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Influence of institutional pressures on sustainability of selected agriculture-related donor-supported project activities in Tanzania

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Abstract: Projects are increasingly failing to sustain activities and benefits beyond the funding period. Informed by the institutional theory, this study employed a comparative case study design to examine the influence of institutional pressures on the sustainability of project activities for two selected donor-funded projects. The study was done in Tanzania's districts of Chamwino and Namtumbo. A total of 274 respondents - 123 from the ECO-ACT project and 151 from the ISFM project were sampled proportionately. Household respondents were interviewed using a five-point Likert scale. Key informant interviews (KIIs) and Focus Group Discussions (FGDs) were also held. Descriptive statistics and cumulative logit regression techniques were used to analyse quantitative data. The findings show that local beneficiaries' participation in project activities has mildly decreased, with 20.1%, 2.6%, 20.8%, and 56.5% of respondents reporting no, low, moderate, and high sustainability. Besides, coercive pressure (p=0.003), normative pressure (p=0.010), and mimetic pressure (0.008) were positively related to the sustainability of project activities suggesting that they can influence local beneficiaries to sustain project activities. Furthermore, project beneficiaries were likely to sustain 0.149, 0.97, and 0.118 times more project-supported activities for every additional unit of coercive, normative, and mimetic pressures. Based on these findings, the study concludes that institutional pressures foster local beneficiaries' participation in project activities post-exit. The study recommends that project implementers should reinforce coercive, normative and mimetic pressures apart from addressing community-specific problems.

Keywords: Institutional pressure, coercive pressure, normative pressure, mimetic pressure, sustainability

1. Background Information

Projects are intended to leave behind communities that continue to participate in the activities they initiated and reap the benefits even after their withdrawal. However, with the growing failure of development projects to sustain activities and benefits beyond the funding period the feasibility of this goal in several developing countries remains debatable (Aarseth, 2017; Obar et al., 2017). Studies have demonstrated that even prominent international donors such as the World Bank (WB) and the International Fund for Agriculture Development (IFAD) have expressed concern about the viability of development projects. Gulali (2018), for example, identified more instances of projects not being sustainable in Africa (50%) than in other developing world regions (40%) in the study of WB-supported projects over the past 30 years. Country-wise, project unsustainability, specifically in Sub-Saharan Africa (SSA) and in the agriculture sector, has been reported in Zambia (Musaana, 2019); Cameroon (Muluh, 2019); Ethiopia (Simane and Zaitchik, 2014); Lesotho (Nthabiseng, 2016). According to Mkomagi *et al.* (2022), the average number of project-supported activities for two donor-financed agriculture projects in Tanzania decreased by 24.1% and 29.9% respectively, indicating project unsustainability in the near future.

The occurrence of project sustainability problems has repercussions for achieving the goal of developing sustainable, self-reliant local communities as envisaged in Tanzania Development Vision 2025 (URT, 1999). However, empirical research reveals that robust and effective local institutions can contribute to project sustainability (Engels, 2010; Ridley-Duff and Wren, 2018). This is because societal changes occur within and are extended through institutions (Dovers, 2001; Winch and Maytorena-Sanchez, 2020). In the context of donor-funded projects, when project implementers capacitate local institutions, they establish an enabling environment for them to operate sustainably, bridging the possible shortfalls caused by donor resource withdrawal.

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Notwithstanding a growing body of empirical research on institutions and project sustainability (e.g., Engels, 2010; Biesenthal *et al.*, 2018; Ridley-Duff and Wren, 2018), a critical review of scholarly research in project management indicates that the impact of institutional pressures (also known as institutional forces) has been eluded. Hence, the need to study the influence of institutional pressures on project sustainability for sustainable development.

Institutional pressures are made up of coercive, normative and mimetic (cultural-cognitive) pressures operating in an institutional environment (DiMaggio, 1983; Scott, 1995). The coercive element deals with actions such as rule-making, monitoring, and sanctioning (Scott, 1995; 2013). It institutionalizes the preservation of members' interests (Khurshid et al., 2021) and regulates their behaviour by compulsion, persuasion, or an invitation to engage in the activity (DiMaggio, 1983). Coercive pressure is established when the project team builds the capacity of the governance structures in the area where it operates to understand the project's key tenets and integrate them into their duties and responsibilities. Normative pressure stems from social expectations of how people should behave based on their beliefs and values (Scott, 1995; 2013). Expectations, beliefs, norms, and standards that are prevalent and observed in the community are used to regulate behaviour (Biesenthal et al., 2018). Normative pressure is established when the project team instils innovative technologies and practices among the local community members such that not doing them is considered irrational. Personal mental maps and interpretive schemes create mimetic pressure (Scott, 1987), which compels an individual to copy or mimic behaviours as a result of uncertainty. It is a rationalised way of doing things aimed to eliminate uncertainty when a clear course of action is lacking or when one is confused about how to respond to a potentially dangerous circumstance (Oliver, Biesenthal et al., 2018). It affects behaviour by consciously copying the acts of someone who in the eyes of the community members is believed to have more success and achievement (Hanson, 2001; Khurshid et al., 2021). By selecting a few successful people to act as role models, the project team creates and reinforces mimetic pressure.

