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Collaborative governance based on farmers' corporations in the development of sorgum areas in East Sumba District

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ABSTRACT

Introduction: The development of sorghum in the drylands of East Sumba faces complex challenges, particularly regarding limited government resources and weak farmer bargaining power. This study analyzes the effectiveness of the sorghum area development program through a Collaborative Governance perspective, focusing on the role of farmers' corporations. **Methods**: This research employed a qualitative descriptive method conducted from May to July 2023 in East Sumba Regency. Data were collected through in-depth interviews, participatory observation, and focus group discussions with 15 key informants selected via purposive sampling (farmers, government officials, and private partners). The analysis utilized Ansell and Gash's framework, examining initial conditions, institutional design, facilitative leadership, and collaborative processes. **Results**: The findings reveal that while the collaboration has successfully initiated the program, it faces critical structural challenges. Initial conditions were marked by information asymmetry and farmer skepticism due to past failures. Although the institutional design adopted a consensus-based voting mechanism, participation remained dominated by government and private actors, leading to passive involvement from less-educated farmers. However, the Agriculture Office's facilitative leadership proved effective in conflict mediation, and the achievement of "small wins" through increased harvest yields has begun to build trust. **Conclusion**: The study concludes that sustainable sorghum development requires transforming farmer groups into legal corporate entities to balance power relations. Future collaboration must focus on substantive farmer empowerment rather than just procedural participation.

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INTRODUCTION

Sustainable development is a global development paradigm that must be implemented by all countries, including Indonesia, to maintain the improvement of quality of life from generation to generation. The Sustainable Development Goals outlined in Presidential Decree Number 59 of 2017 on the Implementation of Achieving Sustainable Development Goals include: supporting the improvement of sustainable economic welfare for the community, maintaining the sustainability of community life, preserving environmental quality, and implementing good governance (Widiawati & Nugroho, 2021). Development is considered sustainable when economic, social, environmental, and governance goals are aligned, and stakeholders are able to effectively integrate their responsibilities and duties in managing their resources (Rina, 2023).

The agricultural sector plays a crucial role in achieving sustainable development goals, particularly in meeting the basic needs of the Indonesian people and driving economic progress. The agricultural industry remains the main driver of national growth to this day (Pandey & Pandey, 2023). However, farmers in Indonesia often face persistent and complex problems related to agriculture. The problems frequently faced by the Indonesian agricultural sector, according to Soedarto and Ainiyah (2022), include land issues, capital, technology, managerial and institutional problems for farmers, as well as post-harvest issues. The main cause of land problems is land conversion due to competition for land use between the agricultural and non-agricultural sectors, driven by three social and economic phenomena: population growth, economic expansion, and resource scarcity (Prabowo *et al.*, 2020). The issue of capital arises because farmer institutions are still weak, with limited credibility from community organizations in their efforts to obtain funding from formal financial institutions . Meanwhile, the technology issue relates to the application of technology in institutions as an effort to open up broader market

information and optimize production processes and other infrastructures (Arvianti *et al.*, 2023). Facing the complexity of agricultural problems, the conventional approach that solely relies on the role of the government has proven to be ineffective. The agricultural sector cannot function effectively if its development solely relies on the role of the government. One of the efforts to address this issue is the implementation of Law Number 19 of 2013 on the Protection and Empowerment of Farmers by the government (Florini & Pauli, 2018). This law specifically encourages collaborative governance in the agricultural sector through the establishment of strong farmer institutions, facilitation of partnerships between farmers and the private sector, provision of integrated technical and financial support, and the development of sustainable marketing systems. Collaborative governance has proven effective in addressing agricultural issues in various countries, with a meta-analysis of 30 case studies showing that collaboration involving farmers and other stakeholders is a key strategy for sustainable agriculture, provided that certain conditions such as trust, effective communication, and facilitative leadership are met.

