



Academic Journal of Humanities and Social Sciences
Research

**COALITION RESOURCES AND THE WICKED PROBLEM OF TRAFFIC
CONGESTION IN NAIROBI CITY COUNTY KENYA**

Dr. Stanely Ontiri Motieri, PhD





Coalition Resources and The Wicked Problem of Traffic Congestion in Nairobi City County Kenya

Dr. Stanely Ontiri Motieri, PhD

*Department of Public Policy School of Law,
Arts and Social Sciences, Kenyatta
University*

Article History:

Published on: 28/05/2025

DOI:

<https://doi.org/10.5281/zenodo.20432169>

How to Cite: Motieri, S. O. (2025).

Coalition Resources and The Wicked Problem of Traffic Congestion in Nairobi City County Kenya. *Academic Journal of Humanities and Social Sciences Research*, 2(1), 1–13.

<https://doi.org/10.5281/zenodo.20432169>

Abstract:

Purpose of Study: This study examines the influence of coalition resources on the wicked problem of traffic congestion in Nairobi City County, Kenya. It investigates how financial resources, public relations expertise, professional lobbyists, skillful leadership, and formal legal authority enable advocacy coalitions to address this complex urban governance challenge.

Methodology: Adopting a pragmatist philosophy and descriptive design, the study sampled 168 respondents from transport sector stakeholders using simple random and stratified sampling. Primary data were collected via semi-structured questionnaires and interviews, achieving an 81.5% response rate (n=137). Quantitative data were

analyzed using descriptive and inferential statistics.

Findings: Coalition resources demonstrated a statistically significant strong positive correlation with addressing traffic congestion ($r=0.698$, $p<0.01$). Regression analysis confirmed coalition resources as significant predictors ($\beta=0.243$, $t=4.066$, $p<0.001$). Descriptive results showed strong agreement that financial resources enable research and consultancy (mean=4.18), public relations experts foster stakeholder engagement (mean=4.19, highest), professional lobbyists create awareness (mean=4.14), skillful leadership effects policy changes (mean=4.13), research evidence boosts agenda-setting (mean=4.17), and formal legal authority facilitates prudent decisions (mean=4.09). These resources collectively determine coalition operational potency.

Conclusion: The availability and strategic deployment of coalition resources—financial, public relations, lobbying capacity, leadership, and legal authority—are essential for effective advocacy against traffic congestion in Nairobi County. Coalitions must systematically diversify resource bases, prioritizing public relations and professional lobbying to sustain long-term policy influence.

Keywords: *Coalition Resources, Wicked Problems, Media Advocacy, Traffic Congestion, SACCOs, Matatu Welfare Association,*

©2025 By The Authors. This Article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by-nc-sa/4.0/>)



1. INTRODUCTION

1.0 Background of the Study

Wicked problem never keeps still (Ritchey, 2013). A number of problems whereby some threaten the health of human beings have posed a challenge to policy makers in defining and responding effectively to them (Walls, 2018). This difficulty is as a result of defining features which range from undefined causes, heated debate on their understanding, their numerous, demand for collective action, lack of precise planning responses, complexity and framing cumbersomeness among stakeholders who hold strong values and beliefs. These problems more often attract strong professional issues, political and moral issues (Ritchey, 2013). The idea that wicked problem is pegged on stakeholders has resulted to little consensus on what the problem is all about and how to go about it.

In the endeavor of trying to solve one wicked problem, it leads to an emergence of other new forms of wicked problems (Ritchey, 2013). Examples of wicked problem include among others; terrorism, food insecurity, climate change, growing obesity epidemic persistence poverty and biodiversity loss (Walls, 2018). According to Alford and Head (2017) problems such as child protection, global warming, natural disasters and drug abuse despite seeming to be well known challenges, more often lead to further complications. Many a times the source of the wicked problems can be associated with natural world and even social developments. In the recent time for instance, countries who wealthier and politically less repressive have witnessed entry of vast number of refugees. Wicked problems are organizational and social vexed occurrences that linear and traditional approaches fronted by planners fail to address (Ritchey, 2013). The planners fail to solve them because they have consequences that are unintended and they are seriously devious in themselves.