The coercive, normative and mimetic pressures, albeit, emanating from differing conditions, can overlap and interact; resulting in different likelihoods to influence behaviour (DiMaggio, 1983; Biesenthal *et al.*, 2018). It can be argued that coercive pressure act as "push factors" while normative and mimetic pressures act as "pull factors". However, their impact on sustained participation in project activities after donor financing remains empirically unexamined, particularly in the agriculture sector. Hence, the main question addressed in this study is, do coercive, normative, and mimetic pressures influence local beneficiaries' sustained participation in agricultural-related project activities in the Tanzania context?

The institutional theory (Meyer and Rowan, 1977) provided the foundation for the empirical examination of the influence of institutional pressures on the sustainability of project activities. The theory has been used in various studies, primarily in business (e.g. Brower and Dacin, 2020), manufacturing (e.g. Khurshid *et al.*, 2021), and natural resource management (eg. Latif *et al.*, 2020).

Similar to Biesenthal et al. (2018), this study extends the application of the theory to project management with a focus on project sustainability. According to Dacin et al. (2002), institutional theories describe both individual and organizational actions as lucrative opportunities for change. Similarly, Engwall (2003) contends that institutional pressures such as past project activities, politics, and institutional norms, values, and routines shape projects in a particular manner. Furthermore, although projects operate in institutional environments and interrelate with institutions (Winch and Maytorena-Sanchez, 2020), few projects (eg. Khurshid et al., 2021) are presently emphasizing the use of institutional pressures as a strategy that contributes to longterm project sustainability. The study projects, however, emphasized the use of institutional pressure as a strategy for project sustainability. The institutional theory has also informed the development of three study hypotheses:

- 1. (H_0) Coercive pressure is not positively related to the sustainability of project activities.
- 2. (H_0) Normative pressure is not positively related to the sustainability of project activities.
- 3. (H_0) Mimetic pressure is not positively related to the sustainability of project activities.

1.2 Institutions and Sustainability

The concept of the institution has been defined and classified in various ways, depending on the conceptual choice of the authors. Williamson (1985) describes institutions as governance structures. But, for neo-institutionalists such as North (1990), institutions are rules of a game that regulate behaviour and social relationships and reduce uncertainty and improve the coordination of efforts and economic relations. North (1997) also makes a distinction between institutions and organizations, claiming that if institutions are the game's rules, organizations and their entrepreneurs are the players. A more precise distinction is drawn by Upholf (1986) who refers to organisations as structures with recognized and accepted roles. The rules of the game influence how organizations work and function in society. Furthermore, Cleaver (2002) distinguishes between administrative and socially entrenched institutions. Administrative institutions have formalised arrangements based on clearly defined organizational procedures, often in the government or other development organisation realms. Socially rooted institutions are informal; based on culture, social organisation and daily practices. For some institutions (eg. village government) however, the formal and informal elements operate simultaneously; making it difficult to

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distinguish them. Cognizant of the above, this study adopted the perspectives of both North (1990) and Upholf (1986).

According to Scott (2014) as cited in Biesenthal et al. (2018) institutions comprise coercive, normative and mimetic elements. These elements together with related activities and resources, give social life stability and meaning. Furthermore, they can support sustainability as well. McGill (1994) argues that projects must be supported by institutionalised structures to facilitate their implementation and contribute to long-term sustainability. Similarly, Uphoff (1992) points out that such institutions as local governments and farmers' groups are critical for promoting sustainability by mobilizing human resources, preserving community norms and consensus, establishing common prospects and a basis for cooperation that extends past the interests of individual beneficiaries. Dovers (2001) inform that the absence or inadequacies of institutions have contributed to the existing project sustainability challenges. In that light, institutions are an important factor when considering the sustainability of projects.

Scheirer (2005) conceives sustainability as the continuing of project activities and the sustaining of project outcomes after the primary funding has ended. This conception is also upheld in this study. Sustainability is inherently related to projects because projects consume resources to achieve beneficial goals (Armenia et al., 2019). More specifically, the consideration of sustainability matters in the management of projects aids the management of risks, raw materials, competition with other projects, and the provision of highly valued goods and/or services. It also entails designing projects in such a way that future generations would not have to suffer from the consequences of previous efforts (Aarseth, 2017). It can be argued that projects serve as catalysts to speed up initiatives by target communities to sustainable development, which consideration of sustainability.