The concept of collaborative governance evolves from the governance theory that emphasizes multi-stakeholder participation in public decision-making. According to Winarti *et al.*, (2020), collaborative governance is a term used to describe the operational processes of government where the government collaborates with all stakeholders to achieve goals. Meanwhile, according to collaborative governance is known as governance that divides power and resources among government agencies, other public institutions, and stakeholders with the hope of strengthening relationships among them (Rattunde *et al.*, 2021). In the context of agriculture, collaborative governance integrates farmers' local knowledge with modern technology and government policy support to achieve sustainable development goals. Previous research shows that the success of collaborative governance in the agricultural sector highly depends on factors such as trust among stakeholders, long-term commitment, fair distribution of power, and effective communication mechanisms (Rattunde *et al.*, 2021). Making processes and solutions much better, more widely supported, stronger, and more innovative, so that policy-making becomes more network-based rather than state-centered.

One of the regions implementing collaborative governance in the agricultural sector is East Sumba Regency, particularly in the development of sorghum as a flagship commodity. East Sumba Regency faces specific challenges in the development of the agricultural sector that require a comprehensive and integrated approach. Empirical data shows that in 2022, the development of sorghum in East Sumba Regency was only carried out on an area of 80 hectares, concentrated in Watumbaka Village and Palakahembi Village, Pandawai District, with a sorghum seed production yield of 10 tons. Although the productivity of sorghum in this region reached 5 tons per hectare, this figure is still below the optimal potential that can be achieved with smart farming technology, which can increase yields by 2-5 tons per hectare. The main problems faced by sorghum farmers in East Sumba include limited access to stable markets, limited modern agricultural technology, irrigation and water supply issues, and weak coordination among stakeholders. This is exacerbated by the isolated geographical conditions of East Sumba and limited infrastructure.

The implementation of collaborative governance in the development of sorghum in East Sumba Regency is carried out through strategic partnerships between farmer groups, the East Sumba Regency Agriculture and Food Security Office, and PT Sumba Moelti Agriculture (PT. SMA). The formation of farmer corporations is an effort to optimize the added value and competitiveness of products developed in a region, in accordance with the mandate of the Minister of Agriculture Regulation Number 18 of 2018 to integrate a series of plans and implementation of policies, programs, activities, and budgets for agricultural area development (Widodo *et al.*, 2025). This development activity only started in 2022 with an expansion target from 80 hectares to 3,000 hectares by 2024, and the chosen agricultural commodity is the Suri 4 sorghum variety. The selection of sorghum as the developed commodity is based on several factors, including the potential vast land area in East Sumba Regency for development locations, the presence of off-takers with industrial capacity on Sumba Island, and support from the local community and government. In this implementation, farmer groups are the main actors in the collaboration, with the government through the Agriculture Office responsible for training and socializing with farmers as well as providing capital assistance in the form of seeds, fertilizers, and agricultural machinery. Meanwhile, the private sector through PT. SMA provides planting tools, assists in the planting process up to harvesting, and purchases the agricultural products.

Although the implementation of collaborative governance in sorghum development in East Sumba has begun, there are still significant knowledge gaps regarding the dynamics of relationships among stakeholders and the factors influencing the success or failure of the implementation. Unanswered research questions include how the patterns of interaction and power negotiation between farmer groups, local government, and the private sector in the decision-making process, what factors are key to the success or hindrance in the implementation of collaborative governance, how the mechanisms of coordination and communication among stakeholders in addressing technical and non-technical challenges of sorghum development, and how to ensure the sustainability of the sorghum development program in the long term through collaborative governance. This research is important because it will contribute to the development of collaborative governance theory in the context of agriculture in Indonesia, particularly in the development of specific commodities in regions with unique geographical and socio-economic characteristics such as East Sumba.

Based on the above description, this study aims to examine and analyze governance in the development of sorghum areas in East Sumba Regency using the concept of Collaborative Governance. Specifically, this research will investigate four main dimensions: identifying initial conditions that influence the implementation of collaborative governance, analyzing the institutional design developed in the sorghum development program, evaluating the effectiveness of facilitative leadership in coordinating various stakeholders, and identifying and analyzing the collaborative processes occurring in the development of sorghum areas in East Sumba Regency. This research is expected to provide practical recommendations to enhance the effectiveness of collaborative governance in agricultural development, particularly in the context of developing flagship commodities in underdeveloped areas.

METHODS

Research design

This study employed a qualitative descriptive approach to comprehensively analyze the governance dynamics in the sorghum development program. This method was chosen to capture the complexity of social interactions, power relations, and institutional mechanisms that quantitative methods might overlook (Creswell & Poth, 2018). The research was conducted from May to July 2023 in East Sumba Regency, East Nusa Tenggara, specifically focusing on the partnership areas managed by the Agriculture and Food Service and PT. Sumba Moelti Agriculture (PT. SMA).

