

## **Policy Implementation Strategies in Mitigating Food Insecurity in Kenya: A Case of Murang'a County**

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### ***Abstract***

*The process of putting a policy into practice is called implementation. This study intended to examine particular policy implementation strategies intended to reduce food insecurity in Murang'a County. Examining policy implementation approaches in connection to governance, public-private partnerships, and national-county coordination in reducing food insecurity in Murang'a County are the study's key objectives. The research was based on the theory of complex adaptive systems as well as on the basis of policy analysis, an approach to the study and evaluation of public policy options in the context of given goals. A descriptive research strategy was employed for both qualitative and quantitative data. A sample of 50 people was randomly selected from a target population of 105 respondents from the Murang'a County Department of Agriculture and Agricultural Extension Officers. SPSS was used to analyze quantitative data to search for linkages or a lack thereof between key variables. This study sought to improve the conceptual rigor, applicability, and thoroughness of implementation techniques that can be applied singly or in combination in policy implementation research and practice. Key findings showed that the food security situation in the country has deteriorated in the last decade and that stability of food supply is Kenya's most important food security challenge. Among key recommendations for the study were to robustly involve the private sector for implementation of policies; and allocation of a clear budget for implementation policies geared towards mitigation of food insecurity. Comparative study in alternate areas of the country was suggested for future studies.*

**Keywords:** *Policy implementation strategies, food insecurity, governance, public-private partnerships, and national-county coordination*

### **1. Introduction**

Food insecurity, according to the definition provided by the Food and Agricultural Organization (2008), refers to the lack of physical or affordable access to nutritious food that meets the dietary needs and preferences of a segment of the population, hindering their ability to lead a healthy and active life. Food insecurity poses a significant challenge for several developing nations, with some making progress in reducing it, while others continue to struggle. Despite this, a few countries have adopted various strategies to address food insecurity, such as growing crops that can withstand drought, using irrigation techniques to increase food production in arid areas, and developing genetically modified foods (Braun, 2007).

Policymaking requires the prior identification of a policy problem. To acknowledge a social issue as a legitimate concern and to convey the necessity for government intervention, it must first be clearly defined. Lowi and Ginsburg (1996, 607) define public policy as "an officially declared objective supported by a sanction, which can be either a reward or a punishment." The implementation of a public policy can take the form of a course of action or inaction, such as a declaration, regulation, act, proclamation, directive, or edict

According to KARI (2010), Kenya, as a developing nation, faces challenges related to food insecurity. The country's agricultural output cannot meet the demands of its growing population due to its heavy reliance on natural weather patterns. This reliance has created a state of food insecurity, implying that the country is likely to experience severe food shortages if there is insufficient rainfall. Additionally, the farmers' reluctance to diversify their agricultural practices has contributed to the food deficit, as they are not inclined to adopt more productive farming techniques beyond growing maize or using pastoralism.

According to the Murang'a County Government (2018), Murang'a County is situated in Kenya and shares borders with Kiambu County to the south, Nyeri County to the north, Embu, Machakos, and Kirinyaga counties to the east, and Nyandarua County to the west. The county spans an area of 2,559 km<sup>2</sup>, with elevations ranging from 914 meters above sea level in the east to 3353 meters above sea level in the west. The county's rivers, which are fed by rain captured by the Aberdares Mountains, are bordered by the county's highest points. Annual temperatures in the county typically range between 10 and 25°C, with an average temperature of 20°C. The county receives between 750 and 1700 mm of rain annually, with less than 750 mm of rain falling per year on average in the county's eastern region. Murang'a County experiences a lot of rain in the months of March, April, and May, with April typically receiving the heaviest rainfall. The months of October, November, and December are typically associated with a brief rainy season (Murang'a County Government, 2018).

Agriculture is a significant factor influencing household income, gross county product (GCP), and food security in Murang'a County. In 2017, the county's gross value added from agriculture, forestry, and fishing was 89,003 million Kenyan Shillings (KSh) (KNBS, 2019a). Seventy-three percent of the county's population practices agriculture, with 95 percent of individuals cultivating crops, 76 percent raising animals, and less than 1% of people fishing and practicing aquaculture (KNBS, 2019e). Approximately 57% of the county's jobs are in the agricultural sector (Murang'a County Government, 2018). Overall, agriculture is a critical aspect of Murang'a County's economy and is closely tied to its residents' livelihoods.