2.0 Theoretical and Conceptual Frameworks 2.1 Theoretical Foundation

According to the institutional theory, the institutional environment strongly influences how organisations behave (Zucker, 1987). In this study organisations refer to local project beneficiaries organised in farmers' groups hereinafter, called local beneficiaries. An institutional environment, according to Scott (1995), is a community of individuals who share a common meaning system. In an institutional environment, local beneficiaries are intertwined in a web of coercive, normative, and mimetic pressures that regulate their behaviour (DiMaggio, 1983). In the context of this study, the tendency of the village administration to make both formal and informal demands on local project beneficiaries to continue engaging in the project-initiated activities constitute coercive pressure. The culture of doing what others in the community are doing as a result of social expectations, values, norms and standards in a community

constitutes what we refer to as normative pressure. The local beneficiaries' impression of peer farmers who had flourished due to their engagement in project-initiated activities is referred to as mimetic pressure.

In this study, it is argued that the local beneficiaries are compelled to align their behaviours concerning the uptake of project-initiated activities to the demands of the coercive, normative and mimetic pressures. As a result, the more coercive measures the village administration takes to enforce continued engagement in project-initiated activities the more likely local beneficiaries will sustain doing the activities. Similarly, the more local beneficiaries uptake the project-initiated activities, the more legitimate the activities become in the environment, to the point where not participating is regarded as irrational. Furthermore, the impressions that local beneficiaries have of successful fellow lead or champion farmers are a critical determinant of whether or not they would continue to participate in the project's activities and/or emulate the lead farmers' actions.

2.2 Conceptual Underpinnings

In the course of executing engagement and disengagement strategies, project implementers establish or strengthen coercive, normative, and mimetic pressures. institutional influence pressures the local beneficiaries' long-term participation in project-initiated activities (Figure 1). However, the extent an individual local beneficiary participate and sustain the project-initiated activities will depend on not only the amount of coercive, normative and/or mimetic pressures exerted but also on the willingness and the ability to comply (Oliver, 1991). Hence, the higher the pressure, the more likely a local beneficiary is to continue participating in project-initiated activities, which in return, guarantees the sustenance of the project-supported activities and attainment of project-intended goals, and vice versa.

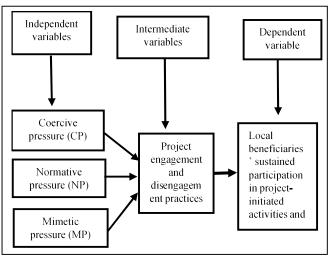


Figure 1: Conceptual framework of the study modified by the author from the original notions of the Institutional Theory by Meyer and Rowan (1977)

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3.0 Methodology

3.1 Study Design, Area and Sampling Approach

Similar to Savaya *et al.* (2008) and Caravella (2011), the study employed a comparative case study design to facilitate the collection, analysis and synthesis of data concerning the institutional pressures and sustainability across the study projects. Similarly, the mixed methods approach (Creswell and Plano Clark, 2011) aided the collection and analysis of both qualitative and quantitative data. All of the data studied is compared between the study project; the ECO adaptation to climate change in central Tanzania (ECO–ACT) and integrated soil fertility management (ISFM).

Funded by the European Union (EU) and the Alliance for Green Revolution in Africa (AGRA), the ISFM and ECO-ACT projects were implemented in Chamwino (2015-2019) and Namtumbo (2015-2018) districts. The ISFM project promoted the cultivation of soybeans, improved maize and cassava, and common beans. The ECO-ACT promoted the cultivation of improved pearl millet, sorghum (MACIA and NACO), sunflower (RECORD), and paddy (SARO 5). The other activities it promoted were

vegetable home gardening, beekeeping, and keeping improved chickens and goats. The study projects were chosen because they were donor-funded and utilised the institutional approach to sustain their interventions' activities. This included linking supported local beneficiaries to local government authorities at the village, ward and district levels in their core enterprises, forming or strengthening farmers' groups, and spotting successful farmers to serve as lead farmers. From the target population, the study was delimited to five villages namely Mtakanini, Nahoro, Mawa and Mchomoro (ISFM project) and Idifu village (ECO–ACT project). In total 274 respondents were sampled and interviewed out of 958 (429 ECO-ACT; 529 ISFM) project beneficiaries using the formula by Kothari (2004) below:

$$n = \frac{z^{2}. p. q. N}{e^{2} (N-1) + z^{2}.p. q}$$

$$= \frac{(1.96)^{2}. (0.5). (0.5). (958)}{(0.05)^{2}. (958-1) + (1.96)^{2}. (0.5). (0.5)} = 274$$

Where: n is the sample size, N is the number of household project beneficiaries from the eight villages, amounting to 958, and e=5% (0.05) level of precision, p= sample proportion, q=1- p, z= the value of a given confidence level. Then, a proportionate random sampling technique was performed, yielding 151 for ISFM and 123 for the ECO–ACT project, as indicated in Table 1.

