



Public-private-community partnerships for enhanced adoption of traditional grains in Zimbabwe: A case study of Hurungwe district

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Abstract

In the wake of climate change-induced droughts, it is feasible for the smallholder farmers in Hurungwe District of Zimbabwe to adopt traditional grains. However, there is a lukewarm response to climate change, necessitating the establishment of Public-Private-Community Partnerships (PPCPs) to enhance the adoption of traditional grains. The study examines the role of public institutions, the private sector, and the smallholder farmers (the community) in the adoption of traditional grains. The factors that could compromise the functioning of PPCPs in the traditional grains value chain are examined. The research proposes pathways for strengthening PPCPs in the traditional grains value chain. The Governance Network Theory, complemented by Systems Theory, informs this study. The research employs a participatory mixed-methods approach to integrate data from different data-gathering methods. The study respondents and participants include diverse stakeholders partaking in agricultural and livelihood interventions in Hurungwe District. Sampling is through purposive, quota, and snowball or chain techniques. This study concludes that PPCPs enhance participation, resulting in mutual understanding, empowerment, transparency, accountability, and leading to inclusive solutions. The study proposes a system-oriented PPCP model for ensuring active participation of key actors throughout the traditional grains value chain.

Keywords: Climate change, Collaboration, Multi-stressor environment, Public-private-community partnerships, Risk sharing, Traditional grains, Trust.

JEL Classification: Q10.

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Contribution of this paper to the literature

Public-private-community partnerships (PPCPs) are yet to be explored as mechanisms for enhancing adoption of traditional grains in Zimbabwe. It was necessary to elaborate on the roles of the public, private, and community actors in the adoption of traditional grains, a focus area with limited research in the Zimbabwean context.

1. Introduction

Humanity's ecological footprint led to climate change with complex and unprecedented effects (Shoniwa, 2024). Climate change is one of the most complex environmental problems facing the contemporary world (Mugambiwa & Rukema, 2019; Post, Schmitz, Issa, & Oehmke, 2021). The effects of climate change are clear, yet the responses are insufficient (Pongiglione & Cherlet, 2015; United Nations, 2023). In Sub-Saharan Africa (SSA), climate change poses significant threats to humanity, with poverty, resource limitations and incapacity making it hyper-complex to sustain livelihoods (United Nations, 2023). In the Zimbabwean context, climate change gained increased attention because its effects on livelihoods are magnified. The impacts of climate change are compounding food insecurity and poverty in Zimbabwe. The climate-induced El Niño weather phenomena, during the 2015-16 and 2023-24 agricultural seasons, are testimony to the devastating drought effects of climate change in Zimbabwe. In the wake of climate change-induced challenges, PPCPs must be established, requiring the partners to develop a comprehensive and holistic framework that enhances mitigation through the adoption of traditional grains. The five specific research questions in this study are (1) What is the role of public institutions in the adoption of traditional grains in Hurungwe District? (2) What is the role of the private sector in enhancing the adoption of traditional grains in Hurungwe District? (3) What is the role of the smallholder farmers (the community) in the adoption of traditional grains in Hurungwe District? (4) What are the factors that could compromise the functioning of PPCPs in the traditional grains value chain in Hurungwe District? (5) What are the pathways for strengthening PPCPs in the traditional grains value chain in Hurungwe District?

2. Theoretical Framework

The Governance Network Theory (GNT) informs this study. In addition, this study is concerned with making the traditional grain farming system in Zimbabwe functional; thus, the Systems Theory complements the GNT.

2.1. Governance Network Theory

According to Kanniainen (2017), the GNT emerged in the 2000s as part of the New Public Governance (NPG) paradigm and was brought to attention by Osborne (2010), who presented it in contradiction with New Public Management (NPM) and its predecessor, the classical public administration (CPA). Osborne argues that NPG is a theoretical model to complement the NPM and CPA. The GNT emphasises the resolution of complex problems through a multi-stakeholder approach. According to Klijn and Koppenjan (2012), the resolutions of complex problems encountered in the contemporary world involve multiple actors. Operating in isolation, governments, businesses, and the community are often not able to tackle the complex societal challenges as they lack the resources or problem-solving capacities to do so (Osborne, 2010). The complexity of the contemporary challenges and interdependencies between actors results in intensive interactions (Dickinson, 2016). As a result, governance networks emerge, which entail interrelated relations between actors (McQuaid, 2010).

2.2. Systems Theory

The System Theory is fundamental, dating back to Greek philosophers who assumed that there has to be a rational order in the world (Gabor & Mahoney, 2013). According to Friedman and Allen (2014), the term Systems Theory emerged from Émile Durkheim's classic study of social systems, as well as from the works of Talcott Parsons. Within the social sciences, systems thinking was influenced by von Bertalanffy (1968), who was the originator of the General Systems Theory and argued that a system is a set of elements in interaction (Friedman & Allen, 2014). In the same vein, the traditional grains value chain ought to be a functional system. The Systems Theory facilitates the examination of all the elements of the systems so that they all contribute towards success. All the stakeholders must effectively contribute towards the success of the traditional grains production system in Zimbabwe.

3. Literature Review

This study reviews literature on the concept of PPCPs and the key stakeholders involved. Attention is also on examining the efficacy of traditional grains in the wake of climate change. There is deliberation on the case for PPCPs in the adoption of traditional grains, the complexities associated with PPCPs, and building blocks for enhancing functionality.

