# Factors Affecting Public Sector Investment in the Livestock Industry in Malawi

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**Abstract:** The dominant narrative is that public financing and investment in the public sector depend on the political leadership of the government executive because of the incentives gained in public finance management. The executive arm of the government includes elected political leaders and technocrats. Using the case of the agricultural sector, this paper examines the role of technocrats and elected leadership in investment choices. This paper uses, in support of quantitative findings, qualitative evidence from a case study designed in the Department of Animal Health and Livestock Development in Malawi. The variables were used to analyze the quantitative data, and content analysis was used for qualitative data. The finding reveals that seniority, authority, political affiliation, and technical expertise of civil servant leadership significantly influence public investment choices in the livestock sector in Malawi. Both elected political executives and technocrats had self-interests in delivering goods with swift and visible returns. The study concludes that Malawi's public sector investment arena is a 'war zone' with various actors vying for dominance. The paper recommends a critical review of the reforms in the livestock sector to bring the investment culture on course in Malawi. More studies are needed to resolve issues around privatization models of services in the livestock sector and the role of government and transactional actors.

Keywords: Public finance management, Technocrat leaders, Elected political leaders, public goods and services, budget.

## 1. INTRODUCTION

The livestock sector has socio-economic importance among smallholder farmers in Africa because livestock is raised for food, income, manure, coping mechanisms in crop failure, and other social values (Adams et al., 2021). Livestock farming plays a critical role in the economy and society of Malawi. It provides small-scale farmers with food, income, and employment opportunities while promoting sustainable farming practices and diversifying income sources. Additionally, livestock farming serves as a form of savings and asset accumulation for rural households and provides manure, which improves soil fertility. Not only does it have cultural and social significance, but it also attracts tourists and benefits trade and foreign exchange earnings, draft power, and hauling services and contributes to the resilience of farming systems in Malawi (Zulu et al., 2018; Fisher, 2004; Chingala et al., 2017; Pica-Ciamarra et al., 2011).

The livestock sector in Malawi is funded by the government budget, its own resources, multi-lateral donors, and banks. Hence, the funding follows a budget process as guided by the executive arm of the government i.e., the president and cabinet and technocrats (civil servants). The development priorities are set by National Livestock Development Policy 2022-2026 (DAHLD, 2021) and Malawi Vision 2063 (NPC, 2020). DAHLD (2021) observes that since the introduction of multiparty democracy, decentralization, and liberalization of the market economy, the livestock sector has faced many challenges. Some challenges are low investment in infrastructure, including laboratory, market, inspectorate, and quarantine facilities. These are exacerbated by government funding in the livestock sector because of its shift in policy priority.

Ng'ambi et al. (2023) found that in the livestock sector in Malawi, the political leadership and public servants (controlling officers) have authoritative authority over scarce financial resources needed for the DAHLD within the hierarchy of the government establishment. While most government activities occur within public space, the critical part revolves around private individual interest in public finance management (Ng'ambi et al., 2023).

Within the context of this paper, public value, budget, and political economy conceptual frameworks explain the interplay between elected political leaders and appointed public servants (controlling and their subordinates). On the one hand, some may believe that elected politicians in government control public investments. On the other hand, literature shows that politicians prevail over public servants to advance self-interest in the politics of public resource allocation, investment, and management (Lewis, 2009). Some scholars argue that elected leaders in government submit to appointed public servants to advance their self-interest (Rubin, 2001 Ng'ambi et al., 2023). At the same time, PFM retains more control to public servants over elected politicians (Ng'ambi et al., 2023). This study is motivated by low investments in the livestock sector in the Ministry of Agriculture by examining the factors that determine resource allocation and investment in livestock. The paper is within the theoretical frameworks of public goods and budget to explain public investment decisions in the livestock sector in Malawi.

## 2. THEORETIC FRAMEWORK

### 2.1. Public Value Theory

Public value has been described as a multi-dimensional construct that reflects collectively expressed politically mediated preferences consumed by the citizenry. It is not created just through 'outcomes' but also through processes that may generate trust or fairness (O'Flynn, 2007). Mulgan et al. (2019) defined public value as value created by the government through services, laws and regulations, and other actions. Stoker (2006) describes public value as 'more than a summation of individual preferences of the users or producers of public services. Public value is collectively built through deliberation involving elected and appointed government officials and key stakeholders. Moore & Moore (1995) argue that creating public value is the central activity of public managers, just as creating private value is at the core of private sector managers' actions. Public managers do more than steer a market process; they balance technical and political concerns to secure public value (Hefetz and Warner, 2004).

Politics is central to a public value paradigm. Hence, the concept of public value provides a rough yardstick against which to gauge the performance of policies and public institutions, make decisions about allocating resources, and select appropriate delivery systems. The assumptions of Public Value theory easily apply to issues of commonly adopted practices, including corporate planning based on central goals, comprehensive program budgeting, management improvement programs, central auditing, and performance monitoring of individuals. It empowers public servants and increases managerial quality. The Qualities of public servant managers include compliance with ethics, transparency, equality, fairness, responsibility, accountability, prudence, participation, responsiveness to the necessities of the people, and efficiency in the administration of public resources.

Kavanagh (2014) argues that public value requires officials to consider the costs and benefits of shared services beyond money and how they impact essential principles such as equity, liberty, and citizenship. Public value aims to help officials talk about the net benefit of government actions despite the limitations of creating a bottom line comparable to the private sector.

### 2.2. Budget theory

The public sector budget is theorized as political, economic, accounting, and administrative. It allocates taxpayers' money among multiple, conflicting, competing interests to stimulate economic development within a legally approved given fund ceiling (Khan et al., 2004). Budget embeds power relations on the one hand, legislative (elected authorities), and, on the other hand, the executive authorities (the president and cabinet, i.e., elected leaders, and civil authorities, i.e., the government-employed experts). Initially, during the twentieth century, budgeting power was in the hands of civil authorities and legislature. Still, it gradually shifted upward to the president, top advisers, and a small cadre of ruling party leaders. Hence, there is always a conflict between the executive and legislatures; for example, the president's budget became more of an opening bid in negotiations than a definitive policy statement. It was centralized because of the deficits in budgeting. The budget is theorized as more public and plebiscitary because it allows political parties to battle for their advantage and support opinion polls in the approval process (Khan et al., 2004).

The budget has hidden politics of budgeting, and its process is highly politicized, especially in the agriculture sector (Khan et al., 2004). Wildavsky (1961)described the budget and the budgeting process as more than just about allocating scarce resources to activities. However, it is a process of different priority needs of the public in political space. (Khan et al., 2004) describe budgeting as political, economic, accounting, and administrative. It allocates society's scarce resources among multiple, conflicting, and competing interests as a political document. Through the budget, the government provides public goods primarily rival in consumption, and a rationing problem arises among competitive consumers (i.e., Ministry against Ministry or Department against Department within the same Ministry of Government).

### Empirical literature on public sector investment: Agriculture

Financing in the agriculture sector in many African governments has paid more attention to crop development than livestock development (African Union, 2003). Low financing has a bearing on public goods and services in agriculture. In Mozambique, public investment decisions affected agriculture sector output (e.g., Mogues and Do Rosario, 2016). Personal interests influence public investments; for example, Mpesi & Muriaas (2012) and Mogues and Do Rosario (2016) argued that public investments of low returns, but high vote swaying receive excellent attention within the government, ignoring core proven public investments of high returns in the long term in agriculture development.

The government, as the political machinery, has individuals that are either rational, budget-maximizing individuals or vote-seeking ones (Rowley and Elgin, 1988). Niskanen’s (1971) work highlights the interplay between elected political officials and technocrats. Elected officials, responsible for delivering public goods to maximize their votes, depend on technocrats, who run departments and ministries to provide these goods. Technocrats, on the other hand, seek to maximize their budgets for their respective agencies. The technocrats predominantly know the information regarding these activities, including the costs involved, creating an asymmetry in communication between the two groups. This resulted in the technocrats winning the budgeting showdown by presenting elected officials with a take-it-or-leave-it situation, given the high cost of the information required for policymakers to make informed decisions. As a result, the oversupply of public goods and services becomes a theoretical outcome of the objectives and information sets of these two groups of actors. Much government action is driven by private goals, even if the institutional means are public. The government does not always deal with public goods or means recognized as part of the public sector. Individuals in government mostly use public office to advance their private goals or interests (Caporaso et al., 1992).

Public servants prioritize projects with higher attributability to appointing authorities and donors and shorter lag time between expenditures and results (Mogues & Do Rosario, 2016) while, to some extent, complying with the public finance management framework. Since politics and government are made equal, political affiliation, seniority of technocrats, and technical expertise are likely essential factors that impact public investment decisions. In some cases, the ruling party enters government with its manifesto, which outlines investments in their constituencies to gain electoral support. However, senior technocrats with more experience and expertise can help reduce the influence of short-term political considerations, although they may resist changes in investment priorities. Technical experts also play a crucial role in ensuring that public investments are allocated efficiently and effectively based on merit rather than political expediency. In more stable and technocratic systems, seniority and technical expertise are likely to significantly influence public investment decisions, leading to a more rational and beneficial allocation of resources.

## 3. METHODOLOGY

### Research design

The cross-sectional descriptive and explanatory research design was used in the study. Gravetter and Forzano (2018) state that explanatory design connects ideas and understands cause-effect relationships. The design involved gathering data, describing the existing conditions, identifying the standards against which existing conditions can be compared, and determining the relationship between specific events. This study describes and critically assesses factors determining resource allocation and investment in livestock in Malawi's Department of Animal Health and Livestock Development.

### Target population

The study involved employees working in different leadership and management in the DAHLD Directorate & Farms, Accountant General, Ministry of Finance, Ministry of Agriculture, Treasury, National Authorizing Office, Economic Planning & Development, Parliament Committee for Agriculture, Parliament Committee for Budget and Finance, Blantyre ADD, Lilongwe ADD, and Mzuzu ADD. Table 1 shows the number of respondents who participated in the survey to assess the drivers of public investment decisions/choices in the livestock sector. Sample size calculation was based on the known population using Daniel's (1999) formula below:

$$n = \frac{N * X}{X + N - 1}$$

Where:

$X = Z_{\alpha/2}^2 * p * (1-p) / MOE^2$,

Moreover, $Z_{\alpha/2}$ is the critical value of the Normal distribution at α/2 (Confidence level of 95%, α is 0.05, and the critical value is 1.96), MOE is the margin of error, p is the sample proportion, and N is the population   The calculated sample size is n=107 The respondents were selected randomly. Table 1 shows the study participants.

**Table 1: Study participants**

| Participants | Sample size | Participants | Sample size |
|---|---|---|---|
| **Blantyre ADD** | 5 | Likasi farms | 3 |
| **Blantyre District** | 2 | Lilongwe ADD | 3 |
| **Chiladzulu District** | 1 | Lilongwe Vet Lab | 6 |
| **Choma Hatchery** | 3 | Mzimba District | 3 |
| **Diambwe farms** | 2 | Mzuzu ADD | 2 |
| **Dzalanyama farms** | 2 | Rumphi District | 2 |
| **Kasungu ADD** | 4 | Thyolo District | 1 |
| | | **Total** | **107** |

### Response rate and limitation

This study administered 105 questionnaires to selected individuals using Kobo Collect, and the study's response rate was 90.1%. We used 95 valid questionnaires for analysis. Limitations to this study were related to its sensitivity. The researchers observed that some respondents were not free to respond to some questions because of the nature of the public office they held. As such, we had some questionnaires invalid for analysis because they were declined.

### Data collection methods

Data was collected directly from the selected respondents. All the data collection tools were pretested, and errors were corrected before data collection. The study used personal- and online-administered questionnaires using Kobo Toolbox to collect data from respondents. The study also collected qualitative data from a case study designed in the Department of Animal Health and Livestock Development in Malawi, based on key informant interviews of 30 senior public civil servants, 2 transactional actors, 2 CSOs, and 3 members of parliament in Malawi.  In addition, two focus group discussions were held, one with the Parliamentary Committee for Budget and Finance and the other with the Parliamentary Committee for Agriculture, with minimum participants of 7 on each FGD.

### Data analysis

Descriptive statistics (frequency and percentages) and inferential statistics (Chi-Square test and analysis of variance) were used to analyze the data. The data collected through a questionnaire was analyzed using SPSS Version 20. The variables in ANOVA used a Likert scale of 1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, and 5=Strongly agree. Narrative analysis was used to analyze qualitative data collected from interviews and focus group discussions. NVivo 14 was used to generate themes from interviews and FGD transcriptions.

## 4. RESULTS

### The influence of the role of leaders in public investment decisions

Table 2 shows that seniority, authority, political affiliation, and technical expertise of civil servant leadership significantly influence public investment choices in the livestock sector in Malawi. However, authority/power invested in civil servant leadership significantly influences this choice (mean score=96, t=46.244), followed by political affiliation (mean score=0.93, t=34.376).