Table 1: Project beneficiaries and study respondents by project, district, ward and villages

Project	District	Ward	Village	Total beneficiaries	Estimation	Respondents
ECO- ACT	Chamwino	Idifu	Idifu	429	274/958 x 429	123
subtotal				429		123
ISFM	Namtumbo	Hanga	Mawa	155	274/958 x 155	44
		Msindo	Mtakanini	117	274/958 x117	33
		Luegu	Nahoro	130	274/958 x130	37
		Mchomoro	Mchomoro	130		37
subtotal				529		151
Total				958		274

3.4 Instrumentation

A five-point Likert scale was employed to measure conceptions concerning coercive, normative, and mimetic pressures, similar to Jan *et al.* (2012). As per Nemoto and Beglar (2014), the development of the instrument went through five stages, as presented below.

First, a review of the literature was conducted to better understand the aspects of institutional pressure and how to operationalize it in the field.

Second, a preliminary list of items was established and shared among other psychometry experts at the Sokoine University of Agriculture for further development. The scale comprised nine items, which were adapted from Jan *et al.* (2012). For the statement about coercive pressure, a respondent was asked to identify whether many of the village government leaders required him/her to engage in project-supported activities and practices. Statements about normative pressure focused on enquiring whether leaders of farmers' groups encouraged them to engage in project-supported activities and whether many people in their social network (family, friends, neighbours etc.) were participating in project-supported activities and practices. Finally, statements about mimetic pressure inquired whether lead

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farmers' engagement in project-initiated activities enabled them to hold a more prestigious, high profile or status symbols in the community. It is important to note that the scope of coercive coercion is confined to village leadership because it is the governance system that people are most familiar with and can feel an immediate impact from. Mimetic pressure is also limited to lead farmers because they are believed to be more trained and successful than their fellow villagers, and so might easily be emulated in times of uncertainty or unclear courses of action, particularly after donor support is withdrawn.

Third, was the determination of outcome space for possible responses. The Disagree/Agree format of responses was opted for and presented on a five-point scale. A score of 1 indicates a strongly disagree (SD) position of the respondent with the statement, while a score of 5 indicates a strongly agree (SA) position of the respondent with the statement.

Fourth, was the verification of whether the assumptions for the use of the cumulative logit model were reasonable. First, results from the model fitting information showed a p-value of less than 0.001, indicating the model fits the data very well. Second, the results from the goodness of fit test showed a Pearson p-value of 0.481 and a Deviance of 1.000, both of which indicate the model is a good fit. Consequently, we failed to reject H₀. Third, results from the test of parallel lines (which tests the assumption of proportional odds) showed a p-value of 0.156. Hence, the slopes do not differ (p-value >0.05). Hence, we failed to reject H₀. Henceforth, it is concluded that the proportional odds assumption is reasonable and the use of the model is justified.

Fifth, to ascertain the effectiveness of the tool, it was piloted at Idifu village for 24 respondents in December 2020 with data collection taking place between February and April 2021. The names of respondents involved in the piloting were then removed from the sampling frame (before computing the sample size). Because the scale was originally written in English, it had to be translated into Kiswahili, first by the author and then by a bilingual expert.

Furthermore, three Focus Group Discussions (FGDs) involving representatives of local beneficiaries were held in the villages of Idifu, Mawa, and Mchomoro. Each FGD had eight (8 - four males and four females) participants. The participants were selected using the key informant recruitment approach (Bryman, 2012) whereas the leaders of the farmers' groups actively assisted in the nomination. In addition, seven Key Informant Interviews (KIIs) were also held by the researcher with project managers, district agriculture, irrigation, and cooperative officers (DAICOs) for Chamwino and Namtumbo, Idifu Ward Extension Worker, CARITAS Songea representative, and Chamwino District representative in charge of the ECO-ACT project.

3.5 Data Processing and Analysis

The processing and analysis of data were done using the IBM (SPSS) and Excel software. The total number of project activities done by the respondents after project withdrawal (specifically in the agricultural season before the data collection period) was used as a proxy for measuring sustainability. It was operationalised as a continuum, ranging from no, low, moderate to high sustainability. Local beneficiaries who had absconded from doing project-initiated activities received the value of 0. Those who dropped two activities (out of three) or three (out of four) received the value of 1. Those who dropped one activity (out of two or three) or either one or two (out of four) received the value of 2. Those who maintained the number of activities received the value of 3. The values of 0, 1, 2 and 3 implied no, low, moderate and high sustainability, respectively. Coercive, normative and mimetic pressure served as predictors. Each respondent's scores for the statement which constituted coercive, normative and mimetic pressures were summed up to make indexed values that were used in the analysis. Descriptive analyses in form of frequency and per cent were done for local beneficiaries' participation in and the sustainability of project activities before and after project withdrawal. The cumulative logit model was used to determine the influence of institutional pressures on the sustainability of project activities. The model is commonly suggested for analysing data that are in an ordered form (Williams, 2006). Hence, it was used in the study because the study's dependent variable is measured on an ordinal scale, ranging from no, low, moderate to high levels. The logit model used in this study is:

$$P(Yi > j) = g(X\beta j) = exp(\alpha j + Xi\beta j) / 1 + \{exp(\alpha j + Xi\beta j)\},$$

