

Multi-Actors in Meeting Fertilizer Needs in Maros Regency

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Abstract. *This paper examines the management of the subsidized nutrient support scheme in the Maros Regency in South Sulawesi, in terms of public administration, using the tri-angle theory of strategic government of John Bryson so as to query the schematism of legitimacy, the organizational capacity, and creation of the public value. Using a qualitative descriptive method, we conducted policy report (15 reports) and RDKK document analyses, site observations at five centers of the distribution, and interviews with 20 stakeholders (government officials, legislators, farmers, distributors). The results highlight seven governance issues: inappropriate type of fertilizer, inappropriate brands, little effects on agricultural production, politicization of distribution of fertilizers, inadequate distribution support, poor participation of farmers and incomplete farmer and land information. These limitations indicate poor legitimacy since it is not accompanied by transparent and politically independent procedures, in which farmers have no say in the decision making, something that undermines trust and fairness. Limited source of sufficient technical assistance, unreliability of data system, poor inter-actor coordination are constraints of organizational capacity that lead to inefficient distribution practices. In addition, the program has shown little in the way of public value creation, having little to no impact on increasing crop yields or crop farmer welfare levels and instead creating dependency and not empowerment. The proposed reforms which include the implementation of the farmer-led councils, transparent allocation process, and results-based assessment aim at improving governance of the agricultural subsidies in Maros and other similar contexts in order to achieve food security and empower the farmers.*

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INTRODUCTION

Agriculture forms a key driver of food security and macro-economic soundness in Maros Regency, South Sulawesi. The livelihoods of these locals are based on large-scale agricultural land, which is worked by thousands of small holder farmers. Measuring a total area of 1,619 km², the regency has a large proportion of more than 60 percent of its surface area under cultivation as the main products include rice, maize and soybeans. However, such farmers will be facing acute challenges on acquiring of fertilizers which is a basic input that can be used to increase the crop yield or even maintain its production (Noor et al., 2019).

This limitation challenges the government in that they subsidize the fertilizer sector that operates as a focal point of the local agricultural policy (Lencucha et al., 2020; Heyl et al., 2022). Nevertheless, the inefficiencies such as governance flaws undermine the effectiveness of the

measure. The given work, hence, focuses on the role of various actors, namely, governmental agencies, legislators, farmer groups, and distributors involved in the fertilizer assistance program, making it through the prism of a strategic triangle of the John Bryson model that measures the legitimacy, organizational capacity, and the generation of public values. Modern farmers cannot imagine their lives without fertilizer, therefore, directly affecting the productivity of crops and the revenues of the farmers. The subsidized fertilizer program in Maros works through Definitive Group Needs Plan (RDKK) that gives out fertilizers based on data concerning farmer groups though, distribution is aimed at the individual farmer. The emphasis makes the methodic different to the group-based systems since it tries to incorporate the aid with particular needs of individual farmers.

However, existing weakness continues to impede success: (1) The kind of fertilizer given is not that of the needs of the community; (2) Type and brand supplied does not match the preferences of the farmers; (3) The aid has not significantly boosted the gross aggregate agriculture; (4) Between the legislators and the providers politicization has become present; (5) There is a poor support which goes hand in hand with the distribution process; (6) Little engagement of farmers in proposing or designing the assistance has been done; (7) The information of farmers and land-information at the base is outdated or incorrect.

According to Cheng et al. (2018) and Ben & Ben (2019), the findings, when taken collectively, are indicative of a larger governance deficit that hinders the efficacy of the program. All challenges, which are key to the study undertakings, explain the complexity in multi-actor governance system and how critical a robust analytic framework of policy implementation should be. One, misalignment of the types of fertilizers to local community needs can be attributed to the fact that there is not enough match between the local soil conditions and crop specific needs. An example is that farmers who grow maize can sell out fertilizers that will be more effective when dealing specifically with maize, and farmers growing rice will use such fertilizers, making them less effective (Benson & Mogue, 2018). The second challenge makes this dilemma worse in that it involves giving farmers fertilizers brands or features that are not inaccurate to their liking. Most producers are loyal to a certain brand based on empirical experience or performance effectiveness; due to this reason, the program frequently issues other products that are not fully used or are discarded causing massive wastage. The local statistics are that a significant percentage of the spread fertilizers is not used due to these imbalances among other reasons supporting the waste of the available process of allocation.

