

Implementation of Agricultural Sector Development Programme's Priority Interventions: Are the Interactions among Agricultural Sector Lead Ministries Optimal?

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Abstract

Tanzania's efforts to reduce poverty involve among others the implementation of Agricultural Sector Development Programme (ASDP) aimed at improving agricultural sector's performance. However, literature shows dismal performance of the sector despite implementation of ASDP since 2010. It was hypothesised that the interaction among the ASDP actors is not synergetic and hence has not optimally contributed to the execution of ASDP. Guided by Ostrom's Institutional Analysis and Development (IAD) framework and the Social Network Theory (SNT), the study examined the interaction patterns among the ASDP actors and their influence on the implementation of ASDP's priority interventions. The QUAL-quan design was adopted whereby data collection methods employed included key informant interview, focus group discussion, and questionnaire survey. Through content analysis and descriptive statistics, it was observed that the implementation of ASDP involved a high level of multifaceted interactions among the key actors. Study participants acknowledged predominance of strong actors' interactions but did not consider this to be enhancing the ASDP implementation. This is because there were actor-specific issues which constrained execution of their roles to the network. For example, farmer groups were too weak to deliver the expected project results. Consistent with the SNT, actors could interact strongly but combined effect is subject to successful execution of roles that are based on their relationship with other actors in the network. For interactions to be synergetic—enhancing agricultural sector transformation through ASDP—the involved actors should have the necessary capacity and should play well their strategic role towards achieving the common good.

Keywords: Agricultural Sector Lead Ministries, interaction, actors, ASDP.

Introduction

Agriculture forms the backbone of most African economies in terms of its share in the gross domestic product (GDP) and employment. Agriculture sector accounts for 32% of the continent's GDP and as source of income for more than two-third of the African population (Bassey, 2018). In Tanzania, agriculture is the main contributor of employment for the nation as it accounts for 66.6% of employment and contributes 26.1% to the national GDP (Tanzania Economic Survey, 2022).

In 2000, Tanzania Development Vision (TDV) 2025 was formulated as the main policy framework to underlie all strategies

and development policies to guide Tanzania's transformation from a third-world country to a middle-income economy by 2025. The framework also guided the agricultural sector by developing Agricultural Sector Development Strategies (ASDSs), which are implemented through the Agricultural Sector Development Programmes (ASDPs). ASDSs and ASDPs are being formulated and implemented based on the lessons learnt from the previous programme implementation. Implementation of the recent ASDS II (2015-2025) through ASDP II (2017/2018–2027/2028) is aimed at the priority intervention areas such as improving water supply management and irrigation; introducing farm mechanization, use of improved seeds,

fertilizers, vaccines and agro-chemicals; and rangeland management. Some of the required facilitating factors include market information, marketing infrastructure, research and extension, private sector business environment, and financial services. These interventions are implemented across several ministries called Agriculture Sector Lead Ministries (ASLMs) which comprise of the Ministry of Agriculture, the Ministry of Livestock and Fisheries, the Ministry of Industry and Trade, and the President's Office - Regional Administration and Local Governments. Other actors in the implementation of ASDP are farmer groups, non-governmental organizations (NGOs), companies, development partners and the local government authorities (LGAs).

Despite all these efforts, statistics show a declining trend in the contribution of agriculture sector to the GDP. The share of the agriculture sector in total GDP was 27.7% in 2006 (URT, 2016) but more recently (Tanzania Economic Survey, 2021) it stood at 26.1%. Growth rate of the sector was 3.9% per annum (URT, 2016), which is lower than 6% recommended by 2003 Maputo and 2014 Malabo declarations for African countries, including Tanzania (NEPAD, 2003; AUC, 2014). The sector faces challenges including low productivity levels, unstable price and unreliable markets for the produce as well as inadequate and unsustainable access to key inputs (URT, 2016). The question is why the problems that constrain the agriculture sector are persistent despite the initiatives that have been undertaken to develop it. At any rate, agriculture is still a major sector to influence poverty reduction in Tanzania due to its potential of developing in terms of the number of people it employs and available land the nation has (Lyatuu *et al.*, 2015). According to World Bank (2019) report, economic growth does more to reduce poverty when it occurs in sectors that employ the poor. Global evidence shows that growth in agriculture, for example, has been on average of two to three times more poverty-reducing than the same amount of growth elsewhere in the economy.