 $j = 1, 2,...,M - 1(1)$

where M is the number of categories of the ordinal dependent variable. From the above, it can be determined that the probabilities that Y will take on each of the values 1, ..., M are equal to

$$P(Yi = 1) = 1 - g(Xi\beta 1)$$

 $P(Yi = j) = g(Xi\beta j - 1) - g(Xi\beta j) j = 2,..., M - 1$
 $P(Yi = M) = g(Xi\beta M - 1)$

4.0 Findings and Discussions

4.1 Local Beneficiaries Participation in the Project Initiated Activities

The study sought to establish the status of local beneficiaries' participation in project-initiated activities, before and after the ending of donor support. The results show the activities done ranged from 1 to 4 (Table 2). Project-wise, the results show that on average the majority of ISFM project respondents (51.0%) participated in two activities whereas the ECO-ACT only participated in one (41.5%), which thereafter fell out of favour, leaving them with nothing else to undertake in (Table 2). Less than ten per cent of the respondents were engaged in four activities for

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both study projects. Furthermore, abandonment was higher among ECO-ACT project beneficiaries (27.6%) than in the ISFM project (13.0%). Overall, the results show that close to 80 per cent of the respondents continued engaging with project-initiated activities at various levels; suggesting variations in the levels of sustainability. The possible reason for the differences in the average number of activities engaged in by the study's respondents could be that the ISFM project emphasised more the crop rotation approach; legumes (soybeans) after cereals (maize) and vice versa, compelling beneficiaries to engage in more than one crop. The ECO-ACT, on the other hand, was implemented holistically, with all of the eco-village activities concentrated in a single area; giving room for the local beneficiaries to participate in even a single activity alone. Also, some activities were targeted at specific groups of people. For example, improved goats were meant for elderly widows.

Table 2: Local beneficiaries' participation in the projectsupported activities during and after the withdrawal of project support

ISFM Project $(n = 151)$					ECO-ACT project (n = 123)				
At the project resour activities withdr		e	croppin season precedi			At the year of project resource withdrawal		During the cropping season preceding data collection	
done	n=151	%	n=151	%	n=123	%	n=123	%	
0	-	-	21	13	-	-	34	27.6	
1	18	11.9	40	26.5	51	41.5	36	29.3	
•	77	51.0	52	34.4	42	34.1	35	28.5	
2	77	51.0	32	34.4	72	34.1	33	20.5	
3	51	33	34	22.5	21	17.1	10	8.1	

Qualitative results from the interview with the project managers for both ECO-ACT and ISFM projects show that supported local beneficiaries were organised in groups for training and information sharing purposes. The ECO-ACT project actively took part in the formation of the groups. For the ISFM project, however, most of the beneficiaries were already organised in saving and internal lending communities (SILCs) groups. Hence, the project only had to transform the SILC groups into farmers' groups. It also formed farmer's Associations (FAs) in each village and an Agricultural Marketing and Cooperative Society (AMCOS) at the district level, as affirmed by the ISFM project manager:

We made an entry through existing local groups which were dealing with Saving and Credit. We managed to work with groups of people who know each other. But, we also formed other groups. We conducted various training to build capacity to achieve our aim of strengthening primary cooperative unions. Therefore, we had to establish farmers' organisations, farmers' associations and finally, an AMCOS (ISFM project manager, 22/01/2021).

The findings indicate that in addition to crop production, the ISFM project local beneficiaries had other reasons for

coming together; handling the SILC and cooperative issues. Consequently, their groups had a better chance of surviving compared to the ECO-ACT project.

During the FGD in Idifu village, the participants agreed that the improved crop varieties (sunflower, pearl millet, and sorghum) introduced by the ECO-ACT project produced more yields than local varieties, encouraging them to continue cultivating the crops. However, the cultivation of Saro 5 – a rice variety was getting almost impossible because it frequently submerged in water following an increased rainfall in the 2019/20 and 2020/21 cropping seasons. As a result, farmers have resorted to using local, long varieties that respond to changes in water levels. Central to these findings is that environmental changes can constrain technology uptake. Furthermore, due to high mortality and a lack of expertise, keeping improved goat and chicken breeds was nearly impossible. Chicken mortality was exacerbated by a lack of therapeutic options due to limited availability of and access to veterinary services meaning drugs and staff. The Idifu ward1 had only one government extension worker who attended to both farmers and livestock keepers. As a result, there was a shift from keeping improved chicken to local breeds. Similarly, there was a shift from group to individual beekeeping when the group disintegrated due to theft of honey before harvest and unfair distribution of benefits. The findings connote that improper management of resources related to beekeeping can potentially disrupt the sustainability of the enterprise. The findings are comparable to those of Tutuba and Vanhaverbeke (2018) and Mwanyoka (2017), who identified a lack of well-organized community groups for beekeeping as a serious challenge for beekeeping in Tanzania. Similarly, Ngongolo and Chota (2021) reported that infections constraint severely reduced chicken productivity in Dodoma.