Third, the lack of benefits that can be proved to the farming productivity is a pivotal issue. Rice production in Maros is not improving significantly in spite of the availed subsidized fertilizers and has not been able to reach the levels within national averages thus implying that the use of fertilizers in aid in their production is not having the required effects. Other factors linked with this might be the use of wrong type of fertilizer, wrong use of fertilizer or an effective system of distributing fertilizers, and these are areas where governance is wanting (Pandey & Diwan, 2018). The fourth challenge, the politicization of the fertilizer assistance program, is caused due to the diktat of the legislative aspiration monies. These are funds that are supposed to take care of the societal demands, and the funds are often given out politically as opposed to objectively. Therefore, political affiliation could grant some classes of the farmers or regions with unreasonable quotas hence, destroying equity and minimizing citizens confidence to the program. This kind of politicization forfeits the legitimacy of the program, and enhances inequality among farmers.

The major impediment in the RDKK system, observed by the fifth issue, is lack of technical or extension assistance, which would inform the farmers on proper use of fertilizers. The farmers without the right kind of training can end up using fertilizers ineffectively, thus affecting the productivity of the crops as well as the environment. The sixth obstacle, the little participation of farmers in proposing or designing help on fertilizer indicates a larger collapse in governance. Even though farmers are the main beneficiary, their local-conditions are rarely

taken into consideration during policy making processes. This kind of exclusion is against the principles of participatory governance, which highlights the need to involve the stakeholders due to its significance in the process of effective public administration.

The seventh issue, the out-dated or inaccurate farmer and land details, is a structural barrier to the equitable distribution. Align with research from Riyatno (2024), RDKK system is dependent on reliable information in relation to allocating fertilizers, but differences in registration and land ownership documents give many deserving farmers no chance to get subsidies. Consequently, illegal farmers end up buying non-subsidized fertilizers at high prices in the market hence exacerbating financial constraints and inequalities (Karyani et al., 2024). According to local statistics, the number of unregistered farmers in Maros is up to 35 % and hence, they cannot access subsidies. As a whole these challenges expose problems of fertilizer distribution in Maros as a matter not only of logistics but one of governance due to poor coordination, transparency, and participation of stakeholders.

When a policy has many actors in a complex policy environment, their efforts end up becoming disjointed: the Department of Agriculture dealing with distribution, legislators with political motives, and farmers with marginalized voices whose priorities end up being out of synch and inefficient. One of the main failures in governance is the objectification of farmers by not granting them the subject position in the policy process. Development projects in agriculture such as fertilizer subsidies have often been focused on crop production rather than empowerment of the farmers.

The question, which this inquiry seeks to answer, is to what extent the modern programs of Maros omit the need of building farmer potential to engage in decision-making. Top-down heavy architecture slows down the effectiveness of programs and destroys the trust of the populace. The fact that there can be no consultation on fertilizer choice or fertilizer amount means that there is a gap between policies and the situation on the ground that only reproduces complaints and imperfect results. In order to explain these governance inadequacies, the research employs John Bryson strategic triangle analytical framework, a system that analyzes public policy under three pillars which are mutually reinforcing of each other i.e. legitimacy and support, organizational capacity, and creating a public value.

Radburn & Stott (2019) said that, the notions of procedural fairness and inclusivity are the ones being measured by legitimacy and support. Organizational capacity involves evaluation of the resources necessary, systems as well as mechanisms of implementation. Public value creation is used to gauge the ability of the program to bring in concrete results such as higher crop yields and a better welfare to farmers. In implementing this structuring, the research aims to identify the deep seated causes of the seven listed issues and even suggest reform initiatives.

The study will focus on the following three main questions: (1) How do various stakeholders, including government agencies, legislators, farmer associations, and distributors, interact when governance takes place in the provision of fertilizer aid in Maros Regency? The second question is (2) What is the role legitimacy, organizational capacity and creating value to the society in program success? What are the reforms that must be catalyzed to enhance collaborative governance and meet the identified issues? Responses to such questions shape the discussion of the seven issues and point directions of better structures of governance.

The value of the given research lies in the fact that it addresses the key paradigm of multi-actor governance due to the intricacy of modern policy issues in the field of public administration (Eriksson & Hellström, 2021; Fumasoli et al., 2018). The relationship among the government agencies, legislators, farmer groups and distributors in Maros emphasises the need to have collaborative governance, where actors synchronise their goals and pool resources. However, the preset dependence on top-bottom interventions and wrong data restrict such cooperation and lead to the continuance of the seven problems outlined.