Participants and data collection

This research uses a qualitative descriptive method chosen because it aligns with the research objectives to analyze collaborative governance in the development of sorghum regions. Creswell and Poth (2016) states that qualitative methods allow researchers to deeply understand the meanings given by individuals or groups to a social issue. This method is suitable for collaborative governance research because it facilitates the understanding of interaction processes, negotiation, and coordination among stakeholders (Fuad *et al.*, 2019). The determination of respondents used the purposive sampling method based on capacity and direct involvement in the development of the sorghum area (Agustianti *et al.*, 2022). A total of 15 respondents were selected, consisting of 5 experienced sorghum farmers, 2 field extension workers from BP3K Pandawai, 3 officers from the East Sumba District Agriculture Office, 2 village heads from the sorghum development areas, and 3 representatives from PT. SMA. Primary data were collected through in-depth interviews, participatory observation, and focus group discussions. Secondary data were obtained from literature studies and documentation from relevant agencies.

Data analysis

Data analysis uses a qualitative descriptive approach with the Collaborative Governance framework by (Ansell & Gash, 2018). The analysis process follows the stages of data reduction, data presentation, and result verification (Muda, 2019). The implementation of the analytical framework is carried out through the identification of four main components: first, the initial conditions are analyzed by identifying the history of cooperation, power distribution, and the level of trust among stakeholders; second, the institutional design is evaluated through participation rules, forum structure, and decision-making mechanisms; third, facilitative leadership is analyzed by identifying the roles of key actors in facilitating dialogue and managing conflicts; fourth, the collaborative process is evaluated through communication dynamics, trust building, and the intermediate outcomes achieved. Data were analyzed using thematic coding techniques to identify patterns within each component of the analytical framework. The results were verified through data triangulation and presented in the form of a narrative description that illustrates the conditions of collaborative governance in the development of the sorghum region.

RESULTS AND DISCUSSION

The concept of Collaborative Governance includes the involvement of related institutions that initiate collaborative efforts so that concepts or ideas emerge from each institution (namely stakeholders) regarding goal setting, evaluation of results, impact of change, and other related functions (Emerson *et al.*, 2012). The Collaborative Governance model according to Ansell and Gash in (2008, as cited in Aziz *et al.*, 2024) is used as an analytical tool to ensure the effectiveness of the implementation of Collaborative Governance in sorghum area development activities in East Sumba Regency. Ansell and Gash's framework is systematic, in the sense that it pays attention to the initial context of a collaborative arrangement, it focuses heavily on the actual process within that arrangement and the dynamics it creates , and it gets paid. Particular attention is given to enabling leadership and institutional design, and ultimately to the outcomes of the process (Christensen, 2024). Collaborative governance is distinguished from other governance arrangements through the interactive participation of various participants in overcoming problems, challenges and/or opportunity. Collaboration is basically understood as a process participants working together (Christensen, 2024). This model consists of Initial Conditions, Institutional Design, Facilitative Leadership, and Collaboration Processes.

Initial conditions

The initial condition, according to Ansell and Gash in (Ansell & Gash, 2012), is a state where there is a willingness from stakeholders to engage in mutual cooperation, whether from government, non-government, or other parties. The generally dry and semi-arid climate of East Sumba Regency creates specific challenges in the collaborative management of sorghum development. Figure 1 shows that rice, corn, and peanuts are the main commodities that have long been the mainstay of farmers, while sorghum is only positioned as a secondary crop with low economic value because it is sold to middlemen. This condition creates complexity in the collaborative process because it generates resistance from farmers who are accustomed to conventional planting patterns and are reluctant to switch to commodities that are considered less profitable.