It was also determined through the FGD that vegetable home gardening, which is mostly a part-time activity, is a femaledominated activity. However, due to low morale and unreliable access to water and inputs (seeds, fertilisers and pesticides), it had fallen out of favour and was becoming nearly impossible. Men worked as gardeners around the dam (which was dug as part of the ECO-ACT project), mostly during the dry season after the water level had subsided. The findings in vegetable production reveal a gender divide. Women sought to feed their families but, males sought income - to maintain the status quo. Previous research on gender issues in agriculture in SSA (UN Women, 2018) supports these findings. The findings also corroborate those of Kpera et al. (2017) who identified limited access to water and farm inputs to be among the constraints for vegetable farming in the agro-pastoral dam in Benin.

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The FGD participants at Mawa and Mchomoro villages similarly held that the improved maize and cassava (KIROBA variety) yielded more than the local varieties; motivating local beneficiaries to continue growing them, both for food and cash. The KIROBA cassava variety was specifically preferred in the Muslim communities for use as a stew when fasting. Besides, changes in the soybean market as a result of the main buyers' relocation to the Zambia market resulted in either limiting its production to the preservation of seeds for planting in the next planting season or total abandonment for lack of price incentive. In terms of group survival, all groups were reported to be active, and new ones had been established in several villages and managed on a SILC basis under the mentorship of CARITAS, Songea office.

It can be seen that the reasons for disengagement or reduced participation in project activities varied across projects, mainly due to contextual and project design differences. However, they all imply that some of the innovations introduced by projects may become obsolete due to dynamics of forces in social, economic and environmental dimensions. Hence, tackling the emergent and project inherent bottlenecks and providing training based on institutional needs could be a major factor in the rebirth and continued participation in project activities. They also imply that local beneficiaries devote their time to project activities only when the benefits of so doing are evident.

4.2 Level of Project Sustainability

The level of sustainability was measured on a continuum ranging from no sustainability to high sustainability. The results in Table 3 show that overall, less than a quarter of the study respondent (20.1%) indicated project activities were unsustainable. The majority of the respondents (79.9%) indicated project activities were sustainable at various levels, ranging from low (2.6%) to high sustainability (56.5%). Project-wise, fewer respondents for the ISFM (13.9%) than ECO-ACT (27.6%) indicated a lack of sustainability in project activities. Similarly, ISFM respondents reporting moderate and high sustainability were slightly higher (2.8% and 57.6%, respectively) than respondents for the ECO-ACT project (17.1% and 55.3%).

Table 3: Sustainability of project activities

Level of project sustainability	ISFM project		ECO-ACT project		<u>Overall</u>	
3 3	n=151	%	n=123	%	n=274	%
No sustainability	21	13.9	34	27.6	55	20.1
Low	7	4.6	-	-	7	2.6
sustainability	36	23.8	21	17.1	57	20.8
Moderate sustainability						
High sustainability	87	57.6	68	55.3	155	56.5

According to the results, the ECO-ACT project activities were almost twice as unsustainable as the ISFM project. The disparity could be explained by the majority of them (51%) being involved in a single project activity that afterwards fell out of favour, leaving them with nothing to do with the project intervention. According to FGD participants, the absconded activities include home gardening, beekeeping, improved paddy cultivation, and raising improved chickens and goats. By considering the primary driving force behind project participation, it was further discovered through FGD at Idifu village to be external facilitation, which, in contrast to the ISFM project, lacked the consideration of cooperative activities or the SILC-like innovations. Furthermore, studies (Assenga and Kayunze, 2016) show that between 2009/10 and 2013/14, Idifu village was the lead food recipient village in the Chamwino district, suggesting the predominancy of dependency syndrome among villagers, which could affect their self-help spirit and morale to participate in project-initiated activities.

In the field of project sustainability, the findings imply that unless issues that cause local beneficiaries' low capacity to sustain participation in project activities are addressed, the gains get lost shortly. Despite the shortfalls observed, the results differ from Simane and Zaitchik (2014) who reported 67 per cent of the community-based organizations (CBOs) activities to be unsustainable in all aspects, while the remaining 33 per cent were judged to be at the menace of becoming unsustainable. The possible reasons for the difference could be differences in the study's assessment methods and level of capacity building upheld.

4.3 The Influence of Institutional Pressures on the Sustainability of Project Activities

This study sought to determine the influence of institutional pressure on the sustainability of project activities. This was achieved by testing the three study hypotheses using the proportionate logit model. The results of the performed analyses are presented in the section below.

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4.3.1 Hypothesis testing

The statistical significance of each of the three institutional pressures evaluated (normative, coercive, and mimetic pressures) is shown in Table 4. Coercive, normative and mimetic pressures were statistically significant at p=0.003, p=0.010 and p=0.008, respectively. Hence, we failed to accept H0 for all study's hypotheses. The positive significant relationship between coercion and the long-term viability of project activities suggests that political pressure has played a critical role in the uptake of project-initiated activities, notwithstanding the risk of non-compliance fines. The positive relationship between normative pressure and project activity sustainability could be attributed to several factors. To begin with, the project-initiated crops produced higher yields than local varieties. As a result, people attempted to boost their output. Second, the use of demonstration farms provided opportunities for local beneficiaries to practically learn and apply what was learnt. According to the ISFM project manager, the demonstration farms were located near the main roads to increase their visibility to not only the target beneficiaries but the entire community.