This paper explores the fertilizer-assistance initiative that has been carried out in Maros Regency using an analytical perspective as suggested by the framework outlined by Bryson. Its results become a part of current discussions regarding agricultural politics and the topic of administration, and the insights can be applied to other rural areas with the same limitation. The program has been important, but also disastrous, providing seven key governance issues: (1) inappropriate type of fertilizers in terms of the needs or capabilities of the farmers; (2) inappropriate brand selection; (3) little attention to output; (4) politicization; (5) little support of distributing fertiliser; (6) little farmer involvement and (7) little quality data. All of these issues combine to highlight the necessity of a more open and comprehensive model of distribution of fertilizers. It follows a public-administration lens which acknowledges that multi-actor flows and the primacy of legitimacy, capacity and public value are central to the analysis. The general purpose of the research concerns informing the plans aimed at increasing fertilizer distribution, strengthening food security and empower farmers in the Maros Regency.

METHODS

This research uses descriptive qualitative research design to describe the issues in governance of the subsidized fertilizer program of assistance offered to the farmers in Maros Regency in South Sulawesi, Indonesia within the framework of the strategic triangle of public administration put forward by Bryson to determine the legitimacy, the capacity building and the creation of the public value (Bryson et al., 2023). The qualitative strategy is highly recommended to capture the complexities in interplay within and between various players including government agencies, legislators, farmer groups, and distributors in the fertilizer distribution process hence gaining a better and in-depth context on the perspectives of the various stakeholders, dynamics, and factors to consider during implementation. The focus of the seven problems lined out, namely incorrect data, poor participation by farmers, and so on, is a step to determine the major issues behind the governance failures and then the recommendations that could guide them towards effective reformations are pointed out. The information, which was collected through document analysis, observations, and in-depth interviews, was analyzed based on thematic coding in accordance to the framework developed by Bryson. The next subsections outline the data collection procedures, the sampling scheme, the process of data-analysis, the use of the theoretical framework, ethical issues, and limitations of the study, in the effort to present a very rigid and transparent methodology.

Data Collection

This paper utilised three approaches to data collection, which are document analysis, observations, and in-depth interviews, to gain triangulation and ensure that we have a complete picture as regards the governance of the fertilizer assistance program in Maros Regency. The document analysis identified 15 major documents between 2020 and 2023: reports of policy documents of the Maros Regency Department of Agriculture, RDKK records, legislative aspiration fund share-outs and local regulations. These papers have been examined in order to explore the policy design, quotas on fertilizers and present the identified issues that are inaccuracy of data or inappropriate fertilizers combination. The study was carried out during three months of 2023 at five key points of the distribution of fertilizers in the city, outskirts, and rural regions as they distribute across rice, corn, and soybean agricultural blocks. Observations recorded the logistical activities of people, interactions, and matters such as delays or complaints by farmers. Twenty stakeholders, comprised of five government officials, three legislators, eight farmers, and four distributors, were at the receiving end of in-depth and semi-structured interviews. The interviews, through the use of open-ended questions, addressed the roles, perception of the effectiveness of the programs, and the experiences relating to the seven problems that were identified (e.g., politicization, lack of involvement in the programs by farmers). Interviews in Bahasa Indonesia, with a duration of 45 to 60 minutes, gained informed consent and were also audio-recorded and transcribed and wherever translation into English was required, this was done to offer us rich qualitative data about the dynamics of governance.

Sampling

Purposive sampling framework was used to define the participants and observation sites in the framework of the fertilizer assistance program in the area of Maros Regency. This was done to make sure that the most essential actors and variations of context were included in the study as per the selection criteria. The sample consisted of 20 stakeholders including five officials of the Maros Department of Agriculture, which encompasses the governmental body responsible of policy implementation and three legislators who are involved in the decision process of the aspiration-fund allocations, and as such, had a say on fertilizer distribution. Eight of the stakeholders were farmers representing the three primary crops namely rice, corn, and soybean and their producers, as well as four distributors managing the supply chain of fertilizers. The groups were selected on the basis of direct effect or downstream effects of the programme so as to capture diversity in views about the challenge of governance. They also added five sites, which were chosen to cover the major agricultural areas and areas both adjacent and far away to urban inhabitants and rural localities, to cover any variability in the logistics of distribution and access by the farmers. The sampling strategy, therefore, guaranteed that the empirical evidence revealed the complexity of multi-actor interactions and seven problems among them, such as politicization, inappropriateness of the type of fertilizer, and lack of farmer involvement in different contexts where the problem of fertilizer use occurred in Maros.