The lack of farmers' knowledge about cultivation, economic value, and benefits of sorghum plants results in information asymmetry that affects the dynamics of collaborative governance. This disparity in knowledge creates farmers' dependence on other stakeholders such as extension workers and agricultural officers, which in turn affects the distribution of power in the collaborative decision-making process. Moreover, the dominance of conventional commodities has established a well-entrenched economic and social network, making the effort to diversify into sorghum require the restructuring of relationships among stakeholders and the formation of a new consensus regarding regional development strategies. These initial conditions also affect the level of trust among stakeholders in the collaborative process, where farmers tend to be skeptical of the sorghum development program due to previous experiences with exploitative middlemen. This demands a strong facilitative leadership role from local governments and private partners to build trust and encourage active farmer participation in the collaborative governance of sorghum development.

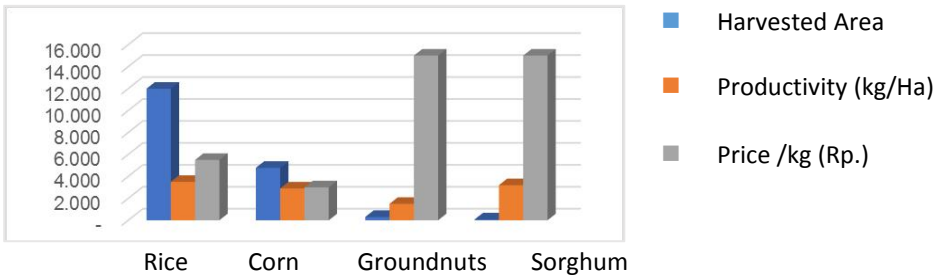

Figure 1. Harvest area, productivity and price of sorgum in 2022 institutional design

East Sumba Regency was chosen as one of the sorghum development areas in East Nusa Tenggara Province. In early 2022, the Presidential Staff Office (KSP) and PT Sumba Moelti Agriculture (PT SMA) worked together to start planting sorghum on 60 ha of land in East Sumba Regency. Harvest yields in the initial stage average ± 5 tonnes per ha, which is considered very good from an economic perspective in East Sumba Regency which is dominated by dry land (Riptanti *et al.*, 2021)This is the main reason for the President of the Republic of Indonesia to pay a working visit in June 2022 to East Sumba Regency. Apart from that, East Sumba Regency has also been designated as one of the sorghum commodity development areas. Sumba Island will be used as a food estate for the sorghum commodity. This project will open up 25,000 ha of land in four districts of the island by 2023. The construction of a new production center for sorghum commodities is expected to increase sorghum production and meet national sorghum needs to overcome the global food crisis.

By considering the potential of the East Sumba Regency area, PT. SMA has started efforts to develop sorghum cultivation in collaboration with the East Sumba Regency Distan by involving farmer groups in the Laipori and Palakahembi village areas. In this activity, conflict cannot be avoided. Farmer groups experience difficulties in inviting other farmers to participate. The reason why farmers refuse to take part in this activity is because they doubt the success of sorghum cultivation and are afraid of experiencing losses. When conflict occurs in the field, the East Sumba Regency Distan conducts outreach to farmer groups. They offer capital support in the form of fertilizer, seeds and agricultural equipment as some of the benefits that can be obtained. Apart from that, because the harvest will be purchased by the company, farmers also receive a guaranteed selling price, and then a legal entity sorghum farming community will be formed.

Institutional design

According toApondo (2021) , an important aspect of the design of collaborative governance institutions is the clarity of rules and procedures that must be applied fairly, openly, and transparently so that stakeholders can trust that the collaboration process is conducted with integrity. In the context of sorghum development in East Sumba, the implementation of collaborative rules and procedures is carried out through several specific institutional mechanisms. The decision-making process in the collaborative governance of sorghum development in East Sumba is conducted

through a multi-stakeholder coordination forum held regularly every month. Based on interviews with the Agricultural Office staff, "Every decision related to the sorghum development program must go through a joint discussion in a forum attended by representatives of farmers, extension workers, the agricultural office, village heads, and PT. SMA." A consensus voting mechanism is applied where each stakeholder has an equal vote, and a new decision can be made if at least 70% of the participants agree.

For conflict resolution, a tiered procedure has been established, starting with informal mediation by the village head, then escalating to a mediation team consisting of representatives from BP3K and the Agriculture Office, and finally to the district-level coordination forum if necessary. One of the respondent farmers stated, "When there is a problem with seed prices or quality, we report it to the village head first, and if it is not resolved, we bring it to the monthly forum." This system ensures that every conflict can be resolved through a clear and structured pathway. Accountability is ensured through a transparent reporting system where every stakeholder is required to submit activity and resource usage reports quarterly. PT. SMA, as a private partner, is required to submit reports on the purchase of harvests and payments to farmers openly in coordination forums. The Department of Agriculture also provides an online platform for monitoring and evaluating the program that can be accessed by all stakeholders.