Also, mimetic pressure being statistically significant with project activities sustainability supports an argument by Scott (2013) that when cultural-cognitive institutions are widely shared and deeply embedded, even conceptualising the possibility of change or reverting may be difficult. These findings imply that lead farmers continued to hold a high profile social status and people sought to imitate their actions. The findings support Ringo (2020) and Oyelami et al. (2018). According to Ringo (2020), lead farmers provide moral incentives to fellow farmers through their roles as community change agents and social entrepreneurs both before and after the project closure. The findings highlight the necessity of project implementers to focus on and consolidate benefit-enhancing practices and behaviours specifically during the project transition period. This can help to avoid the tendency of "ceremonial adoption" where people conceal their behaviour behind the wall of acquiescence during project engagement time; pretending to embrace the technologies promoted by the project during its lifetime. But, when the institutional context change (here implying the withdrawal of donor support and the associated incentives), individuals administered by the institutions tends to alter the definition of what are socially acceptable behaviours and outcomes (Rueff and Scott,1998). If the coercive cultural-cognitive are not well-ingrained, reverting occurs resulting in the project's unsustainability.

Table 4: Parameter estimates

	Estimate	Std. Error	Wald	df	Sig.	95% Confidence	
Institutional pressure category						Lower Bound	Tval Upper Bound
Coercive pressure	.149	.050	8.824	1	.003	.051	.248
Normative pressure	.097	.037	6.715	1	.010	.024	.170
Mimetic pressure	.118	.044	7.112	1	.008	.031	.205

Dependent Variable: The level of sustainability of project activities (no, low, moderate to high)

Model: Normative pressure, coercive pressure, mimetic pressure

Qualitative results from the project managers on the efforts to enhance coercive, normative and mimetic pressures indicate that during the engagement period, the project leadership took various institutional measures to integrate the project into the broader community fabric and to enlist support from both the community members and the government. This included working closely with local government authorities at the district, ward and village levels by building their capacities in various facets related to the projects' core enterprises, as evidenced by the ECO-ACT project manager:

"We involved the District authority, Chamwino District Council, right from the beginning of the project, from the planning of the project, with the expectation that after we had left they will continue the enterprise" (ECO-ACT project manager, 4/2/2021).

The efforts resulted in the Chamwino District Council, for example, integrating climate change adaptation activities in the district and village plans, according to the DAICO. Also, the review of the ECO-ACT project's final narrative report indicated that 17 bylaws concerning natural resource management and sustainable agriculture practices were made and passed at Idifu ward. The bylaws required each household to plant at least two acres of improved sorghum and/or pearl millet, according to FGD members. The ISFM project, however, did not use this strategy and instead, the village leadership relied on existing laws and regulations. In comparison, the ECO-ACT strategy was found to be more effective in enhancing coercive pressure. The findings of the study are similar to that of Savaya et al. (2008) who reaffirmed the importance of the commitment of the leadership of the host organisation. It was further established that only the ISFM project's partnership with CARITAS' Songea office was still strong. In general, it can be claimed that the capacity development work done by the project teams and the local partners, and frequent farm visits, created substantial normative pressure among local beneficiaries to produce the results that were observed.

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The results (Table 4) indicate the estimated value of coercive pressure (0.149), normative pressure (0.097) and mimetic pressure (0.118) are positive, which suggests that as the coercive, normative and mimetic pressure increase, the likelihood of sustaining project activities will increase too. Moreover, the results (Table 4) show of the three institutional pressures studied, coercive pressure had the highest impact likelihood on the project activities' sustainability, which confirms Woolthius and Taminiau (2017), who stated that coercive pressure can be the most powerful change accelerator because it cannot be simply resisted; instead, it enhances the process' pace and unavoidability.

5.0 CONCLUSION AND RECOMMENDATIONS

This study focused on examining the influence of institutional pressure on the long-term sustainability of project activities. It has been indicated that local beneficiaries' participation in project-initiated activities appears to have decreased slightly, resulting in a range of levels of sustainability from low to high. Besides, inconsistent with H₀, the village leadership's formal and informal demands on local beneficiaries to engage in projectinitiated activities were statistically significant, suggesting that project-supportive village leadership is critical to the sustainability of project activities. Similarly, the culture of doing what others in the community are doing either individually or in groups was statistically significant, suggesting that the social networks of family, friends, relatives, neighbours etc. and producer-owned farmers' groups positively influenced local beneficiaries' continued engagement in project activities. Furthermore, the tendency of local beneficiaries' to copy the actions of peer farmers who had flourished as a result of participating in projectinitiated activities was shown to be statistically significant, suggesting the lead farmers motivated fellow farmers to mimic their actions. Overall, the study points out that institutional pressures influence the sustainability of project activities. Additionally, developing workable relationships between project implementers on the one hand and the host village leadership and community, on the other hand, is critical for developing project supportive village leadership and local communities, all of which are important for the long-term maintenance of coercive and normative pressures. Moreover, the use of lead farmers is an effective extension approach and might complement the efforts of government extension agents in the study area.