Data Analysis

The approach to the data analysis was thematic in nature, where the inductive and deductive coding was used to identify common patterns, and then map the results with the strategic triangle structure introduced by Bryson. The documents, the notes of observation and the transcript of the interviews were arranged in the NVivo software to facilitate systematic coding and retrieval. It was initially coded inductively with themes found in relation to the seven problems (politicization, use of wrong type fertilizers), then deductively through the Bryson pillars legitimacy and support (transparency, inclusion of farmers), organizational capacity (accuracy of RDKK data, coordination), and public value creation (impact on yields, effects on farmers). Themes were also formed to discuss the connection, which includes how the issue of inaccurate information negates legitimacy or how poor coordination curbs the achievement of public value. Triangulation between the data sources would allow robustness as the complaints of mismatched fertilizers by farmers were combined with observation notes and data presented by RDKK. The member checking with three members and two officials validated preliminary findings and supported the congruence between the analysis and stakeholders experience.

Application of Bryson's Strategic

The strategic triangle structure that was offered by triangle John Bryson gave a script based method of analysis through which the management of the fertilizer aid program in Maros, Indonesia was probed. The basis of study was the empirical scaffold of the three pillars of the framework, viz. legitimacy and support, organization capacity, and the creation of public values. The interrogation of legitimacy and support was also done by examining the transparency and inclusivity of policy formulation, i.e. the degree to which farmers are consulted in the policy formulation process and the extent to which political interests are considered in policy making, which is represented in aspirational fund allocations. The organizational capability was evaluated based on the effectiveness data systems (e.g., accurate RDKK), the synchronization between subjects (e.g., synchronization between government and distributors), implementer professionalism and thus tackled implementation challenges such as the lack of distribution support. The public value was created by measuring the effects of the program on the agricultural productivity and farmer welfare and this has been associated with constraints in the influence of outputs. This framework permeated the coding procedure and the following thematic synthesis, making sure that the seven identified problems are treated systematically with their potential solutions determining how effective governance should be organised in Maros.

Ethical Considerations

Strict observance of ethical research principles was conducted with the aim of ensuring the security of participants and data as well. All interviewees had given their informed consent, and they had been informed about the objectives of the study, their withdrawal rights, and other steps that would help to maintain their anonymity. Audio recordings and transcripts of interviews were kept in a safe place using password-protected devices, and pseudonyms were used in reporting to guard the identities of the participants. The privacy of farmers and distributors was not to be affected by non-intrusive observation at the distribution sites and sensitive personal and proprietary data were not to be disclosed; data were not to be used in any other way except academic purposes, thus, complying with ethical standards of the qualitative research suggested by Muhammad et al. (2024).

Limitations

In this study, the qualitative methodology is used that, although providing the rich contextual information, restricts in transferring the study findings to another region or another system of governance beyond Maros Regency. The decade-long longitudinal phase 2020-2030 will embrace a range of policy design and implementation approaches; nevertheless, the use of written documents between 2020 and 2023 will threaten to overlook later policy fluctuation. To reduce such limitations, triangulation was conducted between the documents, observations, and interviews to produce powerful perceptions, and purposive sampling was utilized to analyze high-actors and locations. Inclusion of quantitative measures and additional sample growth in the future would contribute to the enhancement of the paper but does not hamper the main purpose of this research, which is a multi-actor governance structure study, and its seven problems as described in the study.

RESULTS AND DISCUSSION

This study examines the governance of the subsidized fertilizer assistance program in Maros Regency, South Sulawesi, using a qualitative approach with data collected through document studies (15 documents, 2020–2023), observations at five distribution sites, and in-depth interviews with 20 stakeholders (five government officials, three legislators, eight farmers, four distributors). The findings, organized by John Bryson's strategic triangle framework legitimacy and support, organizational capacity, and public value creation reveal persistent governance challenges that align with the seven identified problems: (1) mismatched fertilizer types, (2) unsuitable fertilizer brands, (3) limited impact on agricultural output, (4) politicization of the program, (5) lack of distribution support, (6) minimal farmer involvement, and (7) inaccurate farmer and land data. Below, the results are presented with direct quotations from interviews, supported by document and observation data, and integrated to highlight their significance.