Evaluation of the four criteria of institutional design shows varied results. From the clarity aspect, rules and procedures have been documented in the Standard Operating Procedures (SOP) jointly prepared by all stakeholders in 2023. However, the results of the observation show that not all farmers understand the complex procedures, especially regarding the reporting and program evaluation mechanisms. A farmer stated, "We know we have to report to the village head, but for the complicated procedures, we are still confused." In terms of justice, a consensus voting system and equal representation have been implemented, but there is a disparity in participation where farmers with lower education levels tend to be passive in discussion forums. Observations show that the dominance of discussions is often held by service officers and PT representatives, while farmers tend to listen more than actively participate.

The aspect of openness has been implemented through monthly open forums and relatively easy access to information. All stakeholders can attend coordination forums and access program information through the provided digital platform. However, the limited technological infrastructure in remote areas still poses a barrier to information access for some farmers. Transparency demonstrates the best implementation, where financial reports, production targets, and program evaluations are published openly. Quarterly reporting systems and periodic audits by independent teams ensure accountability in resource usage. The head of Pandawai village stated, "All financial reports and program activities are open for residents to see, and they are even posted on the village bulletin board." Based on that analysis, improvements are needed in the aspect of clarity through more intensive socialization of procedures and simplification of the reporting mechanism. To enhance fairness, capacity building for farmers is necessary so they can participate more actively in discussion forums. Improvement of technological infrastructure is also necessary to ensure equal access to information for all stakeholders.Farmer institutional problems are important issues that need to be addressed. Institutional problems and the quality of human resources (HR) are closely related. According to Wulandari *et al.* (2024) farmers living in rural areas usually have low levels of education, while those with secondary and higher education are reluctant to farm. Farmer Groups, and Gapoktan, Agricultural Commodity Associations, are farmer institutions that play an important role in overseeing all aspects of agriculture, including product processing, marketing, and production (Cahyanto *et al.*, 2025)

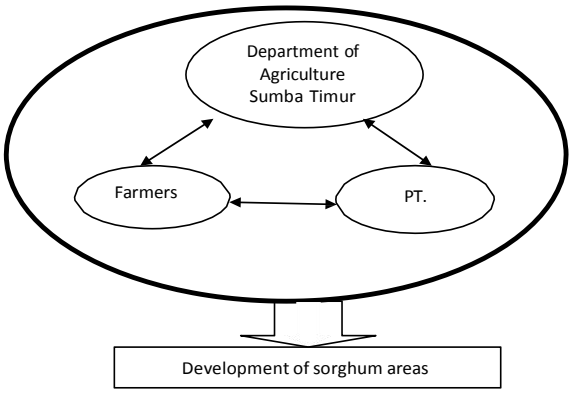

Figure 2. Collaboration pattern of sorghum area development in east sumba regency

In the concept of collaborate governance, it is determined by openness, involvement, regular meetings, and support for fundamental rules. The terms of cooperation in this collaboration are outlined in a Memorendum of Understanding or MoU (figure 2). In accordance with the MoU, East Sumba Regency Distan acts as an intermediary and is trusted to increase cooperation by providing support in the form of production facilitie, tool sagriculture, and the establishment of incorporated organizations for farmer groups. Meanwhile, PT SMA acts as a partner by

purchasing farmers' crops, providing planting equipment assistance, and providing high-quality seeds. Finally, farmers play an important role in this partnership, namely as a workforce. Law Number 19 of 2013 concerning the Protection and Empowerment of Farmers and Regulation.

Number 18 of 2018 concerning Guidelines for the Development of Farmer Corporation-Based Agricultural Areas, and the Decree of the Regent of East Sumba No 721/Distanpang. 520/721/XII/2022 concerning the Determination of Farmer Group Classes in East Sumba Regency are the basis for this partnership. The following is a pattern that shows the collaborative process of developing sorghum areas in East Sumba Regency.

