

Research Title: "Navigating Change: Assessing the Impact of Transportation Modernization on Drivers' Livelihoods in Manolo Fortich, Bukidnon"

The research explores the profound effects of transportation advancements on the livelihoods of traditional drivers, specifically jeepney and tricycle operators, in Manolo Fortich, Bukidnon. As contemporary technologies and alternative modes of transportation continue to evolve, these drivers face both opportunities and challenges in adapting to this rapidly changing landscape. The study aims to meticulously examine how the process of modernization influences the livelihoods, incomes, and job security of these drivers operating within Manolo Fortich. By delving into the personal experiences, perspectives, and narratives of these individuals, the research endeavors to shed light on the complex socio-economic repercussions brought about by the modernization of transportation systems within the local community. This investigation seeks to provide invaluable insights into the intricate dynamics and multifaceted implications of this transformative process, offering a nuanced understanding of its impact on the lives and economic well-being of traditional drivers in Manolo Fortich.

Findings from "The Impact of Improved Transport Connectivity on Income, Education, and Health: The Case of the Roll-On/Roll-Off System in the Philippines" (Francisco et al., 2003) suggest that enhanced transport systems, such as the Ro-Ro policy, contribute to higher incomes, increased school attendance, and reduced consumption of alcoholic beverages and tobacco, thereby emphasizing the broader socio-economic benefits of transportation modernization in the Philippines.

Moreover, research by (Agaton et al., 2019) presents a case study evaluating the investment decisions between diesel and electric jeepneys in the Philippines, highlighting the potential of electric vehicles to address air pollution, traffic congestion, and carbon emissions. This study provides insights into the economic viability and optimal investment strategies for transitioning to electric transportation, which can inform policies aimed at promoting sustainable transport solutions.

(Vidhi et al., 2021) explore the social and technological impacts of businesses surrounding electric vehicles, emphasizing the emergence of new business opportunities and the importance of regional governments in facilitating the transition to transportation electrification. Their findings underscore the interconnectedness between technological innovation, business development, and policy frameworks in shaping the future of mobility.

(Ghandriz et al., 2020) investigate the impact of automated driving systems on road freight transport and electrified propulsion of heavy vehicles, revealing the potential profitability of battery electric heavy vehicles equipped with ADS. Their study highlights the synergies between automation and electrification in achieving sustainable transport solutions.

"The Electric Vehicle Revolution: Economic and Policy Implications for Natural Resource Exporters in Developing Countries" by (Jones, 2020) analyzes the outlook for electric vehicle demand and associated raw material usage, emphasizing the development opportunities for resource-exporting countries and the importance of effective policy management to mitigate risks associated with resource extraction and investment.

(Bi et al., 2023) discuss the opportunities and challenges of transport electrification, emphasizing the environmental benefits, lower costs for customers, and positive impacts on the power grid. Their study

underscores the need for comprehensive approaches to address barriers hindering the transition to electric vehicles and maximize the benefits of electrified transport systems.

(Fazil et al., 2024) explores the role of electric two-wheelers in urban mobility ecosystems, highlighting their potential to address congestion, air pollution, and accessibility issues. The analysis emphasizes the importance of policy instruments to facilitate the deployment of electric two-wheelers and promote sustainable urban transportation.

Furthermore (Bayani et al., 2022) review the implications of transportation electrification on environmental benefits, consumer-side impacts, battery technologies, and utility-side impacts. Their findings underscore the need for cleaner electricity generation and effective charging management to maximize the social, economic, and environmental benefits of electric vehicles.

(Tian & Guo, 2019) investigate the impact of electric vehicles on urban power grids, examining the positive and negative effects of electric vehicles on the distribution network. Their simulation study highlights the importance of charging infrastructure and grid management strategies to ensure the stability and efficiency of urban power systems.

(Sandin, 2010) discusses the development of infrastructure to promote electric mobility, emphasizing the role of a well-functioning electricity grid in supporting the transition to electric vehicles. The paper identifies key factors influencing the adoption of electric vehicles and proposes policy priorities to accelerate the energy transition.

Finally (Coppola & Arsenio, 2015) examine the societal changes necessary for transitioning towards an electromobility future, emphasizing the decarbonization targets set by the European Commission and the role of electromobility in achieving sustainable mobility goals. Their analysis highlights

the need for comprehensive strategies to promote electric vehicles and renewable energy sources in Europe.

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