The results show that power and authority primarily influence public investment decisions, with the highest mean score and t-value. This indicates that power and authority are central in shaping public investment decisions in a government or political system. These factors significantly influence how resources are allocated, which projects are prioritized, and the overall direction of a country's economic development. Individuals in positions of power control the allocation of public funds and prioritize projects based on their objectives, political agenda, and the needs of their constituents or supporters. Decision-makers shape the legal and regulatory frameworks governing public investments and appoint individuals to crucial decision-making bodies. Powerful actors influence decision-makers, often considering public opinion when making investment decisions. This power and authority in public service does not reside in one place. This implies that politicians may be influential in one instance and technocrats in another. Politicians have the power to appoint technocrats, but the information asymmetry and application of the relevant laws give technocrats the power in investment decisions (Ng'ambi et al., 2023).

Political affiliation, seniority of technocrats, and technical expertise significantly influence public investment decisions. These factors interact in complex ways, and their impact varies depending on a given political system. Politicians often prioritize projects and investments that align with their party's ideology or manifesto, allocating resources to projects catering to their political base or campaign promises. In the 2013/14 fiscal year, President Joyce Banda's People's Party (PP) implemented a cow per family (ACAF) project to distribute cows to rural households. The introduction of this project coincided with the May 2014 general elections in which President Dr. Joyce Banda failed. Although she failed in the General elections due to other reasons, this project was conceived for the sole purpose of vote winning. Elected officials favour investments in their constituencies to secure electoral support. This leads to a distribution of resources based on political considerations rather than economic or developmental needs. Public investment decisions may be influenced by the ruling party's affiliation, with projects in areas represented by the opposition receiving less funding. However, in highly politicized environments, political affiliation still overshadows technical expertise, leading to the approval of projects that may not be economically or socially sound.

The study also found that Senior technocrats often have more significant experience and expertise in evaluating and prioritizing investment projects. Their insights carry more weight in the decision-making process. Senior technocrats have more autonomy in decision-making, reducing short-term political considerations' influence. Long-serving technocrats resist changes in investment priorities, potentially perpetuating outdated or ineffective projects. In some cases, senior technocrats with significant technical expertise mitigate the influence of political affiliation by providing evidence-based recommendations and project evaluations.

The influence of technical experts on investment investments was also assessed. They assess proposed projects' feasibility, economic viability, and potential impact. Their expertise leads to more informed investment decisions. Technical experts help ensure that public investments are allocated efficiently and effectively, maximizing the benefits to society. Technical solid expertise serves as a counterbalance to political considerations, helping to prioritize projects based on merit rather than political expediency. In this study, the significance of having the same mean score of 0.92. Ordinarily, more stable and technocratic systems, seniority, and technical expertise substantially influence public investment decisions, leading to more rational and beneficial allocations of resources.

**Table 2. The influence of the role of leaders in public investment decision**

| | N | Mean | S.D. | t | Sig. (2-tailed) |
|---|---|---|---|---|---|
| Seniority | 95 | .92 | .279 | 31.973 | .000 |
| Authority/Power | 95 | .96 | .202 | 46.244 | .000 |
| Political affiliation | 95 | .93 | .263 | 34.376 | .000 |
| Technical expertise | 95 | .92 | .279 | 31.973 | .000 |

Source: Own survey (2023)

### Political and non-political influence of public investment choices

Table 3 presents the drivers of public investment choices in livestock sectors in Malawi. The self-interest of public servants and elected political officials, public goods with quick gains, agenda of transactional actors, manifesto drive, win votes from smallholder farmers, and corruption drive were found to be positively significant ($p<0.000$) to influence public investment choices. Among the variables, the self-interest of public servants has the highest significant influence in making public investment choices (mean score=0.77). In contrast, the agenda of transaction actors has the least significant influence in making public investment choices.

Self-interest by public servants influences investment decisions with the highest mean score (0.77) and t-value (15.645). The agenda of transactional actors is the least influential. Civil servants allocate budget resources to projects that enhance their career prospects or provide opportunities for personal gain, like kickbacks or bribes. They also engage in corrupt practices during the procurement process, such as demanding bribes from suppliers or awarding contracts to friends and associates. In addition, politicians and civil servants would prefer to use public funds for personal or political purposes, such as patronage, campaign expenses, or lavish government perks.

The president and cabinet often prioritize budget allocations to projects or programs that align with their interests or political agendas. This leads to allocating funds to projects that are not the most cost-effective or beneficial for the public. Qualitative findings revealed that the president and cabinet pushed for funding for projects in their home district to gain popularity or secure votes, even if the project was not the best option for the public.

**Table 3. Political and non-political influence of public investment choices**

| | N | Mean | S.D | t | Sig. (2-tailed) |
|---|---|---|---|---|---|
| Ruling elites' interests | 74 | .73 | .447 | 14.039 | .000 |
| Self-interest by a public servant | 74 | .77 | .424 | 15.645 | .000 |
| Self-interest by the president and the cabinet | 74 | .74 | .440 | 14.537 | .000 |
| Self-interest of parliamentarians | 74 | .70 | .460 | 13.136 | .000 |
| Public goods with quick gains | 74 | .64 | .485 | 11.273 | .000 |
| Agenda of transactional actors | 74 | .57 | .499 | 9.788 | .000 |
| Manifesto drive | 74 | .64 | .485 | 11.273 | .000 |
| Corruption drive | 74 | .66 | .476 | 11.962 | .000 |
| Win votes from smallholder farmers | 74 | .65 | .481 | 11.609 | .000 |

Source: Own survey (2023)

### The self-interest of the political and public servants

Table 3 shows that the self-interest of both public servants and elected political leaders influences public investment choices in the livestock sector ($p=0.000$). This indicates that the leaders focus on making public investment choices that create value for their benefit. Some of the respondents provided the following information.

We found that investment in the livestock sector is almost negligible. Physical assets are in a dilapidated state and weak extension services. It is the only sector where service provision was privatized. We found that extension services have been privatized. Some of the extension workers and staff within the department are the ones that are now even providing those services at a fee as a private enterprise.

However, the other services found that the government still provides unique services in the other value chains. Because of the lack of those investments, we found that most of these support services, like the deep tanks, access to drugs, markets, and the whole value chain, are in disarray.

"*The only value chain that you can say, at least, is organized and structured may be the dairy value chain. Because we have the off takers, we have the farmers organizing the bulking groups. The milk-bulking group groups access some financing from the off-takers like Lilongwe Dairy. The dairy industry has some financing and support, but this financing master is private and NGO financing. However, the other value chains within the livestock are free for all. There is no proper structure for financing, no proper structure for marketing, nor even any proper structure for access to extension data and various services."*

We also found that crops (mainly maize) are favored over livestock for political reasons within the agriculture basket. "*It is effortless to distribute maize to so many people for vote winning."* So that is a personal interest of politicians. However, crops, through the Agriculture Input Program (AIP), offer, not just for politicians but also technocrats, opportunities for business because much money is going towards AIP. Politicians and technocrats seize the opportunity to sell seeds and fertilizers to the Malawi government and get transportation to distribute the farm inputs to different rural areas in the country. These are some business deals driven by the corruption agenda.

*"Technocrats support the AIP because it also supports their appointing authorities' political ambitions and assures them of job security. Public servants attempt to protect their jobs to earn promotions because when seen as good to politicians, they can be promoted to specific grades within the civil service structure."*

This is regardless of whether the investment decision is good for the country.

It was also found that when other stakeholders are trying to advocate for price changes and marketing issues with the private companies, some officers, even from the Department of Animal Health and Livestock Development (DAHLD), sit on the boards of private companies. This is a clear example of a conflict of interest. Because you are a public servant, you are supposed to provide the public good of regulatory services. Personal interest has become more prominent in this case than the public service provision. Some respondents shared their memories of public service delivery during the era of the one-party system in the past.

"*Back then, technocrats were driven to accomplish the objectives of their activities. That was the main driving force. People were content and happy in the livestock sector because they saw increased egg production and sales. However, they did not own the chickens; the government did. Nowadays, only a few technocrats are motivated by the same driving force. The current allocation of resources is primarily motivated by personal gain. For instance, when technocrats are involved in a works contract, they look at the benefits they can gain by offering the assignment to a particular contractor. The primary motivation is to determine their cut when they give the contract to the contractor."*

Therefore, public servants are working hard, but most are focused on personal gain rather than on achieving the objectives of their activities. These findings collaborate with Mtuwa and Chiweza (2023), who describe how corruption has been institutionalized in Malawi, affecting institutions' internal systems responsible for providing public services and beginning to serve individual interests rather than the interests of the public.

**Public goods with quick gains**

Public goods with quick gains and attributes also drive public investment choices in the livestock sector (mean score=0.64, p=0.000). These are goods that bring returns within a short period. Politicians and technocrats tend to allocate resources to address immediate needs rather than investing in things that may be essential a hundred years later. For example, maize production helps address food security concerns in the short term, while livestock production may take longer to pay off. This time lag is a crucial factor when making investment decisions in agriculture.

"*It is easier for people to gain political control over crops because crop returns are quicker than animal returns. Therefore, it is easier to see crop improvements than animals because the returns on animal production take longer to register."*

In Malawi, politicians prioritize investing in maize production over livestock because it yields quick gains in securing votes, which is essential in the 5-year voting cycle. The findings agree with the agricultural policies in Malawi which have paid more attention to the provision of an enabling environment for private sector investment in the agricultural sector and less on infrastructure development (e.g., National Agriculture Investment Plan (2018) and Malawi Vision 2063 (NPC, 2020).

**Manifesto drives/wins votes from the public.**

Manifestos by the political affiliates also influence public investment choices (p=0.000). Politicians promise to invest in subsidy programs that benefit smallholder farmers or the public, aiming to win their votes during the upcoming elections. When elected to the position of their interest, they tend to push for funding to be allocated to such programs to continue receiving support from the beneficiaries in preparation for the next elections. This has been the case in livestock sectors for the past 10 years.

During the campaign, the *Tonse Alliance* promised that if Dr Lazarus Chakwera were elected, people would have access to three meals a day (*Kudya Katatu*) and be able to afford them. In Malawi, the provision of maize is considered as having eaten. This is why all politicians support the Agriculture Input Subsidy Program. In the *Tonse Alliance* manifesto, the provision of food is a crucial pillar. It is worth noting that livestock is not considered food in the strictest sense of the word. Members of Parliament shared a sentiment that their decisions are based on the people's demands.

"*As politicians, they sell a product through their manifestos and cannot sell products that buyers are not interested in. Therefore, they invest more in maize production in response to people's wants and demand."*

**Corruption drive**

The corruption in livestock is a significant factor influencing investment choices in the sector (mean score=0.64, p=0.000). Corruption is a common problem in public sectors in Malawi (Mtuwa and Chiweza, 2023), including the livestock sector within the Ministry of Agriculture.

As per the findings of a study, Livestock suffocation is caused by the vested interest of politicians and technocrats. The livestock sector is underfunded; it gets less than 0.02% (APES, 2022) of the annual agriculture sector budget. Politicians and technocrats prefer crop investing because it grants them business deals and furthers their corruption agenda. The Agriculture Input Program (AIP) is exclusively dedicated to the crop subsector in the agriculture basket. This program presents politicians and technocrats with lucrative business opportunities due to the significant funding that supports maize production. The issue of rent-seeking can be summed up as corruption, which remains a significant problem that affects the allocation of public resources in the livestock industry.

**Agenda of transaction actors**

The agenda of transactional actors have the most negligible significant influence in determining public investment decisions in the livestock sector (mean score=0.57, p=0.000) among the tested factors (see Table 3). The study found that donors influence national policies to mainly create an enabling business environment to attract large-scale foreign investments through off-taker-producer contract arrangements where investment is not a priority in the agriculture sector by transactional actors, including the World Bank and IMF. Similar trends were observed in the West African governments (for more details, refer to Tyrou et al., 2023). The agenda of transaction actors does influence the nature of investment in the livestock sector.

## 5. CONCLUSION AND RECOMMENDATIONS

This study is motivated by low investments in the livestock sector in the Ministry of Agriculture by examining the factors that determine resource allocation and investment in livestock. The study applied the theories of public value and budget to explain public investment decisions in the livestock sector in Malawi. The results have shown that seniority, authority, political affiliation, and technical expertise of civil servant leadership significantly influence public investment choices in the livestock sector in Malawi. The public goods and service delivery in the public sector of livestock is motivated by self-interest while meeting, to a limited extent, public interests. Decisions about public investment occur in a highly political domain where often public servants may be seen to listen to elected executives in government while it is not so. We conclude that the public investment landscape is a ‘war zone’ where elected politicians, transactional actors, and public servants fight for their self-interest.

We recommend that a critical review be undertaken on the reforms in the livestock sector to bring the investment culture on course to revitalize the livestock sector in Malawi. Further studies are needed to resolve issues around privatization models of services in the livestock sector and the role of transactional actors.

### Declaration of conflict of interest

The authors declare no conflicts of interest. Co-authors have reviewed and agreed to the manuscript, and there is no financial interest to report. The submission is original and not under review elsewhere.

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