Those issues that seem proliferating in the sense that they are unpredictable, open-ended, intractable and complex sum up to be wicked problems (Alford & Head, 2017). The concept wicked problems emerged as a result of critics directed to rational approaches towards complex issues whereby there was a tendency of overlooking lived experiences of citizens and stakeholders, perspectives and values hence rendering the interventions ineffective (Head, 2023). The interventions to these complex policy programs seem to be impossible because meeting goal-clarity, coordination and levels of information was a tall order. Therefore, exploring the alternatives approaches and nature of these issues requires prudent debate and deliberation for easier solution seeking and problem definition.

Waste management is considered a wicked problem due to the unpredictable outcomes emanating from the interactions of the webs of stakeholders, complex social dynamics and multilayered interdependencies (Salvia et al., 2021). The source of persistent waste problem has been found to lie squarely on the patterns and misalignment of views emanating from between residents and the government, and community-based organizations. Community land rights disputes characterized by resistant to resolution resulting from postcolonial Africa are a classical example of the wicked problem in the contemporary society (Home & Kabata, 2018).



Traffic congestion is a wicked problem bedeviling major cities in the world. In the year 2007 alone, United States of America suffered a huge cost loss of fuel and travel time worth \$ 87.2 billion equivalents to 2.8 billion gallons of fuel consumption and additional 4.2 billion of travel hours (Kono & Joshi, 2019). Similarly, in Japan, a whopping 8 billion travelling hours are lost every year as a result of traffic congestion. In Dar es Salaam Tanzania, traffic congestion consumes an average of 3 out of 10 working days (Mpogole & Msangi, 2016). As a result of this, workers are only able to work for only 1.4 times less the required duration due to loss of 2.5 hours of their time to traffic jams daily. In Accra Ghana, the source of stress, decline in productivity and sales is associated with traffic congestion (Agyapong & Ojo, 2018). The negative spillover is due to poor road designs, road traffic crashes, and the attitude of pedestrians, drivers and traders.

In Nairobi city Kenya, a total of 25.3 million grams of CO₂ (gCO₂e), 6.89 million gCO₂e, 1.82 million gCO₂e, 251, 683 gCO₂e and 181, 054 gCO₂e emissions were associated with private cars, public service vehicles, light commercial vehicles, heavy goods vehicles and motorcycles respectively (Sitati et al., 2022). Gachanja (2015) admits that complete eradication of traffic congestion in the city of Nairobi is an exercise in futility since its not affordable and equally possible. The contributing factors of the traffic congestion scenarios were lack of proper transport planning, lack of effective traffic management and control, inadequate transport infrastructure and increased vehicle ownership and inefficient spatial distribution of land uses. The state above caused by traffic congestion in Nairobi city calls for a panacea whose source is only a combined effort of key and season actor. It is from this perspective the current study examined the causal effect of Advocacy Coalition Framework on the wicked problem of traffic congestion in Nairobi City County, Kenya.

Services of public relations experts and professional lobbyist are accessed by coalitions who are in possession of ample financial resources (Heinmiller, 2016). Coalitions of this nature are able to facilitate successful extensive public education campaigns, offer donations to election campaigns, support research and development and employ full-time administrative staff. This makes financial resources a very crucial element to an advocacy coalition in its policy advocacy endeavors failure to have it can subject a coalition to an uphill battle against those in possession. Similarly, key to effective and successful advocacy among coalitions are skillful leadership for attraction purposes, information about the problem, mobilization troops, course supportive public opinion and formal legal authority to make policy decisions (Sabatier & Weible, 2019).

Despite prowess of Advocacy Coalition Framework in providing solutions and influencing policies in light of coalition resources little is known locally. The empirical evidence in place suggest that ACF is very effective in influencing complex matters in the spheres of environment, energy, public health, education, water, drug and domestic violence. If the same is adopted in the transport sector in Nairobi city County Kenya, solution to ever traffic congestion menace will be achieved. It is from this backdrop the current study is seeking to investigate the influence of Coalition resources on the wicked problem of traffic congestion in Nairobi City County Kenya.

Statement of the Problem

The presence of traffic congestion is a testimony of public policy failure and equally its absence is an indication of things not working as planned (Marohn, 2021). Partially what contributes to



traffic congestion is very simple and straightforward things hence terming it wicked problem. In both rural and urban areas, the phenomenon traffic congestion is a social menace (Jain & Paul, 2020). A number of attempts initiated to manage traffic and traffic congestion have failed to meet the desired goals due to lack of prudent techniques. Travel time and cost is reduced by a better transport system (Vijayalakshmi & Raj, 2023). The net effect of a better transport system is increased economic opportunities that is based on robust economic and behavioral decisions. This menace of traffic congestion requires a policy panacea that relies in advocacy coalition framework having successfully worked elsewhere on environmental, education, energy and climate change policies.