3.1. The Concept of Public-Private-Community Partnerships and the Key Actors

PPCPs are joint and collaborative relationships between the government, private sector, and the farmers (community) that aim at attaining common objectives (Hernandez, 2017; Perez, 2015; Sathiyah, 2013). In the agricultural sector, the PPCPs can also be referred to as Public-Private-Producer Partnerships (4Ps). In this study, the PPCPs entail a system of linkages, connections, and regulations that bring the government, the private sector, and the farmers together to ensure that all the stakeholders realise mutual benefits. PPCPs are extensions of Public-Private Partnerships (PPPs) and reflect a growing concern for citizen engagement, which is in line with the NPG's emphasis on networks, co-design and co-production. Within the NPG thinking, the resolution of complex societal problems, like food insecurity, requires the active interaction of multiple stakeholders, including the grassroots, who were hitherto neglected in the PPPs (Shoniwa & Musanzikwa, 2022). There is a need for the adoption of PPCPs because they enhance active stakeholder participation and representation, including

incorporating the voices of the marginalised and vulnerable groups (High Level Panel of Experts on Food Security and Nutrition, 2020).

PPCPs are based on the democratisation of collaboration, communication, and decision-making, in which the relevant actors from the public, private, and community sectors involved are included. In addition, coordination and understanding of the desired and common goals make it possible to have efficient and symmetric information in the partnership. By aligning information symmetry and adding transparency, it is possible to obtain contractual stability based on each sector's needs and potential roles. The PPCPs are an extension of the PPPs, which did not include the community. The collaborative relationships between various actors in PPCPs are essential in the resolution of complex problems like food insecurity (Perez, 2015). The realisation of the Sustainable Development Goal (SDG) Number 2, which seeks to end hunger, attain food security, and promote sustainable agriculture (United Nations, 2025), could be enhanced through PPCPs.

In a PPCP arrangement, the main actors are the government, the private sector, and the community. Although the impetus for cross-sectoral collaboration often comes from non-state actors, government support and commitment are essential for the creation of the institutional arrangements for cross-sectoral planning, budgeting, and decision-making (Neely et al., 2017). The government has a role to play in promoting enabling business environments and facilitating private investment in agriculture (Alliance for Green Revolution in Africa, 2021). In line with this observation, Post et al. (2021) argue that a deficient enabling environment has deterred private sector investment in agriculture. Thus, sound policies and agricultural governance systems are essential. According to the High Level Panel of Experts on Food Security and Nutrition (2020), policy and governance systems interact with food systems in complex and iterative ways, and there is a need for both formal and informal rules, norms and processes that facilitate sound decisions. The private sector, as the financier of a PPCP contract, is one of the essential stakeholders. The success of multi-stakeholder partnerships is partly dependent on the adequacy of resources, which are made available for a reasonable term. There is a need for fair pricing of the agricultural equipment and inputs. The community is the beneficiary or the producer in the partnerships. The active participation of the community is paramount (Neely et al., 2017).

3.2. The Efficacy of Traditional Grains in the Wake of Climate Change

Traditional grains are inherently tolerant of heat, drought, and poor soils, with lower water and nitrogen requirements than many major cereals (Madzivanzira et al., 2024). Traditional grains like pearl millet and sorghum sustain yields under scant rainfall and high temperatures, supported by traits such as deep root systems, efficient stomatal control, and in sorghum, the widely exploited 'stay-green' phenotype that delays senescence during terminal drought. Sorghum and millets can substitute for maize in water-limited environments with competitive yields and better water-use efficiency, though local performance is genotype-by-environment dependent (Phiri, Dube, Moyo, Ncube, & Ndlovu, 2019).

In addition, millet and sorghum contribute substantially to micronutrient intake (iron, zinc), fibre, and phytochemicals, and are naturally gluten-free (Phiri et al., 2019). A systematic review and meta-analysis found the mean glycaemic index (GI) of millets to be about 36% lower than refined staples such as milled rice and wheat, supporting roles in diabetes risk reduction and glycaemic control (Chamunorwa, Nyasha, & Tapiwa, 2021). Processing and value addition (malting, fermentation, extrusion, composite flours) can enhance bioavailability and consumer acceptability. Contemporary reviews on millet processing emphasise its role in climate-smart food systems by enabling diversified, shelf-stable, and nutrient-dense products for urban and rural markets alike (Madzivanzira et al., 2024).

3.3. Case for Public-Private-Community Partnerships in the Adoption of Traditional Grains

PPCPs help reduce information asymmetries, build transparency, and trust, which are essential in the fight against the negative effects of climate change and the adoption of traditional grains. Active involvement of as many partners as possible is important. PPCPs delve into the democratisation of collaboration, communication, and decision-making, in which the relevant actors from the three sectors involved are included. PPCPs are also networks and are new forms of cooperation between public and private actors as well as platforms for citizen engagement and stakeholder participation (Koppenjan, 2015). Considering the significance of PPCPs in the resolution of contemporary challenges, they could be the answer to the threat of climate change and enhance the adoption of traditional grains. There is recognition of multi-stakeholder partnerships as vehicles for addressing complex problems, facilitating development, and ensuring that the practice of climate-resilient agriculture (CRA) encompasses the integration of adaptation, mitigation, and various agricultural strategies. CRA primarily entails the prudent and enhanced management of natural resources, including land, water, soil, and genetic resources, through the adoption of the most optimal practices available (Kar, Sunidhi, & Kundu, 2024). Through PPCPs, there is traction towards CRA, and this will contribute to improved food security, poverty reduction, and overall economic development (Erezi, Ehi, & Ayodeji, 2023).