## **2. Research Objectives**

Numerous studies have been conducted on food insecurity, including those on strategic approaches to food security in remote indigenous communities by the Council of Australian Governments (COAG) (2009), Southern African responses to food security and the global food crisis by Hilton (2010), an analysis of global food insecurity by Maede and Rosen (2013), research on Indonesia's food security by Nuncio (2013), and the impact of legal and policy frameworks on food security in Laikipia County by Mbiti (2020). These studies have highlighted the need to protect vulnerable consumers, the importance of domestic production combined with imports, and the gaps that need to be closed in order to increase food and agricultural activities and projects to end food insecurity. Despite this, literature on the precise actions taken to lessen food insecurity in Murang'a County is scarce. To address this gap, the current study aims to identify policy implementation strategies that have been adopted in Murang'a County to mitigate food insecurity. This study aims to fill the

empirical and knowledge research gaps about the contribution of the county administration to the end of food insecurity, specifically focusing on National-County coordination, governance, and public-private partnerships.

The study has three main objectives. The first objective is to determine the function of national and county governance in mitigating food insecurity in Murang'a County. The second objective is to assess the effect of public-private partnerships in mitigating food insecurity in Murang'a County. Lastly, the third objective is to examine how National-County coordination contributes to mitigating food insecurity in Murang'a County.

### **3. Policy implementation strategies**

Understanding the various factors that influence policy implementation is crucial, as failing to consider these factors could lead to implementation failures. Scharpf (1978) argues that the involvement of multiple actors with differing interests and strategies is essential for turning policy goals into actionable plans. O'Toole (2000, 266) defines policy implementation as the process that occurs between the declaration of a government intention to act and the eventual impact of those actions on the world. Hrebiniak & Joyce (2001) suggest that implementation involves a series of interventions aimed at managing performance and achieving predetermined goals through organizational structures, employee behaviors, and control systems. In essence, implementing a strategy involves using policies, systems, institutions, and individuals to achieve specific objectives established by management through the creation of clear rules and procedures.

The focus of this study is Murang'a County in the Central Kenya Region, which is a significant contributor to Kenya's food security due to its commitment to and investment in commercial farming. Enhancing regional food production through this study can have a profoundly favorable impact on the nation's food security and supply, as well as a significant boost to the country's GDP, which can be utilized for improving infrastructure, healthcare, education, and security. Simplifying the policy framework is essential for the region to achieve economic independence and increase agricultural production. This study specifically examines the policy framework for developing, formulating, and implementing food security policies.

The research findings of this study will provide crucial insights for achieving the Sustainable Development Goals (SDGs) that the national government and international organizations are committed to accomplishing. Food is a crucial element of the UN's 17 SDGs, which aim to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture by 2030. Achieving this goal will require significant transformations in global food and agricultural systems.

### **4. Governance and Policy implementation strategies**

(Paudel, 2009) suggests that the implementation of food security policies is a complex and ongoing process that takes various forms in response to institutional and environmental factors. The primary tipping point occurs when government operations are converted into optimal governance practices (Hill & Hupe, 2009). Implementation refers to the actions taken by specific individuals to achieve predetermined objectives outlined in the policy document and is initiated by an executive decision or judicial ruling (Mazmanian et al., 1983; Van Meter et al., 1975). Implementation may also be considered a legislative goal, with a specific action plan defined (O'Toole, 2000). The success of policy implementation is based on the policy statute and its interpretation, which serve as the foundation for successful implementation (Brynard, 2005). The comprehension or ignorance of local bureaucrats or implementing agents can cause significant implementation challenges (James et al.,

2002). Therefore, policy explication is essential in ensuring comprehension of policy and goals at all stages of execution.

Governments have become increasingly aware of the need to translate intentions into action to avoid policy failure. Instead of letting plans entirely or partially fail, governments are exploring strategies to enhance and sustain the policy process, particularly during the implementation phase. Public policies are often compared to "wicked problems," which are challenging to resolve, have multiple plausible causes, and require workable solutions that vary depending on the location and circumstances (Rittel & Webber, 1973). Effective leadership is critical in implementing policy, with individuals in leadership positions providing the clarity and direction required for success. Those in positions of authority should be willing to take calculated risks, not punish legitimate failures, prioritize issues, and abandon ineffective projects when necessary. Despite the importance of top-down change, many organizations struggle with implementation (Kielstra, 2010).

### **5. Public Private Partnerships and Policy implementation strategies**

Holovatyi (2015) emphasized the crucial role of the state's regulatory functions in social, economic, and family activities, stating that the primary objective of the state, including public-private partnerships, is to consolidate contemporary society. In order to meet citizens' requirements, safeguard the interests of consumers and the private sector, and implement public policies rationally, it is necessary to use powerful means to influence the private sector. However, the state's destructive function poses a problem for modern society as it permeates all management areas and undermines the framework of the national economy in light of executive authority. The efficacy of PPP models and their application in implementing state policy and socio-economic development are related to the state-private sector relationship, and the following characteristics define the efficacy of the collaboration:

- The outcome of employing a certain PPP model depends on how much public infrastructure or public services are provided by the private sector. The core of this function is the redistribution of risks that occur during the planning and execution of initiatives of strategic importance. The riskiness of the chosen partnership arrangement also influences the amount of financial benefit for private enterprises (Sharma & Bindal, 2014).
- A successful public-private partnership strategy must integrate several different project finance techniques, including those that are funded from the state budget and others that come from the private sector (Yashchenko, 2018).
- The application of public-private partnership models requires a lengthy period of cooperation between the government and private industry because successful collaboration requires several infrastructure project stages, covering the creation, development, operation, and/or upkeep of fixed assets, as well as private finance (Yashchenko, 2018).

The partnership has been successful in raising employee productivity levels in both the public and commercial sectors by fostering an environment that is conducive to personal growth. Employees are encouraged to advance their professional knowledge and skills through the active integration of emerging technological, technical, and innovative developments into economic unit activities. This has led to a consistent increase in the proportion of the able-bodied populace that is knowledgeable about contemporary advances in science, technology, and innovation and is able to put them to use in daily life (Khytrova et al., 2020). Management choices and the factors that impact the effectiveness of the corporate entity and the chosen PPP model are significantly influenced by the expertise of

staff, the professional standing of experts, and the quality of data assessment (Haiduchok et al., 2020).

## **6. National-County coordination and Policy implementation strategies**

According to Hooghe, Marks, and Schakel (2003), multilevel institutions can be categorized into two types: functional regions with overlapping territories and territorial jurisdictions with multipurpose functions. Institutions at all levels are essential for promoting integration. For example, government departments can be considered functional organizations. Poteete (2012) identifies three main issues with multilevel institutions: misaligned bounds, synchronization issues due to institutional complexity, and unclear responsibility lines. To address poorly aligned institutions, Young (2008) suggests managing these systems with multilevel institutional architectures that are related to functional constraints. Institutional complexity can lead to failure, as different levels of government must agree on policies before implementation. Failure to acknowledge or interact with organizations at different levels can lead to competition between decisions made by different organizations (Poteete, 2012).

The implementation process involves interacting with changing policy situations and intentions. Communication and coordination can be challenging due to governments' desire to impose specific actions on target audiences. Effective and interactive communication is crucial during implementation stages when implementers find it challenging to handle situations (Kiviniemi, 1986). According to the Project Management Institute Inc. (2008), breakdowns in communication management pose the biggest threat to the success of government schemes. Communication planning can identify stakeholders' information and communication needs. The distribution of information is a critical aspect of communication and coordination that requires prompt attention. Role delineation involves clearly defining roles and responsibilities for individuals, groups, and teams, particularly those involved in enacting policies (Giacchino & Kakabadse, 2003).

Difficulties with policy implementation may result from failing to evaluate the results and analyze the strengths and limitations of various systems. This evaluation identifies what works and which policies are effective. It also assesses institutional contexts to ensure that policies align with the nation's priorities and ambitions, maintain internal coherence, and avoid policies competing with or contradicting each other (Stone, 2008).

## **7. Methodology**

In this study, a descriptive research design was utilized to obtain both qualitative and quantitative data to fully achieve the research aims. The use of quantitative research was crucial in ensuring a proper sample size and obtaining accurate and reliable data, while qualitative research was used to reveal emotions, motives, and feelings behind policy implementation techniques to mitigate food poverty. The study delved into the assessments made by County governments in the Murang'a County to obtain enough and authentic data on actual policy implementation strategies directed towards food security. Additionally, the study analyzed relevant literature both locally and globally to provide a contextual and empirical perspective on the results. Random sampling was employed in the selection of Murang'a county government officials and regional policy makers responsible for implementing policies, who made up the study's sample. The use of random sampling helped to ensure that the study's results are representative of the entire population (Shadish et al., 2002).

Structured questionnaires were used in the quantitative interviews, and the researcher tested the validity and reliability of the instruments before data collection. The utilization of both qualitative

and quantitative tools offers advantages that compensate for the limitations of both research methods, allowing one approach's strengths to compensate for the other's deficiencies. According to Best and Kahn (2014), instrument reliability is the consistency level displayed by the instruments or approach. The researcher utilized the test-retest method to establish reliability. The primary goal of the test-retest was to confirm the instrument's content validity based on the responses provided, appropriateness of data requested, language used, and the precision of the instrument's questions.

## **8. Findings and Discussion**

The researcher distributed 50 questionnaires to pre-selected participants, of which 48 were completed and returned, resulting in a response rate of 96%. This rate is considered adequate for the study, as per Mugenda & Mugenda's (2008) classification, which suggests that a response rate of over 50% is good, and over 70% is very good. Thus, the study can draw meaningful conclusions from the responses.

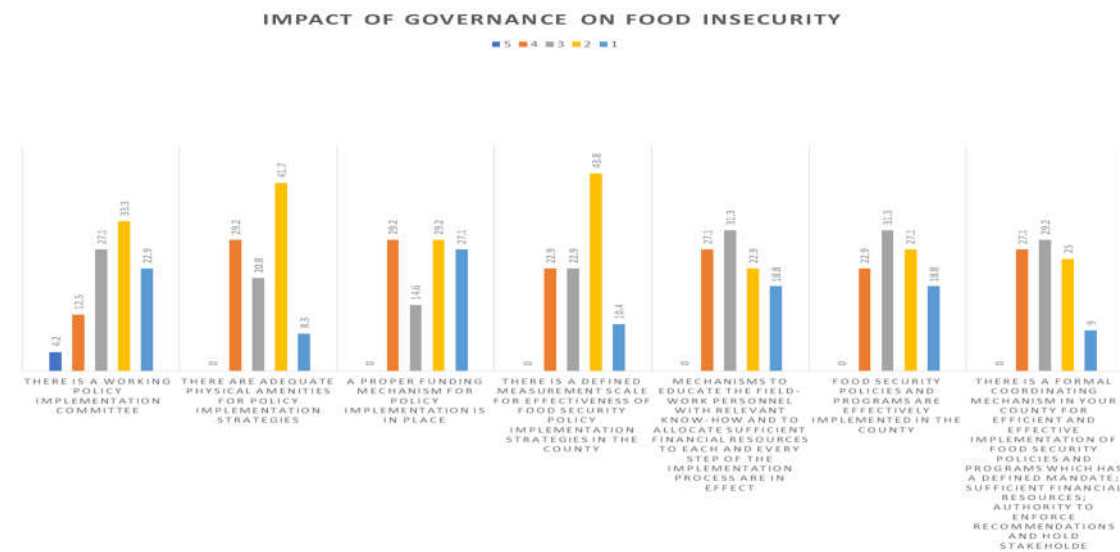
The purpose of this study was to identify ways to mitigate food insecurity in Murang'a County through effective policy implementation strategies. The study aimed to investigate the role of governance, public-private partnerships, and national-county coordination in addressing food insecurity. The researcher conducted a survey with fifty county officers from the department of agriculture in Murang'a County, and the study's guiding principles were based on these objectives.

The study uncovered that governance plays a crucial role in implementing policies to mitigate food insecurity. However, the study also revealed that there is no functioning policy implementation committee, inadequate physical resources for policy implementation, and a lack of proper funding mechanisms. Despite the absence of a formalized Public Private Partnership (PPP) model, the study found that PPPs still play a significant role in funding and ensuring the timely implementation of policies in Murang'a County.

The results of the survey also showed that over 90% of the respondents believed that food security had worsened over the past decade, with the stability of food supply being the most critical challenge. Poor governance and adverse weather conditions were identified as the main contributing factors to this challenge.

The study found that successful policy implementation strategies in Murang'a County included the promotion of avocado and macadamia nuts as well as the establishment of cooperative creameries. The study also revealed the significant relationship between effective policy implementation, governance, public-private partnerships, and national-county coordination.

**Graph 1: Impact of Governance on policy implementation strategies**

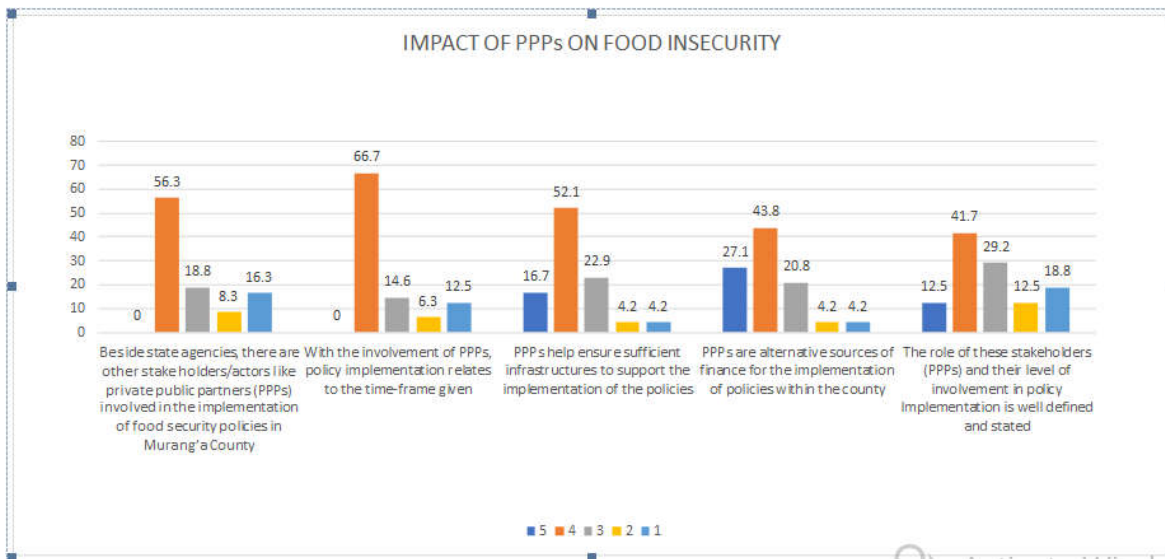


According to the graph, a majority of respondents expressed their dissatisfaction with the governance and implementation of policies aimed at mitigating food insecurity. They disagreed that there is a functional policy implementation committee and noted inadequate physical amenities for policy implementation strategies. Furthermore, most respondents did not agree that there is a proper funding mechanism for policy implementation or a specified measurement scale for the success of food security policy implementation techniques in the county. The majority of respondents also reported the absence of procedures to equip field-work staff with the necessary knowledge and to devote adequate financial resources to each stage of the implementation process. Respondents indicated that although food security policies and initiatives are implemented in the county, they are not executed successfully

According to James et al. (2002), challenges in implementing food security policies and programs arise due to the comprehension or ignorance of local bureaucrats or implementing agents. Additionally, a lack of a formal coordinating mechanism in Murang'a County was noted, which hindered the efficient and effective implementation of such policies and programs, despite the availability of adequate financial resources and authority to enforce recommendations and hold stakeholders accountable. It is evident that more efforts are needed to improve governance strategies to mitigate food insecurity in the county.

Rittel and Webber (1973) argue that public policies are comparable to "wicked problems" due to their complexity, numerous plausible causes, and variable practical solutions depending on the specific context. Effective leadership is critical in addressing these challenges, as emphasized by Kielstra (2010), who asserts that leaders in high hierarchical positions should not only provide direction but also prioritize, take calculated risks, and be prepared to end unsuccessful programs. Punishing justifiable failure is not an effective approach.

**Graph 2: Impact of Public-Private Partnership on policy implementation strategies**

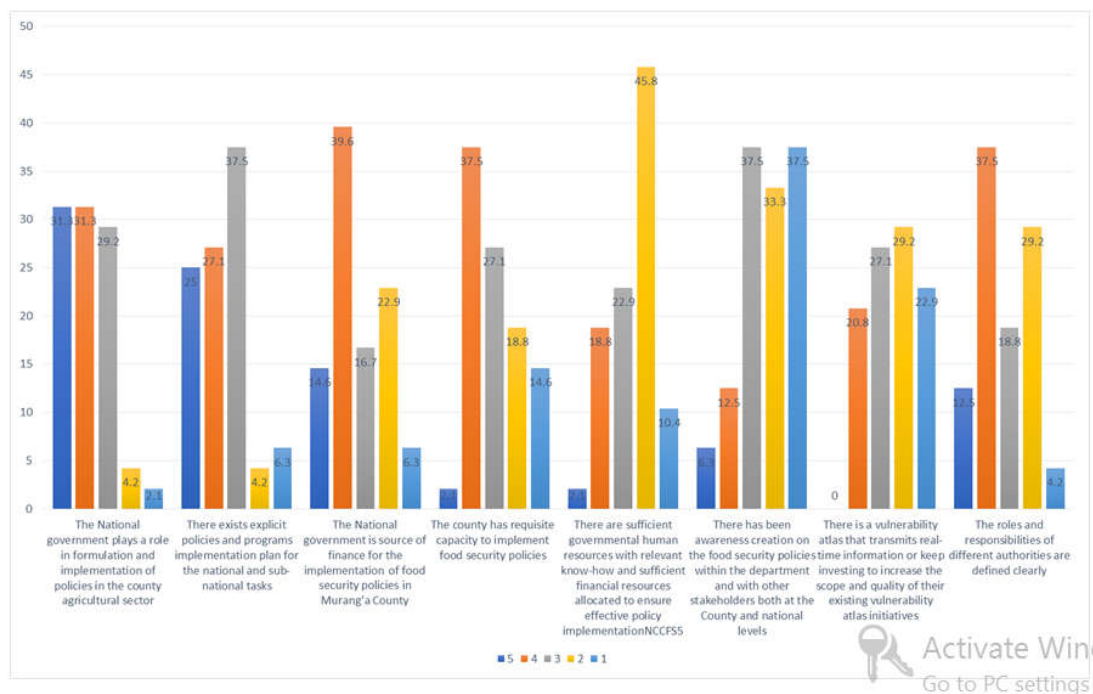


According to the findings presented in the graph, the majority of respondents emphasized the active involvement of private public partners (PPPs) in the implementation of food security policies in Murang'a County, in addition to state agencies. Moreover, respondents agreed that policy implementation is linked to the stated timeframe with PPPs' involvement to a moderate extent. Yaschenko (2018) highlighted that the implementation of public-private partnership models requires a prolonged period of collaboration between the government and private sector, covering various stages such as infrastructure project creation, development, operation, and maintenance, as well as private financing. This finding aligns with the respondents' observations that PPPs significantly contribute to ensuring adequate infrastructure to facilitate policy implementation, including alternative sources of funding.

The study also revealed that a regulatory framework exists for effective implementation of policies in collaboration with stakeholders other than the government. To achieve effective public-private partnership plans, Yaschenko (2018) suggested incorporating various project financing strategies, including state funding and private sector support. Furthermore, the level of PPPs' involvement in policy implementation and their role is well-defined to a moderate extent, as agreed by the respondents. Sharma and Bindal (2014) asserted that selecting a particular PPP model would yield a specific outcome, depending on the extent of public infrastructure or services provided by the private sector. The main function of PPPs is to redistribute risks during strategic initiatives' planning and execution. The level of financial benefit for private businesses is influenced by the degree of partnership arrangement riskiness. Additionally, Haiduchok et al. (2020) noted that management decisions and the effectiveness of the corporate entity and the chosen PPP model are impacted by staff experience, expert stature, and data analysis accuracy.



**Graph 3: Impact of National-County Coordination on policy implementation strategies**



According to the graph above, the National government participates in the design and execution of policies in the county agriculture sector, and clear policies and plans are in place. Furthermore, the National government provides funding for the execution of food security programs in Murang'a County. To achieve successful policy implementation, policymakers should encourage genuine consensus among all stakeholders, ensuring that everyone works toward the same goal (Deborah, 2008). This involves involving all pertinent parties and ensuring that everyone is convinced that the efforts will be highly effective in order to bring about change. Deborah (2008) further emphasizes the importance of evaluating outcomes, considering the advantages and disadvantages of various systems, and ensuring that policies align with national goals and priorities, are internally coherent, and are not in conflict with each other.

Participants pointed out the absence of a susceptibility matrix for real-time information transmission and continued investment in improving the breadth and quality of current vulnerability atlas projects (Anonymous, personal communication, 2023). The Project Management Institution Inc. (2008) emphasized that communication breakdowns pose a significant threat to the success of government projects. Communication planning is crucial in identifying stakeholders' information and communication needs, and prompt attention is required for information distribution and coordination. Role delineation, particularly in defining roles and responsibilities for policymakers and technocrats, is also critical (Giacchino & Kakabadse, 2003).

Respondents noted that various authorities' functions and responsibilities were adequately specified, but policy execution can be challenging in multiple levels of government where there is a lack of acknowledgement and interaction between organizations (Poteete, 2012). Falloux et al. (1988) advocate for a policy execution technique that takes advantage of existing organizational configurations and allows various actors to work in a directed manner to produce results. The

institutional placement of policies in many African ministry systems poses additional challenges as policy implementation cuts across functional and sector boundaries. This results in duplication of effort, bureaucratic infighting, a lack of technical expertise, and difficulties in accessing services for clients (Poteete, 2012; Falloux et al., 1988).

## **9. Conclusion**

The study aimed to establish whether effective strategies for implementing policies are correlated with governance, public-private partnerships, or national-county coordination. The study was based on certain assumptions and premises to determine any connections or lack thereof between the chosen objectives.

Based on the findings, the study concludes that public-private partnerships have a significant impact on implementing successful food security policies. Furthermore, coordination between the national and local levels of government greatly affects the achievement of food security goals. Additionally, having a policy and regulatory framework clearly outlines a successful path for policy implementation.

While some policies have been successfully implemented in the county, there is a lack of awareness and recognition of their significance, leading to a lack of ownership and potential success or failure. Therefore, if the county wants to achieve true success in reaching Zero Hunger as outlined in the Sustainable Goals, it needs to reevaluate its policy implementation process.

## **10. Recommendations**

The study's findings and conclusions suggest the following recommendations. Firstly, the government, as the main player in ensuring food security, should focus on governance by controlling production in retail and commercial access. This would ensure stability in the food supply and physical access to food. Secondly, to reduce food waste, the county should provide adequate resources for food storage in case of excess production. Currently, there is insufficient county-level storage for excess output, resulting in food wastage that could have been preserved for times of food shortages.

Thirdly, the county should fund studies to find drought-resistant plants for the climate of Murang'a in line with the Kenya kwanza plan. This would aid in adapting to climatic changes. Moreover, the county should collaborate with extension agents to provide farmers with certified seeds, ensuring plentiful harvests to improve the quality of life in Murang'a County and advance the national agenda for food security.

Regarding Public-Private Partnerships (PPPs) and effective policy implementation strategies, a clear roadmap with adherence to predetermined schedules and political goodwill is crucial for achieving food security objectives. The County should establish a suitable PPP model with the private sector's involvement to realize policy intentions across all areas of service in the County government.

National-County Coordination requires engaging personnel with relevant technical know-how to ensure successful policy implementation. The County should acquire qualified personnel or train personnel in the agriculture department and extension officers through workshops to furnish them with relevant skills for successful policy implementation strategies.

Lastly, the county must establish a clear budgeted allocation for implementing food security policies and ensure the appropriate financial structure for policy implementation. Corruption and

embezzlement of government funds can hinder financial independence for organizations implementing policies. Therefore, it is mandatory to oversee the use of monies allotted to enable the realization of policy aims. For instance, subsidizing fertilizers would reduce the cost of production and increase food production at reasonable costs.

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