According to Faling and Biesbroek (2019) time, funding and connections are the additional resources required by policy entrepreneurs in establishing cross-boundary linkages with the view of targeting institutions, interests and varying ideas across boundaries. The cross-boundary entrepreneurial strategies employed to influence climate-smart agriculture in Kenya include; venue shopping, multiple framing of the issue, brokerage between coalitions and process manipulation to loop over complex policy making environment. Studies demonstrate dearth of evidence in regard to policy brokers on the wicked problem policies. Majority of the empirical evidence in place present other various approaches to policy solutions but little is known on the extent policy brokers influence the wicked problem of traffic congestion in the city of the Nairobi. It is from this backdrop the current study is seeking to fill this crucial gap by investigating the influence of coalition resources on the wicked problem of traffic congestion in Nairobi City County Kenya.

Specific Objectives: To examine the influence of coalition resources on the wicked problem of traffic congestion in Nairobi City County Kenya.

2. LITERATURE REVIEW

Coalition Resources and Wicked Problem

While on societal resources as sources of trade union power in Poland and Croatia, Butković, Czarzasty and Mrozowicki (2023) conducted a study on the gains and pitfalls of coalitions. The study was conducted during post-2008 crisis period that characterized with limited institutional, organizational and structural power resources. The study findings suggested that erosion of conventional sources of trade union power could not be fully compensated by gains in societal power alone. The study noted that the populist forces seeking to advance their own legitimacy were likely to take up trade union demands if they made a mistake of configuring power resources hence failing to amplify the interests of the workers. The above study was a comparative one whereas the current study is a single case study.

With the view of answering the question on what was the coalition, Lawlor, Metta and Neal (2022) conducted a study on the systematic review of coalitions in community psychology. The study conducted document analysis of articles on coalitions in journals that were giving service to community psychologists. The findings indicated that the wider variety of local level community issues among them stakeholders' diversity characterize the coalitions in community psychology. Further, the survey noted that action coordination, negotiated coordination and knowledge



coordination define coalitions and they are used to address specific problems, goal definition and providing appropriate techniques for solving problems. The study above focused on psychologists' coalitions whereas the current study is focusing on transport sector coalitions.

In Sierra Leone, Hann et al., (2015) conducted a qualitative survey on the subject factors for success in mental health advocacy. Data collection was accomplished through focus group discussions and key informant interviews. The findings from the survey revealed that raising awareness, service delivery training, service user rights, service delivery, supporting policy by the mental health advocacy were all realized through interaction with the government actors, awareness raising and networking factors. The study above focused on mental health whereas the current study is focusing on traffic congestion.

In Nigeria, Olagunju (2015) evaluated traffic congestion in developing countries. The findings of the study revealed that traffic management infrastructure paucity, traffic management institutional arrangement, health implications to road users and road traffic bottlenecks points were the diverse patterns of traffic congestion on that part of the world. The study was however conducted in an international platform therefore its inferences cannot be generalized to the local set up.

In Kenya's Turbo Sub-county, Musundi (2015) explored the subject influence of resource mobilization strategies on the performance of total war against aids youth projects. The phenomenon under investigation was explained by Resource Mobilization Theory and on the other hand descriptive research design gave the roadmap through which the objectives of the study were realized. The findings indicated that strategic planning for resources, resource fundraising and donor outreach made a significant improvement on the performance of TOWA youth HIV and AIDS. The study further noted that Harambee and sports were the special events through which these organizations used to generate resources. The study above was studied in Trans-Nzoia county whereas the current study will be conducted in Nairobi City County.

While directing the focus on actors, Boulle (2019) interests and discursive contradictions shaping the future electricity, investigated the hazy rise of coal in Kenya. The used Political Settlement theory to explain the phenomenon under investigation. The findings suggest that despite civil society broadly resisting the plant, it was given a clean bill of health by the relevant regulatory bodies, big business interests and also it had the backing of the presidency. The study above was conducted in Lamu County and the current study will be conducted in Nairobi City County.