3.4. Challenges Associated with PPCPs in Traditional Grains Production

PPCPs have some risks, and it is essential to consider these negative effects. According to the High Level Panel of Experts on Food Security and Nutrition (2018), multi-stakeholder partnerships are not exempt from limitations and do not provide a 'silver-bullet' solution in any situation. Some of the questions asked in relation to multi-stakeholder partnerships are to do with their capacity to balance power asymmetries among partners in the decision-making process. There is also the risk of conflicts between public and private interests, and the withdrawal of responsibilities previously assumed by states or public authorities. Another challenge is that of the higher transaction costs and supposed lower effectiveness associated with the multi-stakeholder partnerships, especially when the number of stakeholders is high.

Conflicting public/private sector interests and activities can impact economic, ecological, and socio-cultural well-being. In partnerships, different stakeholders have different objectives (Kerahroodi, 2016). For instance, the government may want to lead while staying in power and to ensure that the private sector meets its contractual obligations properly while using public funds efficiently and effectively. The prime goal of the private sector is to

gain profit and what users seek is a new facility or service at the minimum cost. The community's intention is to ensure that its constituency is fully developed. Aligning the stakeholders' incentives makes the partnership arrangements problematic. Along similar arguments, the High Level Panel of Experts on Food Security and Nutrition (2018) stated that tensions can appear among partners because of mistrust or diverging views on the shared values of the partnership.

3.5. Enhancing the Utility of PPCPs in Traditional Grains Production

According to the High Level Panel of Experts on Food Security and Nutrition (2018), multi-stakeholder partnerships are not spontaneous, as they rely on the stakeholders' capacity to set up the necessary steps and conditions for a collective action to take place. A common goal and the pooling of resources alone are not enough to guarantee a coordinated and collaborative arrangement among heterogeneous actors (Food and Agriculture Organisation, 2017). Collective action can only be implemented by developing the appropriate institutions, defined as a set of shared norms and rules agreed to organise common activities (High Level Panel of Experts on Food Security and Nutrition, 2018).

It is paramount for the partners to have a common position on the problem, and Koppenjan (2015) argued that, in networks, there is a need for consensus building when defining problems as well as the search for 'win-win solutions'. The High Level Panel of Experts on Food Security and Nutrition (2018) pointed out that trust between partners can only be built and preserved through continuous stakeholder engagement at each step of elaboration of a PPCP contract. Pattberg and Widerberg (2014) also argued that a central tool for addressing power asymmetries is transparency. It is also essential to note that there is no substitute for ethical and effective governance if the PPCPs are to be a success.

4. Methodology

The research employed a participatory mixed-method or a pluralist method approach to ensure diverse perspectives, allowing multiple voices to be heard, and providing a more holistic picture of the research issue. The study respondents and participants included diverse stakeholders partaking in agricultural and livelihood interventions in Hurungwe District, in Mashonaland West Province of Zimbabwe. These stakeholders included the District Development Coordinator (DDC), the Agricultural and Rural Development Advisory Services (ARDAS) in the Ministry of Lands, Agriculture, Fisheries, Water, and Rural Development (MLAFWRD), non-governmental organisations (NGOs) or partners in the implementation of livelihood projects, Ward Councillors, Traditional Leaders (Village Heads), and the smallholder farmers. The study applied purposive, quota, and snowball or chain sampling techniques. Firstly, there was a purposive selection of stakeholder groups, who, by their occupations, are involved in developmental and livelihood interventions. The study ensured representation from all categories of stakeholders, implying the use of quota sampling. Snowball or chain sampling was applied when selecting the smallholder farmers to partake in the study, and guidance was received from the ARDAS.

Data were collected using questionnaires, in-depth interviews, and focus group discussions (FGDs). The study administered 104 questionnaires to public officials, private sector, and NGO representatives. Many respondents were reached using a questionnaire.

There was the use of five-point Likert scale questionnaires, with fixed responses. The questionnaire was constructed in line with the research questions. An in-depth interview guide was used to collect data from key informant participants.

The key informants were identified at the District, Ward, and Village Levels. The District Level key informants included the District Development Coordinator, Agricultural and Rural Development Officers (ARDOs), and NGOs or partners in the implementation of livelihood and agricultural projects. Ward-level key informants included the ward councillors and ARDOs. The Village Level key informants were the village heads and champion farmers or livelihood officers (as advised by ARDAS). Data from the farmers were collected through five participatory FGDs. The FGDs were meetings comprising more than eight participants, whose purpose was to share ideas and provide answers on PPCPs as mechanisms for enhancing the adoption of traditional grains.

Quantitative data were captured and analysed using the IBM Statistical Package for Social Sciences (IBM SPSS), descriptive statistics. Qualitative data were reviewed and coded into themes around each thematic area.

The study upheld several ethical principles. First, authorisation was sought and granted by the DDC Hurungwe. Individual consent was sought from the respondents and participants by way of an informed consent form, which detailed the aims and objectives of the study and the benefits of participation. The participants were also informed about their rights to withdraw from the research should they feel uncomfortable. Respondents' and participants' confidentiality and anonymity were assured in the informed consent form. Raw data were not shared with anyone not involved in the research process. Completed questionnaires, the IBM SPSS data set, and interviews will be kept in a lockable cabinet. There was transparency in research and stakeholder empowerment. The study also ensured equity and inclusiveness.

5. Findings

Presentation of findings is in five headings, in line with the research questions. There is a discussion of findings in line with the literature.

5.1. Role of Public Institutions in the Adoption of Traditional Grains in Hurungwe District

The government is a key stakeholder in the issue of food security and the financing of traditional grains production. Table 1 shows the findings on the role of the government.

Table 1. Role of government in the adoption of traditional grains.