Facillitative leadership

Effective facilitative leadership plays an important role in bringing stakeholders together, fostering a sense of community, and uniting them in one common goal Purnomo in (E. Wulandari & Kurniati, 2025). In addition, facilitative leadership is essential for fostering collaboration among members, fostering communication, and enforcing the rules of the game.

In the collaborative governance of sorghum development in East Sumba, facilitative leadership is carried out by the East Sumba Regency Agriculture Office as the main actor coordinating and facilitating the multi-stakeholder collaboration process. According to the (Riptanti *et al.*, 2021) framework, facilitative leadership plays a crucial role in facilitating dialogue, building trust, and managing conflicts that arise in the collaborative process. Distan performs the role of facilitative leadership through several concrete actions that can be categorized into four main functions. First, in the function of initiation and mobilization, Distan proactively identifies and invites all relevant stakeholders to join the sorghum development program. The Head of the Food Crop Section of Distan stated, "We not only invite farmer groups but also ensure representatives from each village, field extension workers, and private partners are present in every coordination forum." This mobilization process is carried out through direct visits to villages and coordination with village heads to ensure representative participation.

Second, in the function of facilitating communication, Distan creates structured dialogue platforms through monthly coordination forums and technical workshops. Based on observations, Distan consistently applies an open discussion method where every stakeholder is given an equal opportunity to express their opinions and concerns. One of the respondent farmers expressed, "The gentlemen from Distan always ask for our opinions and seek advice before making any decisions, unlike previous programs that only gave instructions." Third, in the capacity building function, Distan conducts comprehensive outreach that includes technical aspects of cultivation, post-harvest management, and marketing mechanisms. The training program is conducted in stages with a participatory approach, where farmers not only receive information but also engage in discussions and hands-on practice. In addition, Distan facilitates knowledge exchange among farmers through cross-visit programs to villages that have successfully developed sorghum.

Fourth, in the function of mediation and conflict resolution, Distan acts as a neutral mediator when disputes arise among stakeholders. When a conflict arose regarding the purchase price between farmers and PT. SMA, Distan facilitated a tripartite dialogue and successfully reached a price agreement that benefited all parties. The head of Distan stated, "Our role is not as rulers, but as facilitators who help all parties find a joint solution." The evaluation of Distan's facilitative leadership effectiveness shows relatively positive results but with some limitations. In the aspect of building trust, Distan successfully created an environment conducive to open dialogue. The results of interviews with 5 farmer respondents show that 4 of them expressed high trust in Distan as a neutral and competent facilitator. One farmer stated, "We trust Distan because they truly listen to our complaints and always seek fair solutions."

In terms of facilitating consensus building, Distan has successfully established a basic agreement on production targets, quality standards, and marketing mechanisms involving all stakeholders. The consensus-building process was carried out through a series of participatory workshops that resulted in a joint agreement document signed by all parties. However, the effectiveness of Distan's facilitative leadership still faces several challenges. First, the limited human resources cause uneven intensity of assistance across the entire program area. Some farmers in remote villages stated that visits and assistance from the Agricultural Extension Service (Distan) are still limited. Second, in terms of capacity building, there is still a gap in technical knowledge between Distan officers and the specific needs of farmers, especially in handling sorghum pests and diseases. The facilitative leadership of Distan has had a positive impact on collaborative dynamics. The level of stakeholder participation in the coordination forum increased from 60% in the first year to 85% in the third year of the program. Additionally, the number of conflicts successfully resolved through Distan's mediation reached 90% of the total reported conflicts, demonstrating the effectiveness of the mediation role being carried out. However, there is still a need to strengthen adaptive leadership aspects to address external condition changes such as price fluctuations and policy changes. Distan needs to develop the ability to anticipate and respond to emerging challenges more proactively.