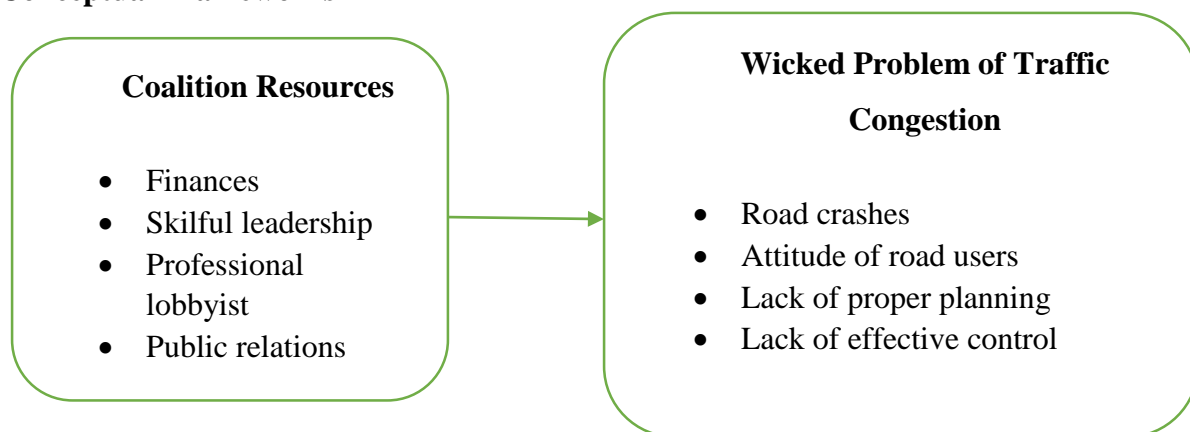
Complexity Theory

The proponent of the theory is Stuart Kauffman of Sante Fe Institute in New Mexico in 1980s. The premises of the theory lie in the hidden behavior of complex systems whether these systems are production lines, organizations, ecosystems or national economy. Complexity theory offers an explanation on how collective behavior is attained through relationship in a firm, system grow, evolve and adapt, a given system or organization interacts with the environment, and initiates negotiation with other entities (Sammut-Bonnici, 2014). Complexity theory emerged to address the malfunctioning of organizations resulting from interconnectedness of various components (Pippenger, 1978). This is achieved through setting the minimum number of components that are required for the system to properly work and also bringing about new designs in a system that will result to efficiency and cost reduction.



The capability of approaching issues with the recognition that they are complex and the process of handling them mucky, earns complex theory an opportunity as the panacea in providing solutions to wicked problems (Turner & Baker, 2019). The theory adopts new approaches in organizing, leading, managing and thinking on wicked problems making it unique as opposed to systems theory that look disconnected from the contemporary issues and that has failed to meet the demands of practice and research. Complexity theory will be the most ideal rational explanation to the wicked problem of traffic congestion from the prism of coalition resources. The theory will be crucial in giving insights on how collective behavior is achieved in the transport sector that will ease traffic congestion in Nairobi City County. The theory will also help the study unpack how the county government employs new approaches purposely to organize, think, lead and manage the wicked problem of traffic congestion with the partnership of other actors.

Conceptual Frameworks



3. RESEARCH METHODOLOGY

The study adopted pragmatism research philosophy as it advocates for the adoption of mixed methods, quantitative or qualitative, it serves as a philosophical program for social research and provides an essential approach to broadly understanding social research (Morgan, 2014). The research was biased towards adopting descriptive research design due to its suitability for the study in the sense that there is no room for manipulation of study subjects but rather have them in their state (Siedlecki, 2020). Therefore, phenomenon coalition resources and the wicked problem of traffic congestion will be described using the descriptive research design. Simple random, purposeful and stratified sampling techniques were employed to select 169 representative sample from SACCOs plying the various routes of the city's estates, senior officials from Matatu Welfare Association, National Transport and Safety Authority, National Transport Services Authority and Ministry of Transport, Usafiri Bora limited, Mazingira Mema group and Smart City Movement Group. Primary data were collected using a questionnaire and an in-depth interview schedule.

4. FINDING DISCUSSION

Demographics



The study targeted 168 respondents sampled from various stakeholders within the Nairobi transport sector. Out of the 168 questionnaires administered, 137 were duly completed and returned, translating to a response rate of 81.5%. The majority of the respondents were male at 65.0%, while female respondents accounted for 35.0%. A larger portion of respondents fell within the 36–45 years’ age bracket at 35.8%, followed by those aged between 46–55 years at 27.7%. Respondents aged below 35 years constituted 20.4%, while those aged 56–65 years and above 66 years accounted for 11.7% and 4.4%, respectively.

In the realms of education, majority of the respondents held graduate-level qualifications at 49.6%. Those with Higher Diploma constituted 34.3%, while certificate holders were the least represented at 16.1%. The study established that majority of respondents had between 7–10 years of experience in the transport sector, constituting 38.0%. Those with over 11 years of experience followed at 23.4%, while respondents with 4–6 years of experience accounted for 27.7%. The least represented group comprised those with less than 3 years of experience at 10.9%. It was revealed that the majority of respondents had been involved in traffic congestion solution initiatives between 7–10 times, representing 37.2% of the sampled population. This was followed by those who had participated 4–6 times at 30.7%. Respondents who had been involved over 11 times constituted 19.0%, while those who had participated less than 3 times were the fewest at 13.1%.

Descriptive Statistics

Influence of coalition resources on the Wicked Problem of Traffic Congestion in Nairobi City County, Kenya

The study sought to investigate the influence of coalition resources on the wicked problem of traffic congestion in Nairobi City County, Kenya. Respondents were presented with statements on a five-point Likert scale to gauge their level of agreement.

Influence of Coalition Resources on Traffic Congestion

Statement	SD f(%)	D f(%)	N f(%)	A f(%)	SA f(%)	Mean	Std
Coalitions get a boost from research evidence in advancing their agenda in agenda-setting.	2.9	5.1	8.8	38.7	44.5	4.17	0.87
Financial resources are key in conducting research, venue creation and outsourcing consultancy.	3.6	4.4	8.8	37.2	46.0	4.18	0.89
Skillful leadership of the coalitions is instrumental in effecting policy changes.	2.9	5.8	9.5	38.7	43.1	4.13	0.87
Professional lobbyists of the coalitions have been relied on to create awareness and advance beliefs.	3.6	5.8	8.8	36.5	45.3	4.14	0.90



Public relations experts promote healthy relationships and engagement with other transport stakeholders.	2.9	4.4	8.0	39.4	45.3	4.19	0.85
Formal legal authority possessed by coalitions helps them make policy decisions prudently.	3.6	5.8	10.9	37.2	42.3	4.09	0.92

Source: Field Data (2024)

The findings revealed that the majority of the respondents strongly agreed that coalitions receive a boost from research evidence in advancing their agenda in agenda-setting (SA=44.5%, A=38.7%), supported by a mean score of 4.17 and a standard deviation of 0.87. Research-based evidence constitutes a formidable resource that enhances the credibility of coalition positions and strengthens their persuasive capacity in policy deliberations.

The study also revealed that the majority of respondents strongly agreed that financial resources are key in conducting research, creating policy venues and outsourcing consultancy services (SA=46.0%, A=37.2%), supported by a mean of 4.18 and a standard deviation of 0.89. The allocation of financial resources determines the operational capacity of advocacy coalitions to sustain long-term engagement with the policy process.

Furthermore, the study revealed that most respondents strongly agreed that skillful leadership is instrumental in effecting policy changes within coalitions (SA=43.1%, A=38.7%), supported by a mean of 4.13 and a standard deviation of 0.87. Competent leadership calibrates coalition strategies to the prevailing policy environment and motivates sustained collective action among diverse membership bases.

The study revealed that the majority strongly agreed that professional lobbyists have been consistently relied upon to create awareness and advance coalition beliefs (SA=45.3%, A=36.5%), supported by a mean of 4.14 and a standard deviation of 0.90. Professional lobbyists serve as the coalitions' frontline agents in navigating complex regulatory landscapes and maintaining institutional access for policy advocacy.

The study further revealed that the majority strongly agreed that public relations experts promote healthy relationships and engagement with transport stakeholders (SA=45.3%, A=39.4%), supported by a mean of 4.19 and a standard deviation of 0.85 — the highest in this section. One interviewee from Usafiri Bora Limited stated: 'Our public relations team has been the backbone of stakeholder engagement; without effective communication strategies, our advocacy work would lack legitimacy.' This finding resonates with Heinmiller (2022), who found that public relations capabilities are among the most decisive coalition resources in determining policy outcomes in complex urban governance contexts.