According to Ajulor (2018), many African countries have good plans in place but they are always faced with implementation

challenges. It is hypothesized in this paper that implementation challenges are partly caused by issues around interactions among the key actors. It is therefore important to explore the roles played by the key ASDP actors, and the implementation arrangements as part of the efforts to unveil reasons for the low performance of the agricultural sector. Specifically, the study explores the patterns of interaction of ASDP actors in the implementation process, and determines whether the interactions have been enhancing or constraining the ASDP implementation. According to Evers *et al.* (2010), the interaction between the higher and low level actors has an effect on the implementation effectiveness. In the context of this study, higher level actors include those from the ministry and district levels whereas low level actors include those from the ward, village and farmer group levels. Interaction is defined in this study as the way through which actors share knowledge or information and give or obtain resources in a social system. Interactions could be intended or unintended, and could be vertical—cross-scale (across different levels of organization) or horizontal—cross-issue (across the same level of social organization).

Theoretical and Conceptual Frameworks

Guided by Ostrom's institutional analysis and development (IAD) framework and the social network theory (SNT), the variables to be studied were identified. According to IAD, action situation (space where individuals, groups, NGOs and institutions interact) influences actor's action (Fig. 1). Action situation is used to refer to an analytic concept that enables an analyst to isolate the immediate structure affecting a process of interest for the purpose of explaining regularities in human actions and results, and potentially reform them (Ostrom, 2011). As for the SNT, its main tenet is that roles played by individual actors are not as important as those based on their relationships with other actors in the network (Wassermann and Faust, 1994; Giuffre, 2013). It aims at measuring and representing social relations and explaining why they occur and their consequences (Wasserman and Faust, 1994; Knoke and Yang, 2008). Use of both IAD and SNT is based on the fact

that none of them would adequately support the identification of relevant variables and exploration of the existing relationships in view of the ASDP actors. In the context of the study they complemented each other.

In the context of this study, actors' interactions are crucial in understanding the implementation of ASDP because they influence their action. Thus, actor's decision whether to participate in the implementation of ASDP priority interventions or not is influenced by their interactions with other actors. The IAD acknowledges the role of institutions in shaping interactions. In this study, institutions are defined as rules and procedures (both formal and informal) that structure social interaction by constraining and enabling actors' behaviour. Cases in point are the modus operandi specified for ASDP implementation and those applicable for the LGAs and the central government. In order to understand the interactions and outcome of interactions, the study paid particular attention to actor-specific situations and patterns of interaction among the key actors of ASDP.

Ministry of Agriculture, the Ministry of Livestock and Fisheries, the Ministry of Industry and Trade, Ministry of Water and Irrigation and the President's Office- Regional Administration and Local Governments (URT, 2016). Njombe and Singida Regions were purposively selected for tracking the planning and implementation of ASDP priority interventions from the ministry down to the ward level. It is at the district and ward levels where there is a mix of experts from various sectors. Njombe District in Njombe Region and Manyoni District in Singida Region were selected as study cases representing food (maize) and cash crops (sunflower) producing areas respectively. Priority interventions in relation to livestock production were also explored in the two districts.

Research design and sampling procedure

The mixed methods approach, following a QUAL→quan design was used, i.e., the approach was primarily qualitative with quantitative approach included for complementarity and triangulation (Morse, 1991). While the interview

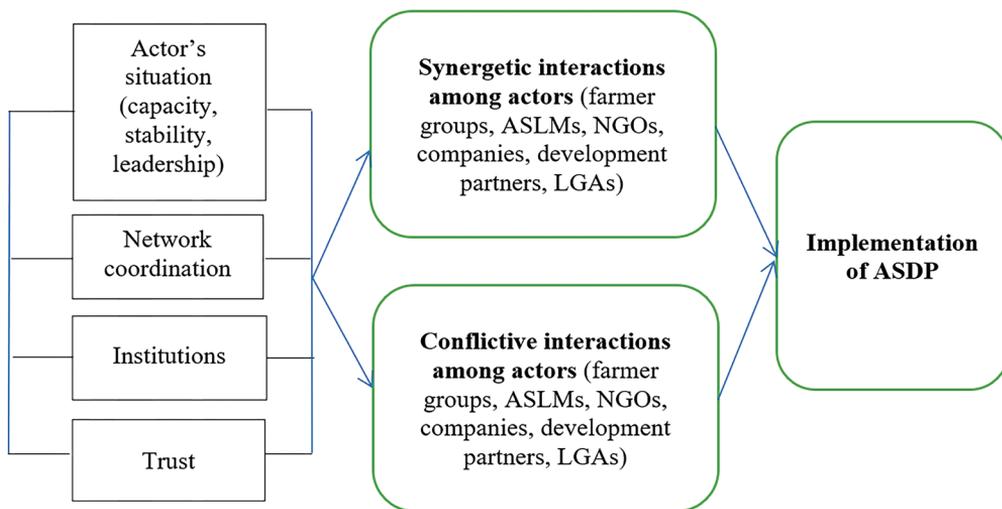


Figure 1: A conceptual framework for the study on the actors' interactions in the implementation of ASDP priority interventions

Source: Adapted from Ostrom (2011) and informed by the social network theory

Methodology

Study area

The study was conducted in Dodoma City, the location for ASLMs headquarters. Agriculture Sector Lead Ministries are the

schedule was administered at a single point in time, key informant interviews were repeated as deemed necessary.

Fifteen wards were purposively selected whereby from each of the two districts four

wards with the highest production records for the selected crop and four with the lowest crop production were selected. The essence was to achieve a comprehensive picture since there could be some differences in terms of the type of actors and nature of interactions (including type and frequency of resource and information flow) when the wards with high and low crop production are compared. District council staff at ward and village levels, serving as Agricultural Extension Officers, Livestock Development Officers, Community Development Officers, Ward Executive Officers and Village Executive Officers, were interviewed. Moreover, District Agriculture, Livestock and Fisheries Officers participated in interviews. In this regard, a total of 68 respondents, from 15 villages which belong to 15 wards from Njombe and Manyoni Districts participated in the survey.

Data collection and analysis

Key informant interview: Participants for key informant interviews were the government officials in the Policy and Planning Division at the Ministry level for ASLMs, ASLMs' ASDP Coordinators, National ASDP Coordinator, Office of the Controller and Audit General (CAG); and District Agriculture, Livestock and Fisheries Officers (DALFOs). The number of key informants was 18. A checklist of questions covering aspects like how planning and implementation is conducted across the ASLMs, existing structures for coordination, resources allocation and sharing was used. Other aspects covered were budgetary allocations and disbursement, relevance of ASDPs, efficiency of ASDPs implementation and factors constraining/enhancing the implementation of ASDPs.

Focus group discussion and survey: Four focus group discussions (FGDs) were conducted. Participants to the FGDs were district council staff at ward and village levels serving as Agricultural Extension Officers, Livestock Development Officers, Community Development Officers, Ward Executive Officers and Village Executive Officers; and farmers. Each FGD comprised of 6-8 participants making a total of 24-32. Data collected include actors' roles in ASDPs planning and implementation, and actors' interaction patterns.

Using a structured questionnaire, survey was conducted to district council staff at ward and village levels. This aimed at capturing the implementation of priority interventions at the grassroots. Specifically, the survey was employed to identify roles played by various actors in each of the ASLMs at the ministry, region, district and ward levels in the implementation of ASDPs, patterns of actors' interactions and perceived strength of the interactions.

Quantitative data were analysed using IBM SPSS software and Ms Excel. Descriptive statistics including frequency and cross tabulation were used to understand the patterns of interactions among actors. For the qualitative data, content analysis was employed.

Results and Discussion

Actors involved in the implementation of ASDP make up a system which, as the systems theory narrates, is an entity with interrelated and interdependent parts; it is defined by its boundaries and it is more than the sum of its parts (SE Scholar, 2019). Therefore, attempt has been made to gain insight into the whole by understanding the linkages and interactions between the elements that comprise the whole system.

Actors' interactions

Patterns of actors' interactions in the implementation of ASDP priority interventions Planning and implementation of ASDP saw vertical—cross-scale (across different levels of organization) or horizontal—cross-issue (across the same level of social organization) interaction of actors.

The main actors involved in the programme and hence interacting included agricultural sector lead ministries (ASLMs) namely the Ministry of Agriculture (MoA), Ministry of Livestock and Fisheries, Ministry of Industry and Trade, Ministry of Water and Irrigation, the President's Office - Regional Administration and Local Governments (PO-RALG); farmer groups; NGOs; companies, development partners, District Councils and Ward Development Committee (Table 1). Actors' interaction patterns depicted are discussed along

Table 1: Individual actor's interaction with other actors

Interaction patterns	Actors									
	Ministry of Agriculture	Ministry of Livestock and Fisheries	Ministry of Water and Irrigation	PO-RALG	LGAs	Farmer groups	Private sector	Ward	Total	
Direction of information/resources flow	To you	2(28.6)	4(23.5)	3(42.9)	5(50.0)	6(17.1)	13(21.3)	12(29.3)	4(8.9)	49(22.0)
	To him/ her/ it (received)	1(14.3)	1(5.9)	1(14.3)	0(0.0)	3(8.6)	7(11.5)	5(12.2)	5(11.1)	23(10.3)
Means of information sharing	Both ways	4(57.1)	12(70.6)	3(42.9)	5(50.0)	26(74.3)	41(67.2)	24(58.5)	36(80.0)	151(67.7)
	Informal meetings	0(0)	4(20)	0(0.0)	0(0.0)	0(0.0)	1(1.8)	1(2.6)	0(0.0)	6(2.7)
	Formal meetings	1(20)	8(40)	4(80.0)	5(50.0)	10(27.0)	25(44.6)	19(48.7)	20(38.5)	92(41.1)
	Trainings	1(20)	1(5)	0(0.0)	1(10.0)	2(5.4)	6(10.7)	7(17.9)	0(0.0)	18(8.0)
	Phone call	1(20)	2(10)	0(0.0)	1(10.0)	8(21.6)	15(26.8)	7(17.9)	20(38.5)	54(24.1)
Strength of interaction	Email	1(20)	1(5)	0(0.0)	0(0.0)	0(0.0)	1(1.8)	1(2.6)	0(0.0)	4(1.8)
	Letters	1(20)	4(20)	0(0.0)	3(30.0)	13(35.1)	8(14.3)	4(10.3)	6(11.5)	39(17.4)
	Reports	0(0)	0(0)	1(20.0)	0(0.0)	4(10.8)	0(0.0)	0(0.0)	6(11.5)	11(4.9)
	Strong	3(42.9)	8(38.1)	3(50.0)	2(22.2)	12(32.4)	30(53.6)	14(35.9)	30(66.7)	102(46.4)
	Moderate	4(57.1)	13(61.9)	2(33.3)	7(77.8)	24(64.9)	20(35.7)	20(51.3)	11(24.4)	101(45.9)
Weak	0(0.0)	0(0.0)	1(16.7)	0(0.0)	1(2.7)	6(10.7)	5(12.8)	4(8.9)	17(7.7)	

NB: In brackets are percentages

Source: Field data

the following themes: information/ resources sharing among actors, direction of information/ resources flow, means of information/ resources sharing and perceived strength of interactions as detailed below.

Information/resources sharing among actors

Actors involved in ASDP have been sharing a diversity of agriculture-related information and/or resources with farmers. Findings from focus group discussion indicated that the information shared include: technical information on irrigation, crop and livestock production; market information; projects funds-related information; project implementation progress; project monitoring missions; farmer group's information; and information on emergence of pests and diseases. The FGD participants indicated also that it was more of information that flowed than resources. Resources included project funds, leaflets, some pesticides, planting materials and tools.

Direction of information/resources sharing among actors

In most cases information flowed both ways (67.7%), with the ward /district council levels depicting the highest difference between both ways information flow and the other patterns, namely delivery and receipt of information (Table 1).

This connotes a possibility that the actors adopted a two-way communication. Also, the fact that information exchange occurred more at the lower levels (ward and district councils) is an indication that much of the ASDP undertakings took place at the targeted people's vicinity. This is further demonstrated by the fact that farmer organizations, who were the ASDP beneficiaries experienced mostly (67.2%) the both ways information flow (Table 1) compared to the other patterns of information flow.

Across actors comparison shows that farmer organizations form the most recipients of information relative to other actors. They also scored the highest (30.4%) in terms of information delivery to other actors. Likewise, both ways information flow applies more to this category (27.2%) than the other categories (Table 2). The findings were expected because

farmer groups are the target actors and hence the activities of the rest of the actors are geared at improving the situation of the farmers (farmer groups). This makes information flow to and from the farmers necessary. Similar findings were observed by DFID (2003), which reported prevalence of two way communication between farmers and researchers, extension staff, veterinary staff and local administrators.

Means of information sharing

Seven common information sharing means were identified, of which, the formal meetings scored the highest (41.1%) whereas e-mails scored the least (1.8%) (Table 1). Farmer organizations and ward development committee contributed the highest to the formal meetings. This means formal meetings, in this case face-to-face meetings, were highly employed to pass information to the community members or receive information from them. For instance, a key informant from the MoA said: *"During the implementation of ASDP I, projects were identified through obstacles and opportunities to development, which involved conducting meetings at village levels"*. In addition to indicating the modality of information flow adopted, the quote above provides an impression that use of participatory approaches was embraced in execution of ASDP I. It shows also that there was participation of grassroots community members.

Through formal meetings, it was possible for a number of actors to meet and discuss about ASDP. Elaborating the meeting avenues applicable for ASDP, a key informant from the Prime Minister's Office narrated as follows:

"The first meeting involves the National Coordination Team (NACOTE) in which each ASLM is represented. This meeting seats once a month bringing together all ASDP coordinators. The meeting receives reports from the PO-RALG and other ASLMs. The second meeting is the technical committee of directors which is held on quarterly basis involving directors from the ASLMs—often time directors of policy and development—who go through reports from NACOTE. The third one is permanent secretaries meeting whereas the fourth and last one is the steering committee which involves the

Table 2: Across actor comparison

Interaction patterns	Actors							
	Ministry of Agriculture	Ministry of Livestock and Fisheries	Ministry of Water and Irrigation	PO-RALG	LGAs	Farmer groups	Private sector	Ward
Direction of information/ resources flow	To you	2(4.1)	4(8.2)	3(6.1)	5(10.2)	6(12.2)	13(26.5)	4(8.2)
	To him/ her/ it (received)	1(4.3)	1(4.3)	1(4.3)	0(0.0)	3(13.0)	7(30.4)	5(21.7)
	Both ways	4(2.6)	12(7.9)	3(2.0)	5(3.3)	26(17.2)	41(27.2)	36(23.8)
Frequency of information/ resources flow per year	4(8.2)	7(14.3)	4(8.2)	4(8.2)	10(20.4)	6(12.2)	5(10.2)	9(18.4)
Means of information sharing	Informal meetings	0(0.0)	4(66.7)	0(0.0)	0(0.0)	0(0.0)	1(16.7)	0(0.0)
	Formal meetings	1(1.1)	8(8.7)	4(4.3)	5(5.4)	10(10.9)	25(27.2)	20(21.7)
Strength of interaction	Trainings	1(5.6)	1(5.6)	0(0.0)	1(5.6)	2(11.1)	6(33.3)	0(0.0)
	Phone call	1(1.9)	2(3.7)	0(0.0)	1(1.9)	8(14.8)	15(27.8)	20(37.0)
Strength of interaction	Email	1(25.0)	1(25.0)	0(0.0)	0(0.0)	0(0.0)	1(25.0)	0(0.0)
	Letters	1(2.6)	4(10.3)	0(0.0)	3(7.7)	13(33.3)	8(20.5)	6(15.4)
	Reports	0(0.0)	0(0.0)	1(9.1)	0(0.0)	4(36.4)	0(0.0)	6(54.5)
	Strong	3(2.9)	8(7.8)	3(2.9)	2(2.0)	12(11.8)	30(29.4)	30(29.4)
	Moderate	4(4.0)	13(12.9)	2(2.0)	7(6.9)	24(23.8)	20(19.8)	11(10.9)
Weak	0(0.0)	0(0.0)	1(5.9)	0(0.0)	1(5.9)	6(35.3)	5(29.4)	4(23.5)

NB: In brackets are percentages

Source: Field data

government (permanent secretaries) and other stakeholders, including the private sector. This meeting is chaired by the Prime Minister”.

From the quote, it is clear that there are people interacting specifically to discuss ASDP at least once every month, and that both horizontal and vertical interactions take place.

Expectedly, the highest scores (27.2%) attributable to formal meetings (the main information flow means) was due to the farmer groups compared to the other actors. Use of training as the major means of information sharing was applied more by the private sector (38.9%).

Usually, NGOs employ training to introduce or promote technologies among community members. The ward level was ahead of others in terms of use of reports and phone calls by scoring 54.5% and 37% respectively (Table 2). Key informant from the Ministry of Agriculture said: “Quarterly reports, semi-annual and annual reports are prepared by the Local Government Authorities, then are compiled at the PO-RALG for submission to the Prime Minister’s Office”.

Strength of interactions

Study respondents were of the opinion that the interactions were largely (46.4%) strong although there was a minor difference between strong (46.4%) and moderate (45.9%) strength categories. The strength of interaction reported here is purely opinion based and was gauged based on the type and frequency of resource or information sharing, and means employed in sharing the same. Ward development committee and farmer organizations contributed the highest to the “strong” category, suggesting that actors at higher levels (ministry and district) and those at the same level interrelated well with them. Accounting for the small proportion of the respondents (7.7%) who thought the interactions were weak, a key informant from the MoA said: “Under the ASDP II, there are statutory meetings; however, they are not implemented as scheduled. As a result, coordination becomes somewhat tricky”.

Based on the findings, the interactions exercised during the implementation of ASDP can be said to be frequent and involving an array of stakeholders from the grassroots levels to the

ministerial levels. This is well echoed by key informants from the Prime Minister’s Office and the Ministry of Agriculture, respectively, who said: “I can say, the programme (ASDP) is very participatory; it does not leave a person aside”. “Principally, there are very good structures; however, it seems we are not well organised”. In the same vein, a key informant from the Division of Policy and Planning of the MoA said: *There are statutory meetings including inter-ministerial technical committee and ministers’ council; therefore, there is a very close cooperation between ASLMs*”. It is implicit in the second quote that the outcome is questionable and that the informant, who is one of the ASDP implementers, is speculating on the possible causes. The following section addresses the question, are the interactions enhancing or constraining ASDP implementation?

Actor-specific situations

Study findings show that actors involved in the ASDP implementation had their own dynamics which had bearing on their level of commitment towards attainment of the common goal. This is reflected in the quote from the Division of Policy and Planning of the MoA. He said: “*The modus operandi adopted by the government in the implementation of ASDP enhances actors’ interactions; but there are issues with the actors that are not related with the system*”.

Reflecting on farmer groups, which were benefiting from ASDP, a key informant from the MoA said: “We have a problem when it comes to seeing that the messages conveyed to the farmers are understood and conceived of as intended; the farmer groups are not strong”. From the quote, strong farmer groups would make a more meaningful use of the information delivered to them.

As for the private sector, in this case, the non-governmental organisations and companies working with farmers, another key informant from the MoA said: “*Interaction among the private sector is very poor; there is coordination problem. Also, it is very difficult to get reports from the private sector; they are very discrete. Private sector is really private*”. Thus, NGOs and companies could be stronger if they had

reliable avenues for experience sharing, and this would possibly strengthen their contribution to ASDP implementation. A study conducted in Songea and Njombe regions (Zook *et al.*, 2023) showed that NGOs that engaged in some form of collaboration gained information on new opportunities including trainings, funding and calls for new projects, and technical support including 'how-to' information, such as monitoring and evaluation practices, benchmarking, fundraising, and strategic planning. From the quote, it is also clear that there are issues with compliance of the private sector to the network rules.

From the Agricultural Training, Extension Services and Research Division of the MoA, a key informant remarked on the status of extension officers as follows: *"Inadequacy of extension officers given the number of farmers to be served. Also they do not receive refresher training"*. As for the ASDP II Coordinators' situation, a key informant from the MoA said: *"ASDP Coordinators are not motivated; there is no recognition of the hard work they have been doing. This is demonstrated by lack of budget lines in this respect. At times one has to ask for support from other units when on their project implementation mission in order to have something to report"*. The two quotes suggest that there is lack of motivation among some actors. They would therefore not be expected to deliver much.

A key informant from the Policy and Planning Division of the MoA commented on the performance of the development partners, saying: *"Development partners have their strategic objectives; those are the ones that matter most to them"*. Implicitly, actors might be in the network but focusing more on individual agenda than the common one. As implied in the SNT, positive outcomes in terms of the implementation of ASDP would most likely be realized if the development partners devoted equally well to the network.

Agricultural sector lead ministries are key actors; however, some issues were pertinent. A key informant from the PO-RALG said: *"One challenge faced is low level of understanding among some ASLMs regarding the structure and functioning of the government; there are*

ministries which think they can bypass the local government authorities in implementation of their activities. This is impossible because all development activities are under jurisdiction of the citizens of the respective areas, that is, the LGAs". ASLMs were also considered as being not very well organized for the ASDP activities. A key informant from the MoA said: *"ASDP II does not receive the attention it deserves; it is not uncommon to find that in a ministry all the ASDP II activities are left to the ASDP II Coordinator"*. The first quote suggests that there are actors (players) who are not conversant with the modus operandi (rules of the game). It follows then that, although they are interacting with other actors they can hardly deliver on the common goal because they lack some basics. The second quote demonstrates cases of disorganisation among individual actors towards ASDP implementation. Interacting while disorganized and without adequate knowledge of the rules is like playing a game you are not well prepared for and you are not clearly aware of its rules. The outcome of such undertaking is largely a failure. To be synergetic, involved parties ought to be fully aware of the rules and well prepared to contribute to the collective action.

Inadequacy of means, in this case financial resources, among some actors was reported to be a constraint as shown in the following quote from a key informant from the PO-RALG: *"There is limited financing for ASDP II; implementation of ASDP relies on availability of funds in the LGAs be it from own revenue collections or from other sources such as the private sector or development partners"*. In the same vein, a key informant from Agricultural Training, Extension Services and Research Division of the MoA said: *"Agricultural sector has been marginalized budget wise; hardly does the sector receive the full amount of its budgetary allocation"*. Budgetary constraints were also apparent in coordination offices. This is well narrated by a key informant from the MoA who said: *"The off-budget is directed more to activity implementation leaving the coordination inadequately financed"*. Since money is pivotal to execution of plans, it follows that an actor with financial constraint may face

difficulties implementing plans agreed upon for the achievement of a common goal.

Trust among the actors

Study findings unveil some cases of complaints among actors and throwing of blames to other actors for unfavourable situation faced. A case in point is the MoA versus the PO-RALG. On this, a key informant from Agricultural Training, Extension Services and Research Division of the MoA said: *“We want to return to our ministry; it is very tricky for a person to be under two authorities (ministries). It happens that our priorities, as the MoA, are not necessarily the same as that of the employer; that is, the PO-RALG”*. Another key informant from the Crop Development Division of the MoA said: *“When the Minister convened Extension Officers in Dodoma, they aired out a concern that they wanted to return to their ministry (MoA). However, he told them that they (MoA) would serve them while in the ministry they were (PO-RALG)”*. The two cases tell clearly that those employed to work in the agricultural sector were not comfortable with the current arrangement despite it being consistent with the law (D by D of 1998). They probably lacked trust to the PO-RALG, which is the employer of those working at the LGAs level. The assertion “our priorities” in the first quote connotes belongingness to their ministry of origin and possibly the state of feeling as aliens in their current ministry. This could demotivate their performance, because if institutions fail to enhance an action they will constrain it (Malisa and Mahonge, 2023).

Another key informant from the Crop Development Division of the MoA said: *“PO-RALG has a system that facilitates communication. The idea is not to get rid of PO-RALG; the concern is district council staff who are in the agricultural sector claiming that they do not have parents”*. Likewise, a key informant from PO-RALG said: *“PO-RALG facilitates coordination because it has people (district council staff) everywhere. Sector ministries do not have staff at the lower levels (division, ward and villages/ streets), and this makes coordination of their activities difficult without PO-RALG”*. Thus, there are indications

that the way things are at present is not pleasant, especially to the district council staff working in the agricultural sector. It is also an area of concern to agricultural sector employees at ministry level. This is demonstrated by the following quote from a key informant from the Crop Development Division of the MoA, who said: *“At times you go to the district council to meet with staff working in the agricultural sector and they tell you – but we do not have a letter on your visit”*.

Those who are not happy with the existing arrangement would probably not perform their duties optimally. Since the two ASLMs are highly interacting, it might be assumed that they are synergetic; however, they are probably not. If they are, then better outcomes would have been realised had it been that both parties were comfortable with the existing relationship. Ostrom (2011), in her IAD framework, asserts that actors interact in light of the incentives they receive to generate outcomes directly in the world. The findings do not demonstrate the interactions between these two ASLMs to be driven by incentives to generate outcomes; they were probably interacting because they were obliged to do so, being public servants. Therefore, while incentives to generate outcomes are an important driving force for interactions, actors’ interactions can also be driven by the fear of punishment for non-compliance with prescribed rules and the modus operandi of the action situation. Consequences of interactions resulting from incentives and those resulting from fear of punishment are different. It is clear in the findings of this study that, interactions resulting from fear of punishment are oftentimes conflictive, and are less likely to contribute optimally to the final collective outcome.

Conclusions and Recommendations

Actors’ interactions in the implementation of ASDP were multifaceted and largely strong. However, there were issues with individual actors’ situations, which in turn affected the contribution of such actors to the common goal, that is, the implementation of the ASDP priority interventions. The issues made the actors’ interactions to be suboptimal. Thus, individual actor-related dynamics can affect the outcome

of interactions because they have bearing on the actor's contribution to the network. According to the SNT, it is actor's roles that are based on relationships with other actors that are more important than those played by individual actors.

Interactions are compulsory in execution of initiatives that involve multiple actors. The findings of the study demonstrate that interactions can be synergetic and therefore enhance attainment of the collective outcomes, or conflictive and constrain attainment of the outcome. Interactions resulting from fear of punishment for non-compliance with prescribed rules and the modus operandi are often times conflictive, and are less likely to contribute optimally to the final collective outcome.

Therefore, while interactions and outcomes are associated, it is possible for networks to have interactions that directly or indirectly are conflictive rendering it difficult to achieve the common goal. Thus, consistent with the SNT, it is not the strength of interactions that matters but what actors bring to the network. While agreeing with IAD's assertion that, incentives to generate outcomes is an important driving force for interactions, fear of punishment for non-compliance with prescribed rules and the modus operandi of the action situation could be the only driving force for interaction.

Since synergetic interactions are driven by incentives to deliver an outcome, there is a need for the ASLMs and other ASDP stakeholders to create incentives for participation in ASDP implementation. Also, for individual actors to deliver the requisite roles for functioning of the relationships, there is a need for the following to be considered as ASDP implementation continues or in designing and implementing similar initiatives: financial, human and organizational capacity of the participating actors, awareness of rules and modus operandi among the individual actors, incentives (ensuring ownership—participatory designing, implementation and M&E, institutions and compliance); and good coordination of the actors and cultivating trust among actors.

References

Ajolor, O.V. (2018). the Challenges of Policy Implementation in Africa and

Sustainable Development Goals. *People: International Journal of Social Sciences*, 3(3), 1497–1518. <https://doi.org/10.20319/pijss.2018.33.14971518>

AUC (African Union Commission) (2014). Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. https://www.au.int/web/sites/default/files/documents/31247-docmalabo_declaration_2014_11_26.pdf. Site visited on 16/07/2020.

Bassey, E. (2018). Maputo declaration target and agricultural expenditure, Maputo declaration target and agricultural output: A case study of Nigeria. *International Journal of Economics, Commerce and Management*, 6, 515–531.

DFID (2003). Departmental Report 2003. 158pp.

Evers, J.G., Huibers, F.P., Bas, J., & Vliet, V. (2010). Institutional Aspects of Integrating Irrigation into Urban wastewater Management: The Case of Hanoi Hanoi, Vietnam. *Irrigation and Drainage*, 59(2010), 336–344. <https://doi.org/10.1002/ird>

Giuffre, K. (2013). *Communities and Networks: Using Social Network Analysis to Rethink Urban and Community studies*. Polity Press, Bridge Street, Cambridge CB 21UR, UK.227pp.

Knoke, D. and Yang, S. (2008). *Social Network Analysis*, Second edition. Sage, Thousand Oaks, CA.

Lyatuu, E.T., Nie, F., & Fang, C. (2015). The Role of Agriculture in the Economic Growth and Poverty Reduction in Tanzania. *Journal of Economics and Sustainable Development*, 7(31), 1–16.

Malisa, E.T. and Mahonge, C.P. (2023). Implications of institutional interplay on land management: A case of traditional land tenure and formal laws in the Uluguru Mountains, Tanzania. *Land Use Policy* 129(2023) <https://doi.org/10.1016/j.landusepol.2023.106626>

Morse, J.M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research* 40. 120–123. doi: 10.1097/00006199-199103000-00014.

- NEPAD (New Partnership for Africa's Development) (2003). Comprehensive Africa Agriculture Development Programme (CAADP). ISBN 0-620-30700-5
- Ostrom, E. (2011). Background on the institutional analysis and development framework. *Policy Studies Journal* 39(1): 7–27. <https://doi.org/10.1111/j.1541-0072.2010.00394.x>
- SA Scholar (2019). Who said “the whole is greater than the sum of the parts”?
- Systems Thinking, SE Philosophy, Emergence. <https://se-scholar.com/se-blog/2017/6/23/who-said-the-whole-is-greater-than-the-sum-of-the-parts>. Site visited on 29/6/2023.
- Tanzania Economic Survey (2022). Hali ya uchumi wa Taifa katika mwaka 2021. Dodoma, Tanzania. 271 pp.
- URT (2016). Agricultural Sector Development Strategy-II 2015/2016-2024/2025. United Republic of Tanzania, 95. Retrieved from <http://extwprlegs1.fao.org/docs/pdf/tan160643.pdf>. Site visited on 10/7/2020
- Wasserman, S. and Faust, K. (1994). Structural Analysis in Social Sciences-Social Network analysis: Methods and Applications 819 pp. Cambridge University Press. The Edinburgh Building, Cambridge
- World Bank (2019). Tanzania Economic Update Human Capital : The Real Wealth of Nations, 45 p. Retrieved from <http://documents.worldbank.org/curated/en/873031563454513018/Tanzania-Economic-Update-Human-Capital-The-Real-Wealth-of-Nations>
- Zook, S., Temple, S. and Malisa, E.T. (2023). Exploring mutual dependence through non-financial resource exchanges. In: M. van Wessel, T. Kontinen, and J.N. Bawole (Eds.). Reimagining civil society collaborations in development: Starting from the South. Routledge, New York. pp 129-144.