Distan of East Sumba Regency involves BPSB East Sumba Regency to assist in assisting the entire cultivation process, from land preparation, planting, maintenance, to harvesting, as an effort so that the results obtained are

quality controlled and maintained purity so as to reduce the risk of failure when they will be used again as seeds. The Seed Supervision and Certification Center (BPSB) has an important role in supporting farmers, especially in terms of quality control and seed certification. Some of BPSB's main roles in assisting farmers are: seed quality supervision, seed certification, farmer development and education, ensure seed traceability, seed management extension, increased availability of superior seeds, supervision of seed circulation. In addition, East Sumba Regency Distan serves as a communication mediator between relevant parties, facilitating effective coordination between the central government, provincial government, and local government. The East Sumba Regional Government is collaborating with the PUPR Ministry and the River Basin Center (BWS) in terms of land processing, building barbed wire fences and drilling wells. Meanwhile, the Ministry of Agriculture is collaborating with the NTT Provincial Agriculture and Food Service to provide seeds and planting tools. The development of sorghum area in East Sumba Regency is highly appreciated by the central government. Even in the national discourse that Sumba Island will be used as a food estate and sorghum center with PT. SMA as an offtaker.

Collaboration process

According to Ansell & Gash in (Saputra, 2020) there are five processes in collaboration, namely direct communication (face to face dialogue), building trust (trust building), commitment to the process (commitment to the process), sharing understanding (shared understanding), and interim results (Intermediate outcomes).

1. Face to face dialog
   There are two factors that can be used to measure face-to-face communication: the parties involved and the level of discussion with stakeholders (Mulyandari *et al.*, 2010) . Face-to-face communication in this partnership is carried out through socialization and counseling. Together with BP3K Pandawai District, East Sumba Regency Distan conducted socialization. In order to avoid misunderstandings among farmers during the socialization process, a clear and comprehensive explanation of everything related to cooperation operations is given. Mentoring and regular meetings are held every Thursday every week so that farmers and extension workers can discuss related activities in the field.
2. Shared understanding
   Building understanding among stakeholders through discussions and offering alternative solutions to problems is the foundation of effective cooperation (Sadana *et al.*, 2024). Through the FGD forum, stakeholders collaborate. In the development of sorghum areas in East Sumba Regency, there are problems that occur, namely the attack of locust pests that trigger limited planting. In an effort to overcome this, the East Sumba Regency Distan ordered its ranks in the field to form a Pest Exterminator Team (RPH) where RPH was tasked with supervising and detecting points that were the beginning of the spread of locust pests, PT. SMA facilitates spray equipment that will be used then together with the community together to control.
3. Intermediate outcomes
   Ansell and Gash state in (Irdiana *et al.*, 2023) that cooperation occurs when there are goals and gains achieved that give rise to short-term hopes (small wins). Small wins are important in a collaboration, to motivate stakeholders to be bolder in innovating. At the beginning of this partnership only involved five farmer groups, and only a few farmers participated because they thought this partnership would fail and cause losses. But in its development, 26 Poktan took part and joined this partnership. In addition, the temporary result of collaborative governance in sorghum land development activities in East Sumba Regency is an increase in sorghum seed production. Through PT SMA, this production can meet the general and even national needs for sorghum seeds on Sumba Island. This makes East Sumba Regency one of the leading sorghum seed producers in Indonesia.

Figure 3. Sorghum crops and sorghum yields

The realization of the land planted with sorghum covers an area of 100 ha, but the land that has been successfully harvested is ±80 ha with an average yield of 2-4 tons of sorghum seeds per ha, resulting in around 256 tons of sorghum seed production (figure 3). The harvest was purchased directly by PT SMA at a price of up to Rp 15,000 per Kg. In 2023, East Sumba Regency Distan targets to plant sorghum covering an area of 17 thousand hectares, for this reason, through this collaboration, it continues to encourage the community to plant sorghum massively, in addition to encouraging the community to participate in sorghum seed breeding.

CONCLUSION

Based on the results and discussions that have been stated above, it illustrates the success of the East Sumba Regency Government in implementing the principles of *Collaborative Governance* in the development of sorghum areas in East Sumba Regency. In the midst of uncertain climatic conditions and locust pest attacks, farmers can produce quality sorghum seeds. The successful development of sorghum cultivation based on collaborative governance has made the government of the Republic of Indonesia make East Sumba Regency a sorghum food estate area as one of the efforts to realize national food security. Therefore, it can be suggested to the Agriculture and Food Office of East Sumba Regency to continue to nurture farmers to have a business mindset so that farmer groups or farmer corporations can be legal entities. So that in the future it can open agribusiness markets, offer working capital, provide agricultural production facilities, facilitate the formation of partnerships and other forms of cooperation, and facilitate training and mentoring.

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