Lastly, the study revealed that the majority of respondents strongly agreed that the formal legal authority possessed by coalitions helps them make policy decisions prudently (SA=42.3%, A=37.2%), supported by a mean of 4.09 and a standard deviation of 0.92. The possession of formal legal authority confers institutional legitimacy on coalitions and enables them to participate



meaningfully in constitutionally mandated policy processes. This finding aligns with Sabatier and Weible (2022), who noted that legal resources constitute a critical structural asset that enables advocacy coalitions to operationalize their belief systems within the formal policy subsystem.

Correlation Analysis

Pearson correlation analysis was performed to establish the nature and strength of the bivariate relationships between the independent variable (Coalition Resources) and the dependent variable (wicked problem of traffic congestion).

Pearson Correlation Matrix

Variable	Traffic Congestion	Sig. (2-tailed)	N
Coalition Resources	0.698**	0.000	137

****Correlation is significant at the 0.01 level (2-tailed).**

Source: Field Data (2025)

Coalition resources has statistically significant and strong positive correlation ($r=0.698$, $p<0.01$) with the wicked problem of traffic congestion at the 0.01 significance level. These findings suggest that coalition resources are a crucial predictor of the traffic congestion outcome variable, thereby justifying the subsequent regression analysis.

Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	0.412	0.218		1.890	0.061
Coalition Resources (X4)	0.248	0.061	0.243	4.066	0.000

Dependent Variable: Wicked Problem of Traffic Congestion.

Source: Field Data (2026)

The coalition resources predictors ($\beta=0.243$, $t=4.066$, $p<0.001$) registered statistically significant positive relationship with the wicked problem of traffic congestion. This implies that it is the most influential predictor of wicked problem of traffic congestion outcomes. These findings singularly affirm the significant role of coalition resources components in addressing the wicked problem of traffic congestion in Nairobi City County. The findings conform to Butković, Czarzasty and Mrozowicki (2023) erosion of conventional sources of trade union power could not be fully compensated by gains in societal power alone.

5. CONCLUSION AND RECOMMENDATION

The study concluded that the availability and strategic deployment of coalition resources are essential prerequisites for effective advocacy aimed at addressing the wicked problem of traffic congestion in Nairobi City County. Financial resources, public relations expertise, professional lobbying capacity, skillful leadership and formal legal authority collectively determine the operational potency of advocacy coalitions. The study concluded that advocacy coalitions operating in the transport sector in Nairobi must systematically build and diversify their resource bases to sustain long-term policy engagement. Particular emphasis should be placed on public relations capabilities and professional lobbying, as these were identified as the most influential



resource types in shaping positive policy outcomes related to urban traffic congestion management.

The study recommended that transport advocacy coalitions should proactively diversify their resource portfolios by seeking funding from multiple sources, including government grants, development partner financing, private sector sponsorship and membership subscriptions. Investment in professional public relations capacity and skilled lobbying personnel should be treated as strategic priorities, given their demonstrated influence on policy outcomes. Leadership development programs within coalitions should be institutionalized to ensure continuity and strategic coherence in advocacy efforts. Furthermore, coalitions should leverage their formal legal authority to formally participate in County Integrated Development Plan processes, transport policy reviews and legislative engagements, thereby ensuring that their resource investments translate into sustained policy influence.

6. REFERENCES

- Agyapong, F., & Ojo, T. K. (2018). Managing traffic congestion in the Accra central market, Ghana. *Journal of Urban Management*, 7(2), 85-96.
<https://doi.org/10.1016/j.jum.2018.04.002>
- Alford, J., & Head, B. W. (2017). Wicked and less wicked problems: a typology and a contingency framework. *Policy and society*, 36(3), 397-413.
<https://doi.org/10.1080/14494035.2017.1361634>
- Butković, H., Czarzasty, J., & Mrozowicki, A. (2023). Gains and pitfalls of coalitions: Societal resources as sources of trade union power in Croatia and Poland. *European journal of industrial relations*, 29(1), 43-61. <https://ideas.repec.org/a/sae/eurjou/v29y2023i1p43-61.html>
- Boulle, M. (2019). The hazy rise of coal in Kenya: The actors, interests, and discursive contradictions shaping Kenya's electricity future. *Energy Research & Social Science*, 56, 101205. <https://doi.org/10.1016/j.erss.2019.05.015>
- Faling, M., & Biesbroek, R. (2019). Cross-boundary policy entrepreneurship for climate-smart agriculture in Kenya. *Policy Sciences*, 52(4), 525-547.
<https://link.springer.com/article/10.1007/s11077-019-09355-1>
- Gachanja, J. (2015). Mitigating Road Traffic Congestion in the Nairobi Metropolitan Region. <https://repository.kippra.or.ke/items/e1207dfb-2b0a-4398-bc2e-710201fdd5b2>
- Hann, K., Pearson, H., Campbell, D., Sesay, D., & Eaton, J. (2015). Factors for success in mental health advocacy. *Global health action*, 8(1), 28791.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC4685298/>
- Head, B. W. (2023). Wicked problems in public policy. In *Encyclopedia of Public Policy* (pp. 1-8). Cham: Springer International Publishing. https://link.springer.com/rwe/10.1007/978-3-030-90434-0_43-1



- Heinmiller, B. T. (2016). Water policy reform in Southern Alberta: An advocacy coalition approach. University of Toronto Press. <https://doi.org/10.3138/9781487511241>
- Home, R., & Kabata, F. (2018). Turning fish soup back into fish: The wicked problem of African community land rights. *Journal of Sustainable Development Law and Policy (The)*, 9(2), 1-22. <https://ir-library.ku.ac.ke/items/39e38e91-5966-401f-87c7-f73b079dd765>
- Kono, T., & Joshi, K. K. (2019). Traffic congestion and land use regulations: Theory and policy analysis. Elsevier. <https://www.sciencedirect.com/book/monograph/9780128170205/traffic-congestion-and-land-use-regulations>
- Lawlor, J. A., Metta, K. R., & Neal, Z. (2022). What is a coalition? A systematic review of coalitions in community psychology. *Journal of Community & Applied Social Psychology*, 32(1), 3-18. <https://doi.org/10.1002/casp.2554>
- Marohn Jr, C. L. (2021). Confessions of a recovering engineer: transportation for a strong town. John Wiley & Sons. https://books.google.com/books/about/Confessions_of_a_Recovering_Engineer.html?id=niK9zAEACAAJ
- Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative inquiry*, 20(8), 1045-1053. <https://doi.org/10.1177/1077800413513733>
- Mpogole, H., & Msangi, S. (2016). Traffic congestion in Dar es Salaam: Implications for workers' productivity. *Journal of Sustainable Development*, 9(6), 103-110. https://doi.org/10.5539/jsd.v9n6p103?urlappend=%3Futm_source%3Dresearchgate.net%26utm_medium%3Darticle
- Ritchey, T. (2013). Wicked problems. *Acta morphologica generalis*, 2(1). <https://www.swemorph.com/pdf/amg-2-1-2013.pdf>
- Sabatier, P. A., & Weible, C. M. (2019). The advocacy coalition framework: Innovations and clarifications. In *Theories of the policy process*, second edition (pp. 189-220). Routledge. https://www.researchgate.net/publication/309563471_The_Advocacy_Coalition_Innovations_and_Clarifications
- Salvia, G., Zimmermann, N., Willan, C., Hale, J., Gitau, H., Muindi, K., ... & Davies, M. (2021). The wicked problem of waste management: An attention-based analysis of stakeholder behaviours. *Journal of Cleaner Production*, 326, 129200. <https://doi.org/10.1016/j.jclepro.2021.129200>
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8-12. <https://pubmed.ncbi.nlm.nih.gov/31789957/>
- Sitati, C. N., Oludhe, C., Oyake, L., & Mbandi, A. M. (2022). A street-level assessment of greenhouse gas emissions associated with traffic congestion in the city of Nairobi, Kenya. *Clean Air Journal*, 32(1), 1-12. https://scielo.org.za/scielo.php?script=sci_arttext&pid=S2410-972X2022000100006



Walls, H. L. (2018). Wicked problems and a ‘wicked’ solution. *Globalization and health*, 14, 1-3. <https://link.springer.com/article/10.1186/s12992-018-0353-x>

Vijayalakshmi, S., & Raj, K. (2023). *Economic and Environmental Cost of Traffic Congestion in India*. Taylor & Francis. <https://doi.org/10.4324/9781032662299>