Role	N	Frequency (Percentage)				
		Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
Continuous review of the legal and institutional framework	104	0 (0.0%)	0 (0.0%)	7 (6.7%)	49 (47.1%)	48 (46.2%)
Continuously build the capacity of the Agricultural Marketing Authority (AMA), which is the central coordinating institution for agricultural partnerships	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	51 (49.0%)	53 (51.0%)
Increase investment in basic infrastructure like roads, bridges, and electricity	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	74 (71.2%)	30 (28.8%)
Continuous expansion and improvement of training institutions, and the establishment of new ones	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	41 (39.4%)	63 (60.6%)

Table 1 shows that ‘the government needed to ensure a continuous review of the legal and institutional framework for PPCPs’ (47.1% of respondents ‘agreed’ while 46.2% ‘strongly agreed’). To corroborate the findings from questionnaires, almost all the interviewees argued that the legal framework should aim at developing functional markets instead of perpetuating the dependency syndrome. There is a need for a deliberate effort to move away from direct government funding. These findings agree with the literature, and Simon (2016) points out that a clear legal framework enhances the success of PPCPs. The legislation for the partnerships should not be prescriptive. Instead, the legal framework must be permissive, focusing on achieving outcomes, while setting broad parameters in which partners can design and implement the agreed projects. Dense legislation that seeks to micromanage the process of implementing the partnerships drives away prospective investors; hence, emphasis should be on flexibility (Rankin, Nogales, Santacoloma, Mhlanga, & Rizzo, 2016).

All the respondents, as indicated in Table 1, were in support of the need for continuous capacitation of AMA (49.0% ‘agreed’ and 51.0% ‘strongly agreed’). During an interview, one of the agricultural experts said, “*Continuous reconfiguration of AMA is essential so that the entity is able to respond to new challenges in the environment*”. There is a need for strong institutions that can manage the contracts in an effective way. In the Zimbabwean context, the government needs to continuously build the capacity of the AMA, which is the central coordinating institution for the management of agricultural partnerships in Zimbabwe, so that the entity can handle new and unpredictable complexities.

Table 1 also shows that all the respondents (71.2% ‘agreed’ and 28.8% ‘strongly agreed’) agreed with the assertion that ‘the government also needs to increase investment in basic infrastructure like roads, bridges, and electricity’. There is also a need for continuous investment in research and agricultural extension services. Qualitative data corroborates these findings, and one of the officials in the MLAFWRD said: “*Zimbabwe already has a robust and extensive agricultural extension system. However, there is a need for continuous building of the capacity of the extension officers and the addressing of the challenges that they face.*”

All the respondents, as indicated in Table 1, were in support of the assertion that ‘continuous expansion and improvement of institutions for training and farmer capacity building, including establishment of new centres’ was necessary (39.4% ‘agreed’ and 60.6% ‘strongly agreed’). The findings from focus group discussions also showed that there is a need for the government to work with the private sector so that they do not exploit the ‘ignorant’ farmers. One of the farmers who participated in the focus group discussions said that the government needed to ‘weed out’ unscrupulous private partners. An agricultural expert had this to say about the role of government.

“The government has the constitutional obligation to ensure that there is individuality of the needs of the citizens (including access to food). Hence, it plays a central role in the success of PPCPs. There is a need to foster sound corporate governance in the state entities involved in agriculture so that they can deliver the expected results. There is also a need for political will to curb corruption”.

The findings in this study agree with the literature, and Neely et al. (2017) pointed out that the government is also one of the important stakeholders. Although the impetus for cross-sectoral collaboration often comes from non-state actors, government support and commitment are essential for the creation of the institutional arrangements for cross-sectoral planning, budgeting, and decision-making.

5.2. Role of the Private Sector in Enhancing the Adoption of Traditional Grains in Hurungwe District

The private sector is another critical stakeholder in the PPCPs. Table 2 shows the findings on the role of the private sector in the PPCPs.

Table 2. Responses on the role of the private sector in the adoption of traditional grains.

Role of the Private Sector	N	Frequency (Percentage)				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Co-invest in community-owned assets like storage facilities, warehouses, and processing units	104	0 (0.0%)	0 (0.0%)	7 (6.7%)	35 (33.7%)	62 (59.6%)
Provide adequate and timely funding for inputs and working capital	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	51 (49.0%)	53 (51.0%)
Refrain from profiteering tendencies	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	52 (50.0%)	52 (50.0%)
Provide support for the acquisition of equipment, especially for tillage and irrigation	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	56 (53.8%)	48 (46.2%)

The findings in Table 2 indicate that the private sector should ‘co-invest in community-owned assets like storage facilities, warehouses, and processing units’, with 35 respondents (33.7%) ‘agreeing’ and 62 (59.6%) ‘strongly agreeing’. There is also a need for ‘the private partners to provide adequate and timely funding for inputs and working capital’ (49% ‘agreed’, while 51% ‘strongly agreed’). One of the agricultural experts said that adequate and timely funding is possible through active farmer engagement.

Table 2, above, also shows that 52 respondents (50%) ‘agreed’ while another 52 (50%) ‘strongly agreed’ with the view that ‘the private sector needed to refrain from profiteering tendencies’ (Mean 4.50). One of the officials in the MLAFWRD argued:

“The private sector ought to share the production risks with the farmers. The financiers are the ones reaping the major benefits”. Another interviewee had this to say: “The private sector needs to ensure fair pricing of both the inputs and produce. The private sector should be ready to share the losses together with the farmers”.

The findings in Table 2 also show that 56 respondents (53.8%) ‘agreed’ while 48 (46.2%) ‘strongly agreed’ with the view that ‘there is a need for the private sector to provide support for the acquisition of equipment, especially for tillage and irrigation’ (mean score 4.46). One of the participants opined:

“Investment in irrigation facilities is essential so that there is full 80ndividuali of the available water resources. The private sector ought to engage in backward integration and support the local farmers. It is better to finance local production instead of resorting to imports”.