It has been indicated that institutionalising projects within local institutional contexts can foster sustainability, it is recommended that project implementers should invest in building or strengthening coercive, normative and mimetic pressures to enhance their capacity to consolidate benefit maintenance behaviours post-project exit, as determined by the local institutional needs. However, this will necessitate

consideration of the project's larger context during both the design and implementation stages, challenging the traditional notion of a project as a separate entity from the institutional framework in which it operates (see, Engwall, 2003; Söderlund, 2004). It has also been indicated that project supportive leadership is critical for the sustainability of project activities, hence, apart from addressing community-specific issues, project implementers should work closely with village-level administrations and farmers' groups, and capacitate them to be aware of their responsibilities and adapt to the changing agricultural environment.

Furthermore, the project implementers should carefully examine lead farmer selection criteria, which, according to Ringo (2020), should include both socioeconomic and personality traits. Such scrutiny would help to identify pretenders seeking economic-social gains.

Although the findings from this study cannot be generalized, they do show that the institutional framework might well be used to improve the sustainability of project activities for projects in similar situations.

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REFERENCES

Aarseth, W., Ahola, T., Aaltonen, K., Økland, A. and Andersen, B. (2017). Project sustainability strategies: A systematic literature review. *International Journal of Project Management*, 35(6): 1071–1083.

Armenia, S., Dangelico, R. M., Nonino, F. and Pompei, A. (2019). Sustainable project management: a conceptualization-oriented review and a framework proposal for future studies. *Sustainability*, 11, 2664.

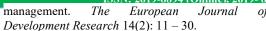
Assenga, E. A. and Kayunze, K. A. (2016). Food security incidences based on dietary energy consumption, dietary diversity and household food insecurity access scale I Chamwino district, Tanzania. *International Journal of Asian Social Sciences*, 6(11): 644-658.

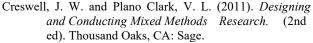
Biesenthal, C., Clegg, S., Mahalingam, A. and Sankaran, S. (2018). Applying institutional theories to managing megaprojects. *International Journal of Project Management*, 36(1): 43-54. Brower, J. and Dacin, P. A. (2020). An institutional theory approach to the evolution of the corporate social performance – corporate financial performance relationship. *Journal of Management Studies* 57(4): 805-836.

Caravella, K. D. (2011). Mimetic, normative and coercive influences in institutionalisation of organisational practices: The case of distance learning in higher education. Dissertation for the Award of PhD Degree at Florida Atlantic University, Florida, United States, 161 pp.

Cleaver, F. (2002) Reinventing institutions: Bricolage and the social embeddedness of natural resource

ISSN: 2619-8894 (Online), 2619-8851 (Print)





- Dacin, M. T., Goodstein, J. and Scott, W. R. (2002).

 Institutional Theory and Institutional Change:

 Introduction to the Special Research Forum.

 Academy of Management Journal, 45(1): 45-56.
- DiMaggio, P. J. and Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2): 147-160.
 - Dovers, S. (2001). Institutions for sustainability. TELA: environment, economy and society, Issue 7. 33pp.
 - Engels, J. E. (2010). Aid project exit strategies: Building strong sustainable institutions. Thesis for Award of PhD Degree at the University of Melbourne, Australia, 375pp.
 - Engwall, M. (2003). No project is an island: linking projects to history and context. Research Policy 32: 789– 808.
 - Gulali, N. (2018). The World Bank in Africa: An analysis of World Bank aid and programmes in Africa and their impact. Accessed on 5/1/2022 from

[http://www.realityofaid.org > uploads > 2018/12]

- Jan, P., Lu, H. and Chou, T. (2012). The adoption of elearning: an institutional theory perspective Pi-Tzong. The Turkish Online Journal of Educational Technology, 11(3): 326-343.
- Kothari, C.R. (2004). Research Methodology: Methods and Techniques. 2nd Edition, New Age International Publishers, New Delhi.
- Khurshid, A., Muzafar, A., Khurrum, M. and Bhutta, S. (2021). Institutional pressures and supplier involvement: a perspective on sustainability. *Operations Management Research*.
- Kpéra, G. N., Segnon, A.C., Saïdou, A., Mensah, G. A., Aarts, N. and van der Zijpp, A. J. (2017). Towards sustainable vegetable production around agropastoral dams in Northern Benin: current situation, challenges and research avenues for sustainable production and integrated dam management. *Agric & Food Secur*, 6(67): 1-13.
- Latif, B., