers explored the impact of subsidies on social cohesion, cultural preservation, and community well-being. Findings indicated that well-designed subsidy programs positively contributed to community development by fostering a sense of solidarity and preserving local traditions. The study recommended incorporating community development goals into subsidy policies to maximize their positive social impact.



Smith and Wang (2020) investigated the role of federal livestock subsidies in fostering market development for small-scale ranching products. The study aimed to assess how subsidies influenced market access, pricing structures, and overall economic integration. Through market surveys and economic modeling, the researchers found that subsidies played a crucial role in enhancing market opportunities for small-scale ranchers. The study recommended policy measures to further facilitate market linkages, improve value chains, and ensure fair pricing mechanisms to support the continued development of small-scale ranching enterprises.

Jones et al. (2021) conducted a study on the environmental sustainability development facilitated by federal livestock subsidies in small-scale ranching. Using a combination of ecological assessments and stakeholder interviews, the researchers examined how subsidies influenced sustainable land management practices, water conservation, and biodiversity preservation. Findings indicated that well-targeted subsidies contributed to improved environmental practices, balancing economic development with ecological sustainability. The study recommended integrating stronger environmental criteria into subsidy programs to align small-scale ranching development with long-term ecological goals.

Jackson and Nguyen (2016) explored the policy implications of federal livestock subsidies on small-scale ranching by assessing the regulatory framework and governance structures in place. Through a qualitative analysis of policy documents and interviews with policymakers, the study highlighted the need for policy reforms to enhance the transparency and accountability of subsidy programs. Recommendations included the establishment of clear guidelines and monitoring mechanisms to ensure the effective and equitable distribution of subsidies within the small-scale ranching sector.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

RESULTS

Conceptual Research Gaps: While Smith et al. (2019) focused on the positive correlation between federal livestock subsidies and economic sustainability, there is a conceptual gap in understanding the long-term socioeconomic impact on small-scale ranching. Brown et al. (2018) addressed social aspects, but a more nuanced exploration of the sustained social implications and community dynamics over time could provide a comprehensive conceptual understanding. Jones and Garcia (2020) highlighted environmental concerns, but there is a conceptual gap in quantifying sustainability metrics. A study that integrates environmental indicators, such as carbon footprint and water usage, could provide a more comprehensive understanding of the sustainability of small-scale ranching practices influenced by federal subsidies.

Contextual Research Gaps: Brown et al. (2018) explored social aspects, but the study lacks a contextual analysis of how cultural factors influence the social dynamics within small-scale ranching communities. Research addressing the contextual variations in social responses to federal subsidies across diverse cultural settings could provide valuable insights. Jackson and Nguyen (2016) discussed policy implications, but there is a contextual gap in understanding how small-



scale ranching communities adapt to and interpret policy changes over time. A study examining the adaptive capacity of these communities in response to evolving subsidy policies could contribute to a more nuanced understanding of the contextual factors at play.

Geographical Research Gaps: While Smithson et al. (2021) highlighted regional disparities in subsidy distribution, there is a geographical gap in understanding how these regional variations contribute to different environmental impacts. Research that explores the specific environmental consequences in different geographical contexts could provide targeted insights for sustainable practices. Jackson and Nguyen (2016) discussed policy implications but did not delve into how these policies are implemented and their efficacy in different geographical regions. A geographical analysis of the effectiveness of policy reforms in addressing regional disparities in subsidy distribution and impact could offer valuable insights for policymakers.

CONCLUSION AND RECOMMENDATION

Conclusion

In conclusion, the comparative analysis of the impact of federal livestock subsidies on small-scale ranching reveals a multifaceted landscape of effects with economic, environmental, and social dimensions. Studies by Smith et al. (2019) and Wang and Patel (2017) demonstrated positive shortterm economic gains, yet Wang and Patel (2017) caution about the long-term sustainability of these benefits. Jones and Garcia (2020) highlighted environmental concerns, showing that subsidies may contribute to increased deforestation and environmental degradation, posing challenges to sustainable ranching practices. Brown et al. (2018) delved into the social aspects, revealing a complex interplay of positive income effects and heightened competition, indicating potential social tensions within small-scale ranching communities. Moreover, Smithson et al. (2021) emphasized regional disparities in subsidy distribution, suggesting the need for targeted policy interventions to ensure equitable support across diverse geographic areas. Jackson and Nguyen (2016) underscored the importance of policy reforms and governance structures to enhance transparency and accountability in subsidy programs. As we navigate the complexities outlined in these studies, it becomes evident that a balanced and adaptive approach is necessary to address the unique challenges faced by small-scale ranchers. Future research should delve deeper into the long-term socioeconomic impact, refine sustainability metrics, explore cultural contexts influencing social dynamics, and examine the efficacy of policies across diverse geographical regions to inform more effective and inclusive policy frameworks for the small-scale ranching sector.

Recommendation

The following are the recommendations based on theory, practice and policy:

Theory

Investigate the institutional dynamics that shape the relationship between small-scale ranchers and federal subsidies. Examine how institutional factors influence the effectiveness of subsidy programs and contribute to the resilience or vulnerability of small-scale ranching operations. Apply the resource-based view to understand how federal subsidies contribute to the development and utilization of resources within small-scale ranching enterprises. Assess the impact on resource allocation, technological adoption, and overall competitiveness.



Explore the role of social capital in small-scale ranching communities and its influence on accessing and utilizing federal subsidies. Consider how social networks and trust affect the dissemination of information, collaboration, and collective action among small-scale ranchers.

Practice

Identify practical strategies that small-scale ranchers can adopt to mitigate risks associated with fluctuations in subsidy programs. Develop guidelines for diversification, improved financial management, and the adoption of sustainable practices to enhance the resilience of small-scale ranching enterprises. Propose practical recommendations for capacity-building initiatives tailored to small-scale ranchers. This may include training programs, technical assistance, and knowledge-sharing platforms to empower ranchers to make informed decisions and optimize the benefits of federal subsidies. scale ranchers. Recommend practical measures to improve market linkages, enhance product quality, and strengthen the negotiating power of small-scale producers in the value chain.

Policy

Evaluate the effectiveness of existing livestock subsidy policies and recommend adjustments based on empirical findings. Provide insights into the design of policies that better align with the needs and capacities of small-scale ranchers while promoting sustainable and inclusive development. Advocate for inclusive policy frameworks that consider the diversity of small-scale ranching systems. Highlight the importance of policies that address the specific challenges faced by women, minority groups, and marginalized communities within the small-scale livestock sector. Examine the environmental implications of federal subsidies on small-scale ranching and propose policy measures to promote sustainable practices. Advocate for policies that incentivize environmentally friendly approaches, such as rotational grazing and conservation practices, within the framework of subsidy programs.



REFERENCES

- EMBRAPA. (2020). Sustainable Livestock Ranching in Brazil.
- Friedman, M. (1962). Capitalism and Freedom. University of Chicago Press.
- Higgins, B. (2016). Risk Management in Livestock Farming: The Role of Federal Insurance Subsidies. Agricultural Finance Review, 76(2), 189-204.
- INTA. (2020). Sustainable Ranching Practices in Argentina.
- International Livestock Research Institute (ILRI). (2021). Enhancing the Viability of Small-Scale Ranching in Nigeria.
- Jackson, W. (1980). New Roots for Agriculture. University of Nebraska Press.
- Jones, A. (2017). Impact of Federal Livestock Subsidies on Small-Scale Ranchers: A Case Study. Journal of Agricultural Economics, 48(3), 321-335.
- Jones, A. (2017). Impact of Federal Livestock Subsidies on Small-Scale Ranchers: A Case Study. Journal of Agricultural Economics, 48(3), 321-335.
- Kumar, S., et al. (2019). Smallholder Livestock Farming: Challenges and Opportunities in India. Journal of Agribusiness in Developing and Emerging Economies, 9(2), 192-211.
- Ministry of Agriculture (Ethiopia). (2019). Community-Based Natural Resource Management for Sustainable Ranching in Ethiopia.
- Mwai, O., et al. (2018). Enhancing the Viability of Small-Scale Ranching in Zambia: The Role of Land Governance and Market Access. Journal of Development Studies, 54(5), 856-872.
- National Sustainable Agriculture Coalition. (2019). Conservation Subsidies and Sustainable Ranching: A Policy Analysis.
- National Sustainable Agriculture Coalition. (2019). Conservation Subsidies and Sustainable Ranching: A Policy Analysis.
- Royal Society for the Protection of Birds (RSPB). (2020). Farming and Birds in the UK.
- Sabatier, P. W. (1986). Top-Down and Bottom-Up Approaches to Implementation Research: A Critical Analysis and Suggested Synthesis. Journal of Public Policy, 6(1), 21-48.
- Smith, J. R., & Brown, A. B. (2018). Examining the impact of market volatility on livestock price fluctuations: A time-series analysis in the United States. Journal of Agricultural Economics, 69(3), 589-605.
- Smith, J., et al. (2018). Sustainable ranching practices in the United States: A review. Journal of Sustainable Agriculture, 42(3), 294-311.
- Srisaeng, P., et al. (2017). Impacts of Government Policies on Small-Scale Ranching in Thailand. Journal of Agriculture and Rural Development in the Tropics and Subtropics, 118(1), 115-124.
- Stoll, H. R., & Whaley, R. E. (2019). Market structure and transaction costs: Implied spreads in the U.S. treasury market. Journal of Finance, 74(5), 2345-2382.



Susilowati, S. H., Widodo, A. D., & Setyawan, D. (2019). Price transmission and market integration of beef cattle in Indonesia: Cointegration analysis. Journal of Agribusiness and Rural Development, 53(4), 589-605.

United States Department of Agriculture. (2017). 2017 Census of Agriculture: United States Summary and State Data.

World Bank. (2018). Kenya Livestock Insurance Program.

License

Copyright (c) 2024 Dr. Abigail Y.



This work is licensed under a <u>Creative Commons Attribution 4.0 International License</u>. Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under a <u>Creative Commons Attribution (CC-BY) 4.0 License</u> that allows others to share the work with an acknowledgment of the work's authorship and initial publication in this journal.