The private sector or financier of the PPCP contract is one of the essential stakeholders. Literature supports these findings, and Sablah, Baker, Badham, and De Zayas (2013) pointed out that the private sector is the source of financial resources and can provide technical expertise. The success of multi-stakeholder partnerships is partly dependent on the adequacy of financial resources, which would be available on reasonable terms. There is a need for fair pricing of the inputs.

5.3. Role of Smallholder Farmers in the Adoption of Traditional Grains in Hurungwe District

The farmers are essential partners in the PPCPs as they are the traditional grain producers. Table 3 shows the findings on the roles of the farmers in the PPCPs.

Table 3. Roles of the farmers in the adoption of traditional grains.

Role of the Farmers	N	Frequency (Percentage)				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Establish farmer groups, which can be used to help in inputs 80ndividualiz, capacity building, and acquisition of farm equipment	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	34 (32.7%)	70 (67.3%)
Acquire expertise and experience in traditional grains production under local conditions	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	62 (59.6%)	42 (40.4%)
Refrain from abusing agricultural inputs and working capital provided by the financiers	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	41 (39.4%)	63 (60.6%)

Table 3 shows that 34 respondents (32.7%) ‘agreed’ while 70 (67.3%) ‘strongly agreed’ with the view that ‘the farmers should establish farmer groups, which can be used when 80ndividual the inputs, capacity building, and acquisition of farm equipment’. One of the participants who took part in this research argued that adequate expertise is essential on the part of the farmers. The farmers also need to invest in human capital, which is possible through working in groups, in order to increase their traditional grain production. As individuals, the farmers are not able to realise these objectives but ought to work in groups. According to one ARDAS official:

“In agriculture, farmer groups such as Farmer Study Circles (FSC), Farmer Field Schools (FFS), Garden/Irrigation Groups, Livestock Groups, Farmer Training Groups, and Farmer Marketing Groups have a long history in Zimbabwe. There has also been a significant growth in Income Savings and Lending (ISAL) groups, with Rotational Credit Savings Groups (ROSCGs).”

In addition, one agricultural expert said, *“The group concept can be empowering in terms of knowledge sharing, farmer education, training and cost effectiveness, market linkages and better output income”.* There are Farmer Investment Groups, whose aim is joint 80ndividualiz of resources rather than waiting for handouts. Collaboration with fellow farmers resulted in the pooling of scarce resources at reduced cost and ensured improved service provision to small-scale producers. The farmers must work as a ‘community’ as opposed to 80ndividualized effort.

Table 3 shows that 62 respondents (59.6%) ‘agreed’ while 42 (40.4%) ‘strongly agreed’ with the view that ‘the farmers ought to understand their agricultural conditions and know the types of crops to grow’. There is a need for adequate soil testing. Equally essential is the need for the farmers to have a positive attitude towards agricultural support programmes, and behavioural change is essential. One of the participants from the financial services sector also opined that the farmers should change their mindset and adopt a business approach to agriculture. Another participant said: *“The farmers ought to fully understand the industry (private partners). They need to have tours of the industry premises. This can create more understanding and reduce information asymmetries”.* Additionally, one of the agricultural experts said: *“The farmers should adopt new technology. There is a need for farmers to be innovative and use technology in their operations”.* Therefore, the active participation of the community is paramount for the success of PPCPs.

The findings in Table 3 show that 41 respondents (39.4%) ‘agreed’ while 63 (60.6%) ‘strongly agreed’ that there is a need for the farmers to refrain from abusing agricultural inputs and working capital provided by the financiers. The farmers ought to respect the sanctity of contractual obligations in the PPCPs, as the failure to do so drives investors away. Adoption of the group concept, as discussed in the preceding sections, could help in reducing cases of abuse of inputs.

5.4. Factors that Could Compromise the PPCPs in the Traditional Grains Value Chain

The respondents were required to answer a question about the disadvantages of PPCPs in traditional grain production in Hurungwe District. It is essential that there is a consciousness of these problematic factors and that they be mitigated. Table 4 illustrates the findings on the disadvantages of the PPCPs.

Table 4. Disadvantages of PPCPs in traditional grains production.

Disadvantages	N	Frequency (Percentage)				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Complexities associated with balancing power asymmetries and conflicts of interest among the partners	104	0 (0.0)	28 (26.9)	7 (6.7)	39 (37.6)	30 (28.8)
High transaction costs in multi-stakeholder partnerships	104	0 (0.0)	13 (12.5)	0 (0.0)	42 (40.4)	49 (47.1)
Unavailability of appropriate equipment and machinery compromises the mechanisation of production and processing	104	0 (0.0)	6 (5.7)	0 (0.0)	54 (51.9)	44 (42.4)

According to Table 4, 39 out of 104 respondents (37.6%) 'agreed' while 30 (28.8%) 'strongly agreed' that balancing power relations and conflict of interest were a challenge in the PPCPs. The responses were rather mixed, as 28 respondents (26.9%) 'disagreed', while seven (6.7%) were 'unsure', implying that a slight majority agreed with the assertion that there could be complexities associated with balancing power asymmetries among the partners. These findings show that there is a need to balance the power relations and avoid conflicts of interest. Power asymmetries in the PPCPs could result in unfair pricing. According to Table 4, a slight majority of the respondents agreed with the assertion that high transaction costs are associated with multi-stakeholder partnerships.

Considering the high transaction costs associated with the PPCPs, ensuring active participation of multiple and diverse stakeholder groups is a challenge. Involving different stakeholders in a PPCP is a demanding process, especially in the initial phases, that requires time, specific skills, and financial resources. The actors in multi-stakeholder partnerships, particularly those involved in knowledge generation, capacity building, and advocacy, need to meet regularly. One of the agricultural experts interviewed said: *"The views of all the farmers may not be heard because of the limitations associated with genuine participation. There may be 'roadside elites' who hijack participatory processes"*. In one of the focus group discussions, the farmers argued that not everyone would provide their views, and a few powerful individuals may dominate the process.

There are always challenges associated with coming up with mutual decisions. The stakeholders may have different interests and motivations for engagement in the PPCPs, and they usually pursue multiple, sometimes competing, objectives at different scales. One of the farmers who participated in the focus group discussions said: *"Corruption is a huge challenge in Zimbabwe, and accountability mechanisms may lead to wastage of resources that are meant for traditional grains production"*. This argument has support from literature, and the High Level Panel of Experts on Food Security and Nutrition (2018) argued that the private sector can see its participation in multi-stakeholder partnerships as a way to influence policy discourse and decision-making at different levels, while improving its image and reputation and acquiring a new legitimacy.

The success of PPCPs in the traditional grain crop sector requires appropriate equipment and machinery to enhance the mechanisation of production and processing, which is not available. According to Table 4, 42 respondents (40.4%) 'agreed' while 49 (47.1%) 'strongly agreed' with the view that 'unavailability of appropriate equipment and machinery compromises mechanisation of production and processing.'. Thirteen respondents (12.5%) 'disagreed' with this view.

5.5. Pathways for Strengthening PPCPs in the Traditional Grains Value Chain

There are several pathways for strengthening PPCPs. Table 5 shows the responses pertaining to options for enhancing the utility of PPCPs in financing of traditional grain production (frequency and percentage).

Table 5. Responses on options for enhancing the utility of PPCPs.

Option	N	Frequency (Percentage)				
		Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
The partners ought to have a common position regarding the problem being faced (consensus building is paramount)	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	74 (71.2%)	30 (28.8%)
Fairly sharing risks and benefits is essential	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	42 (40.4%)	62 (59.6%)
Effective communication is essential in the PPCPs	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	49 (47.1%)	55 (52.9%)
A clear definition of the roles of partners is essential, and each stakeholder ought to perform their duties properly	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	49 (47.1%)	55 (52.9%)
Flexibility is critical in the PPCPs	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	41 (39.4%)	63 (60.6%)
There is a need to maintain relationships built on trust and transparency to ensure the fair pricing of traditional grains	104	7 (6.7%)	0 (0.0%)	0 (0.0%)	36 (34.6%)	61 (58.7%)
Monitoring and evaluation of PPCPs is essential	104	0 (0.0%)	0 (0.0%)	0 (0.0%)	50 (48.1%)	54 (51.9%)

According to Table 5, 74 out of the 104 respondents (71.2%) ‘agreed’ while 30 (28.8%) ‘strongly agreed’ with the view that ‘the partners ought to have a common position regarding the problem being faced’. None of the respondents disagreed with the assertion that consensus-building is paramount. Thus, the multi-stakeholder partners ought to have a common position regarding the problems in the traditional grains value chain. Literature agrees with the view that it is paramount to have a common position on the problem, and Koppenjan (2015) argued that, in networks, there is a need for consensus building when defining problems as well as the search for ‘win-win solutions’. Respecting the views and interests of the other parties could be difficult. There is a need for a common vision, building trust and commitment. The High Level Panel of Experts on Food Security and Nutrition (2018) argued, “there can be the building and preservation of trust between partners through continuous stakeholder engagement at each step of elaboration of a PPCP contract”.

Fair sharing of risks and benefits is essential, and Table 5 shows that 42 respondents (40.4%) ‘agreed’ while 62 (59.6%) ‘strongly agreed’ that ‘fair sharing of risks and benefits is essential in the PPCPs’. None of the respondents disagreed with the assertion. Table 5 also shows that all the respondents agreed with the assertion that ‘effective communication is essential in the PPCPs’, with 49 respondents (47.1%) ‘agreeing’ while 55 (52.95%) ‘strongly agreed’. Literature supports this finding, and Pattberg and Widerberg (2014) argued that central tools for addressing power asymmetries are clear communication and transparency. “Engaging and ensuring open and transparent communication, decision-making procedures and evaluations increases the likelihood of having weaker parties participate and access the outcomes of the partnership, in particular since the results are likely to mirror the power balance among the partners” (Pattberg & Widerberg, 2014). Likewise, in traditional grains production, there may be no substitute for effective communication among the value chain actors. Almost all the interviewed participants concurred that effective communication reduces information asymmetry problems, which are common in Zimbabwe’s agricultural sector. According to lessons from the literature review, information asymmetry affects the three areas of trust, emotions, and change in the venture creation process (Anna & Sofia, 2016). Other issues that arise because of information asymmetry are adverse selection and moral hazard.

Table 5 also shows that 49 respondents (47.1%) ‘agreed’ while 55 (52.9%) ‘strongly agreed’ with the view that ‘clear definition of the roles of partners is also essential and each stakeholder ought to perform their duties properly’. There should be a clear division of responsibilities and risk sharing. Equally important is the need to define the roles of the partners and align their interests. These arguments resonate with literature, and the High Level Panel of Experts on Food Security and Nutrition (2018) pointed out, “A clear definition of roles is paramount for the successful implementation of the partnerships”. Successful agribusiness partnerships require aligning diverse interests and visions and reaching consensus, particularly on public sector objectives and priorities for promoting partnerships. The public partners must clearly understand the rationale for promoting a partnership approach over other mechanisms of public sector support, and be able to identify the types of projects where partnerships will be most effective at addressing market failures in a sustainable way.

Flexibility is essential in the partnerships, and the data in Table 5 show that 41 respondents (39.4%) ‘agreed’ while 63 (60.6%) ‘strongly agreed’. This finding resonates with the literature, and Almarri and Blackwell (2014) argued, “flexibility comes in many forms, one of which is the incorporation of a renegotiation clause in the partnership contract”. Renegotiations are necessary when there is a need to balance the risks and economic benefits. In the traditional grains value chain, adaptation is paramount, especially if the macro-environment is volatile. The findings in Table 5 also show that 36 respondents (34.6%) ‘agreed’ while 61 (58.7%) ‘strongly agreed’ with the view that ‘there is a need to maintain relationships built on trust and transparency to ensure fair pricing of traditional grains’. Only seven respondents (6.7%) ‘strongly disagreed’. These findings show that trust is a critical ingredient for the success of PPCPs in traditional grain production. The word ‘Trust’ can be expanded to mean ‘Truthfulness’, ‘Relationships’, ‘Understanding’, ‘Steadfast’, and ‘Tolerance’, as illustrated in Figure 1.

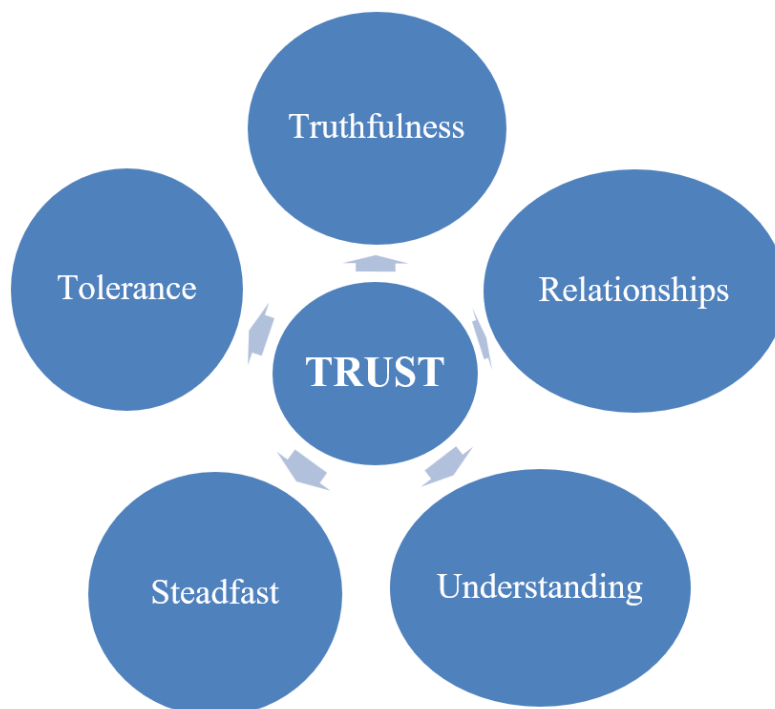


Figure 1. Meaning of the word ‘trust’.

Source: Shoniwa (2024).

According to Figure 1, truthfulness is an element of trust, and, in line with the ancient writings in The Apocrypha: I Esdras 4:41, “..... Great is Truth and mighty above all things”. In this regard, all the stakeholders in

the PPCPs ought to be true to one another, as lies are toxic. There is also a need for sound relationships among the actors in the PPCPs. It is also essential for the stakeholders to understand the concerns and positions of fellow partners in the PPCPs. Moreover, vibrant multi-stakeholder partnerships ensure strength. There is security in numbers (organised groups), and when risks like droughts come, the PPCPs would remain resolute. Finally, tolerance and respect for the views of the stakeholders are essential. It is essential for all the actors to be open and willing to adjust their positions. Being rigid is toxic.

The findings in Table 5 show that 50 respondents (48.1%) ‘agreed’ while 54 (51.9%) ‘strongly agreed’ with the assertion that monitoring and evaluation of PPCPs is essential for success. Lessons from literature showed that an adequate and efficient monitoring, reporting, and evaluation system is important (Rankin et al., 2016). Through monitoring and evaluation, there is organizational learning, and institutions have proven more effective when they are able to adapt quickly to new circumstances. To manage this process, monitoring progress, producing reports, and evaluating outcomes are essential tools for understanding how the partnership is doing vis-à-vis its targets and goals. The findings from interviews and focus group discussions also showed that the active involvement of as many partners as possible is important. There is a need to have devolved structures in the PPCPs arrangements, down to the district and ward levels.

Moreover, sound planning is essential if the PPCPs are to be a success. Planning to ensure that all the input requirements for traditional grain production are available when required. Adequate inputs, particularly high-yielding seed and fertilisers, have an important role in the performance of agricultural development. In the traditional grains value chain, it is possible to meet or exceed the production targets when there is timely procurement of the required inputs. An adage says, ‘failing to plan is planning to fail’. An effective procurement plan saves time and money and serves as a conduit to achieving an entity’s objectives (Shoniwa & Musanzikwa, 2022). In addition, an effective plan ensures compliance with regulatory policies. If there is a plan, the ‘six rights’ of procurement are realisable, that is, the right quality, from the right source, at the right cost, delivered in the right quantities, to the right place, and at the right time. Early and accurate planning is very important in order to avoid emergency or unplanned procurement, which is opposed to an open, efficient, effective, and transparent procurement process. According to Shoniwa and Musanzikwa (2022), in Zimbabwe’s traditional grains production sector, it is very common for farmers to make rushed buying decisions at the onset of the farming season. There is pressure on the suppliers who, for a short period during the year, are not able to meet demand. As a result, there are shortages of basic inputs like seed and fertilisers, and the farmers are then ‘forced’ to buy at exorbitant prices.

6. Conclusion and Recommendations

This study concludes that PPCPs are feasible mechanisms for enhancing the adoption of traditional grains in Hurungwe District, Zimbabwe, and other countries grappling with climate change-induced shocks. PPCPs ensure participation, mutual understanding, and empowerment, which are helpful in reducing information asymmetries, building transparency and trust, and leading to inclusive solutions. In addition, the PPCPs are based on the principle of collective responsibility and the idea that governments alone cannot facilitate development. The multi-stakeholder collaborations and active involvement of as many partners as possible are important. There is a need to have devolved structures in the PPCPs arrangements, down to the district, ward, and village levels. The PPCPs could make the traditional grain farming enterprise a functional and productive system. The capacity of the private sector to provide equipment, inputs, and support to the traditional grains value chain requires a holistic PPCP system. In this vein, this study’s main recommendation is in the form of a multi-stakeholder-driven system for traditional grain production in Zimbabwe, as presented in Figure 2.

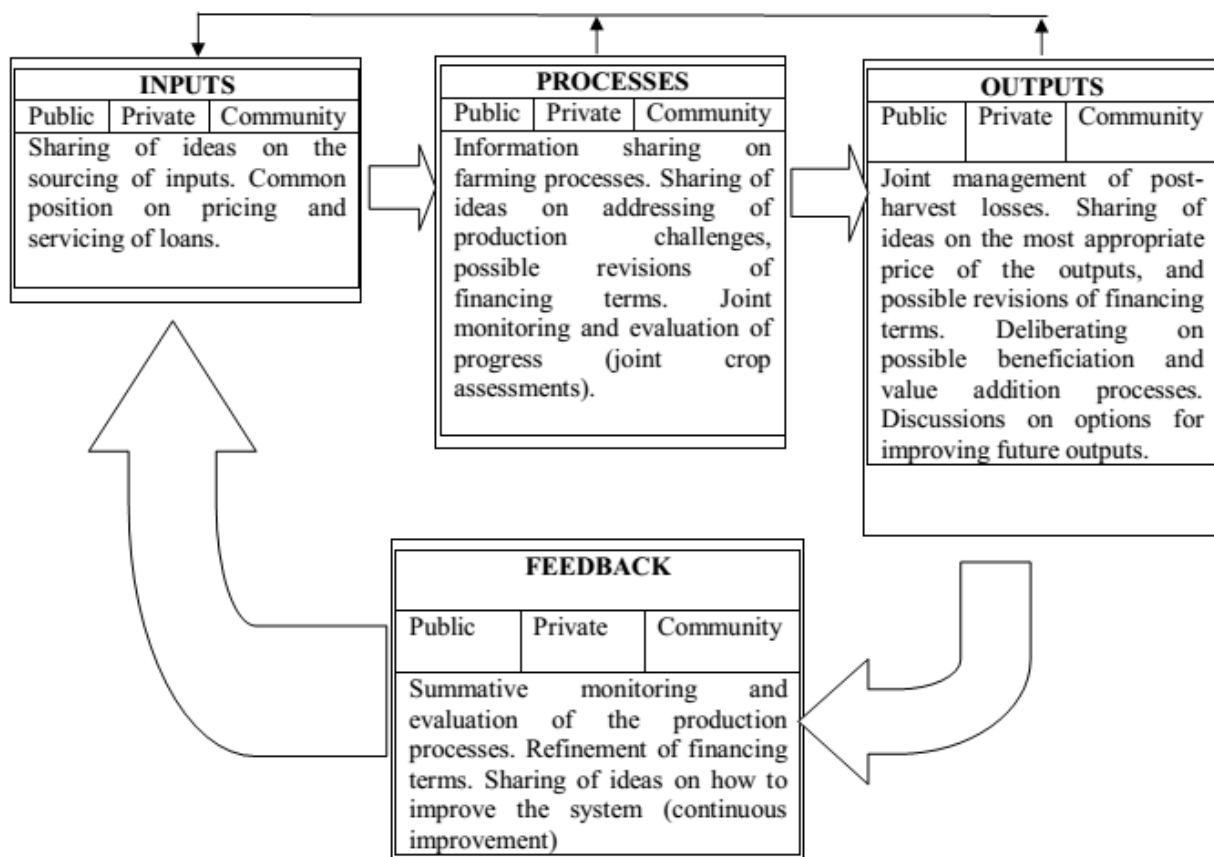


Figure 2. System-Oriented PPCP model for traditional grain production.

The proposed System-Oriented PPCP Financing Model, in Figure 2, is a further refinement of the systems theory. Attaining food security is possible if the traditional grain production system is functional. The government alone (public sector) has the primary responsibility of ensuring that citizens are food secure, but it lacks capacity. The private sector can have the financial capacity, but may not be trusted because of its profit-oriented motive. Finally, the community, which is the beneficiary or the producer, may lack capacity. There is the ‘power of three’ and PPCPs, embodying the collaboration of the public, private, and community sectors, which is a sound financing alternative for ensuring sustainable and adequate traditional grains production in Zimbabwe. The PPCPs could lead to inclusive solutions, mutual understanding, transparency, empowerment, accountability, and cross-sectional coordination. PPCPs in the traditional grains production system (inputs, processes, outputs, and outcomes) could be tools for improving effectiveness and efficiency. The government’s main role is to establish the legal and institutional frameworks for the implementation of the PPCPs. The private partners provide capital and professional expertise, while the community (farmers) provides labour and indigenous knowledge. Agriculture has huge potential to drive inclusive economic growth and improve food security for many people in Zimbabwe. Given that Zimbabwe has a small- and medium-scale type of farmer dominating, there is a need to rethink the financing models, marketing, and technologies so that they align with the new trajectory. It is essential to ensure that there is long-term instead of short-term financing.

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