Legitimacy and Support

The fertilizer assistance program suffers from weak legitimacy due to non-transparent policy processes and minimal farmer involvement. Document analysis of RDKK records revealed that 35% of eligible farmers were unregistered due to outdated data, forcing them to purchase non-subsidized fertilizers at higher costs. A rice farmer stated,

"I've been farming here for years, but I'm not on the list. No one explains why or how to fix it" (Farmer 3).

This exclusion, observed at distribution sites where unregistered farmers were turned away, fostered distrust. Politicization, another key issue, was evident in interviews with farmers and officials. A farmer noted,

"Fertilizer goes to villages that support certain legislators, not to those who need it most" (Farmer 6).

Document studies confirmed that legislative aspiration funds skewed allocations, with 60% of 2022 quotas directed to politically aligned areas. A legislator defended this, stating,

“We prioritize our constituents’ needs, but it’s still fair” (Legislator 2).

The lack of farmer involvement was clear in interviews, with a corn farmer saying,

“They decide everything in the office; we’re never asked what fertilizer we need” (Farmer 1).

These findings indicate that non-inclusive processes and political influences undermine the program’s legitimacy, exacerbating perceptions of unfairness and the problems of politicization and minimal farmer involvement.

Organizational Capacity

The program’s organizational capacity is limited by inaccurate data systems, poor coordination, and inadequate support mechanisms. Document analysis showed that RDKK data errors led to 20% of registered farmers receiving incorrect fertilizer quantities in 2022. A distributor highlighted this issue:

“The lists we get don’t match the farmers who show up, so we waste time sorting it out” (Distributor 1).

Observations at distribution sites confirmed logistical inefficiencies, with delays of up to three days and insufficient staff to assist farmers. The lack of distribution support was evident in interviews, with a farmer stating,

“They drop off the fertilizer, but no one tells us how to use it properly” (Farmer 5).

Mismatched fertilizer types and unsuitable brands further reflect weak capacity. A government official admitted,

“We distribute what’s available, not always what’s best for the crops” (Official 4).

Observations noted that 25% of distributed fertilizers were returned unused due to mismatches (e.g., urea instead of NPK for rice). Interviews also revealed no formal coordination forum, with a distributor noting,

“We rarely meet with the government or farmers to plan; it’s all separate” (Distributor 3).

These findings underscore how data inaccuracies, lack of coordination, and insufficient support systems contribute to the program’s inefficiencies, aligning with the identified problems.

Public Value Creation

The program fails to create significant public value, as it has limited impact on agricultural output and farmer welfare. Document analysis of 2020–2023 agricultural data showed that rice yields in Maros grew by only 1.2% annually, compared to a national average of 2.5%. A soybean farmer stated,

“The fertilizer doesn’t make a difference; our yields are almost the same every year” (Farmer 7).

This aligns with the problem of limited agricultural output, driven by mismatched fertilizers and lack of application guidance. Observations at distribution sites showed farmers struggling to apply fertilizers correctly, with one instance of over-application leading to crop damage. The lack of farmer involvement further diminishes public value, as a farmer noted,

“If they listened to us, we’d get fertilizers that actually work for our land” (Farmer 2).

Inaccurate data and politicization exacerbate inequalities, with unregistered farmers facing higher costs, as one stated,

“I spend half my income on market fertilizers because I’m not in the system” (Farmer 8).

The absence of evaluation mechanisms, noted in document studies, means outcomes are not assessed, perpetuating dependency rather than empowerment. These findings highlight the program's failure to deliver sustainable benefits, linked to multiple identified problems.

Systemic failures of governance revealed by a qualitative analysis of the subsidized fertilizer assistance program in the Maros Regency undermine its functioning, particularly in terms of the strategic triangle framework that John Bryson identified three strategic objectives, namely legitimacy and support, organizational capacity, and the creation of public value (Bryson 2018). There was an identification of seven main problems namely inappropriate fertilizers, inapplicable brands, little effect on the agricultural production, the politicization of the project, lack of distribution services, under participation of the farmers, and unreliable information on the farmers and land. Such gaps lie mainly in relations among various participants of the activities, government agencies, legislators, farmer groups, and distributors, and they trigger a cycle of inefficiency, exclusion, and inequality that hinder the ideals of the program to increase agricultural productivity and farmer welfare. These findings, based on document research, field observations and stakeholder interviews, demonstrate the need to address the need to have a more participatory, open and accountable exercise of distributing the fertilizer. It discusses these findings by defining them along the three dimensions of legitimacy and participatory governance, organization capacity and collaborative mechanisms, and the public value and sustainable outcomes and can connect them to the theory of public administration and the seven identified problems. By so doing, this segment delves into this issue of the root cause of governance failure and proposes reform agenda towards a more thorough overhaul of fertilizer assistance in the town of Maros and beyond to agricultural settings.

Legitimacy and Participatory Governance

Non-transparency in policy making, political factors and a systematic lockout of farmers in the policy making process hence, discredits the credibility of the fertilizer assistance program and thereby seal inequitable allocation. The framework of legitimacy described by Bryson claims the presence of policies that are seen with justice and fairness, inclusion, and democracy-based. However, this is contrary to these principles because of the top-down nature of the program where government agencies and legislators make decisions about the fertilizer allocation without involvements of farmers. There is little involvement of farmers at the very core, where the farmer is perceived as a mere recipient and does not have any role other than being a receiver of policies that does not meet their local needs effectively. The oversight of community priorities in the policies, which is the main highlight of participatory governance, is a key element of a proper public administration (Bua & Escobar, 2018; Meuleman, 2021; Cashore et al., 2021). In Maros, lack of mechanisms that can allow farmer to influence fertilizer types or quota, has led to allocations that do not take into account the specific agricultural circumstances, i.e. soil type or crops requirements, hence further complicating the issue of inadequate fertilizer type and wrong brands.

This makes farmers distrust the program and therefore the farmers are not satisfied with the program and the credibility of the program has been affected. Other factors resulting in illegitimacy include the politicization of the entire program which is enhanced through legislative aspiration funds which puts the political interest first, not the equitable distribution. Aspiration funds are supposed to help fill the needs of the community; they are usually distributed depending on the connections provided by the political parties leading the perceptions of preference and injustice. This is in consistency with what is observed by Pasternak (2018) who point out that politicized resource allocation undermines alienation of the people and misdirects policy results. This has seen some groups of people in Maros be given excessively high quotas of fertilizer and others especially those lacking political links to be marginalized. What makes the situation even worse is that farmer and land information are faulty and, based on this, farmers who are not registered in the RDKK system cannot get the subsidies, forcing them to use expensive market fertilizers instead.

This long held disparity regarding fertilizer subsidies distribution in Maros give rise to further sentiments of unfairness and increases the likelihood of social unrest since poor farmers perceive themselves being left out in a program that was supposed to be a boon to them. Lack of transparency, both with regards to the use of RDKK data and with regards to decisions made in legislation add to lack of legitimacy, since stakeholders are not informed on the grounds upon which these decisions are made. To correct such problems, the policymakers should implement participatory forms of governance, which regard the farmer participation and openness (Yami et al., 2019; Fritsch, 2019). Local needs would be incorporated into fertilizer allocations by creating farmer-based advisory councils or forums in which the people of that area consult and make their demands known to fix the issues of little participation and inappropriate fertilizers. With such mechanisms, the farmers could give feedback as to the type and quantity of fertilizers they want to use and that would not be out of context with crop and soil demands. Improving transparency may be done by announcing RDKK figures and allocation rates so that as little favouritism and politicisation as possible is perceived.

According to Tomo et al. (2020) and Sørensen et al. (2021), collaborative governance where policy is co-created by the stakeholders enhances legislative authority because it builds trust and accountability. This may include the regular meetings of farmers, governmental officials, and legislators in Maros to recognize priorities and correct the falsehood of the data. Furthermore, any politicization can be reduced through commissions of independent oversight, that is, allocations in the aspiration-fund can be audited by independent third parties so that not allocation is undertaken on basis of political appeals. Such reforms would not only increase the legitimacy but also develop more credible and fair fertilizer assistance programme, thereby depressing social tensions and creating a somewhat favorable attitude within the circle of community. These findings are not limited to Maros; rather, such finding enlighten us about other agricultural areas that may have the same issues with governance.

In Indonesia where the systems of governance are decentralized with a lot of authority being transferred to the local governments, it is vital that the legitimacy in the subsidy programmes of Indonesia could help in getting the trust of the people and in accomplishing the objectives of these subsidy programmes. Politicization as well as low level of participation by farmers are the common problems in the decentralized systems, which might be subject to local politics influence in resource distribution by the locals (Closas & Villholth, 2020). To meet the converging issues of agricultural development and food security, the hierarchical to participatory phases of governance is required as a paradigmatic shift based on the aspect of stakeholders that highlights their perspectives and upholding of process transparency. By encouraging local governments to embed farmers in the policy mode itself, local governments create even more responsive and legitimate interventions, hence increasing programmatic effectiveness.

Organizational Capacity and Collaborative Mechanisms

Organizational capacity as Bryson defines it as the resources, systems, and coordination needed to ensure effective implementation of policies representation of best practices in the field (Bryson, 2018, p. 254) is a formidable obstacle in providing fertilizers in the frameworks of Maros RDKK program. The inefficiency of the data management due to inaccuracy of records and absence of proper coordination mechanisms produces misplaced or too few quota allocations. Inaccuracy like this does not lead to equitable distribution; the farmers that should have shared in the distribution or the farmers who were supposed to have the distribution are either marginalized or the ratios of quantity given to them are not what they are supposed to have, compromising on the efficiency of the program. Also, lack of technical support in the distribution leaves farmers at a loss on how best to use the fertilizer, which leads to misuse of product type and brands. Due to the fact that proportions are supplied by limitations on supply and not the practical needs of farmers, a huge amount of underprivileged usages and wastages follow (Fussy & Papenbrock, 2022). Such trend is worsened by ineffective coordination of activities between government agencies, legislators, distributors and farmers. Lack of a formal coordination channel

brings on disjointed efforts: government leaders deal with quota objectives, politicians seek political gain, distributors deal with logistical limits and farmers stay at the periphery.

Strong implementation is therefore opposite to collaborative governance, which requires the stakeholders to coordinate action with an aim of matching the goals and the resources (Ansell & Gash, 2018). Sectoral reasoning in the fertilizer distributions leads to a number of barriers and among them incomplete delivery schedules, mismatched fertilizer types at sale stations, and excess or short quota assignments among individual farmers. Most of these inefficiencies can be blamed on the factor of lack of institutional support and in this case the lack of extension services to educate the beneficiaries on how to practice proper application techniques. This yields poor management of fertilizers, low crop yields and subsequently ecological destruction through poor nutritional levels in the soil. The need to reduce these capacity bottlenecks creates the necessity of systemic reforms that would boost the quality of data, inter-agency collaboration, and support systems. A comprehensive and constantly updated RDKK database with digital platforms that collect real-time data would solve potentially inaccurate or incomplete data on the information provided during registration, thus guaranteeing that farmers who meet the requirements would get the correct quota allocation.

Frequent multi-stakeholder coordination briefings, e.g. quarterly meetings between multi-agencies, would further harmonise the organisational priorities and henceforth facilitate the cooperation between government offices, distributors, and farmer groups. Such forums can eliminate the variance in quotas and type of fertilizers by ensuring that there is joint planning and logistical points of congestion are taken care of. Besides, there should be an expansion and intensification of extension services which should be realized by initiatives committed to the training of farmers by agricultural professionals and will empower them with the technical information regarding fertilizer correct use. It can be concluded that to maximise the effectiveness of any input subsidy program, strong administrative constructs and synchronised stakeholder enterprises are important. The abovementioned reform agenda could also make distribution channels more efficient, reduce wastage, and provide fertiliser according to the needs of local agriculture in Maros. The wider applicability of these findings is not limited to image subsidy programmes but can be used in intervention with relevance to complicated agricultural support programmes within the decentralised governance application in Indonesia. Focus on the support and coordination mechanisms ensure that policymakers are able to implement governance systems that eliminate these issues and ensure an improved programme performance and cater to the needs of the farmers.

Public Value and Sustainable Outcomes

The fact that the fertilizer assistance program offers no net public value should be evidenced by the fact that this initiative had limited impacts on agricultural output and welfare of farmers. According to Bryson et al. (2014), a better definition of the notion of public value is the delivery of quantifiable advantages to stakeholders, such as an increased level of productivity and improved economic welfare (Best et al., 2019). One can see on the example of Maros that observable shortages that include low production in agriculture and misplaced fertilizers have confirmed the little role of the scheme will play in crop production; fertilizers are often mismatched in relation to the crops or soils on which they are applied. The fact that the program offers little in distribution support, especially in form of technical guidance regarding application of fertilizer, also reduces the effectiveness of the program since farmers tend to use inputs improperly hence yield poor results or cause environmental desolation. In addition, the farmer-led participation in the formulation process is so minimal to the extent that those in the frontline become marginalized, thus creating a tendency of dependency instead of empowerment. Inaccurate data collection and politicized allocation of resources contribute more to dissatisfaction of the greater good and it creates disparity among the benefit recipients. The unregistered farmers who are not part of the RDKK system are facing high out-of-pocket

expenditures on fertilizers found in the market through which they can only maintain their livelihoods at the cost of economic inequality.

Weaponized subsidy distribution- often spurred by aspiration funds, weaponizes equity, by funneling resources to some communities at the expense of others and erodes the ability of the program to support all the farmers without discrimination. Such unsuccessful experiences are consistent with the findings, according to which such poorly designed subsidy schemes almost never offer benefits to the masses. To top it off, the lack of serious evaluation processes, another major failure on their part, delays policymakers to measure their effect or identify the areas where they need improvement, further sustaining a system of poor governance. These accountability gaps hobble the realization of sustainable gains, such as the enhancement of agricultural yield and self-sufficiency among farmers. Creating a public value means setting new farmer-focused policies where personalized allocations of fertilizers and fully fledged supply systems are prioritized. Engagement of farmers in the design of policy tools--in other words, focus-group discussion or systematic survey--would ease the synchronisation of provision of fertilizers with local context reducing the far-reaching deterrence of products and needs.

At the same time, the diversification of extension activity to include modules on fertilizing, soil management, and nutrient-balanced crop growing would improve agronomic efficiency and/or reduce the undesired environmental externalities addressing the reported lack of productive effect of farm subsidies. The utilization of the results-based evaluation schemes, that is, the scheduled assessment of the impact, would provide the policymakers with possible feedback to act on, which would allow them to constantly improve the intervention. The efficient establishment of the public-value creates the situation that depends on the policy designs to provide visible benefits with simultaneous fostering of stakeholder trust. When it comes to Maros, the above reforms have the capability of resetting the fertilizer-subsidy programme in light of sustainable agrarian development and improving farmer agency and reducing dependence on external aid. Notably, such limitations are also relevant to agricultural policy in Indonesia and other developing countries in general.

The aspect of attaining a balance between efficiency and equity within subsidy schemes is one that most often arises contention with, and this issue is all the more worsened on the localized nature of decentralized environments featuring the heterogeneity of local capabilities. Comprehensive, evidence-based governance that places greater focus on public value can enable national governments to feel the breadth and takings of cross-sectoral approaches to agricultural change that promotes food security and rural prosperity. This pathway is seen in the Maros case where an integrated combination of participatory and data-driven interventions is dealing with seven inter-related programme gaps, providing a replicable example of how to carry out governance reform to produce sustainable gains to farmers and the communities where they live.

CONCLUSION

Based on strategic triangle framework explained by John Bryson, the governance of fertilizer aid in Maros Regency still has a significant paradigm with regard to the aspects of legitimacy, organizational capacity and creation of public value. The legitimacy of policies and the authority in policies are weak since policies lack a foundation on transparent and participatory democratic process therefore eroding the trust the people have on the efforts being undertaken. There is also insufficient organizational capacity that is reflected in poor integration of farm data and low professionalism of implementing officials. Any resulting policy interventions, therefore, cannot be used as a manner of dealing with urgency in the field. Furthermore, this very program has been unable to yield any significant level of public value, since fertilizer relief has not resulted in any significant gain in agricultural productivity and welfare of the farmers. Factually, unfair allocation of fertiliser has triggered conflict between farmers, and increased social disparity. And to add to these, the lack of effective reporting and evaluating mechanisms with community participation will only hinder the utilisation of Bryson triangle principles. To this end, a more

participatory and evidence-based readjustment of fertilizer aid policies is necessary in order to create more equitable and effective policies of government.

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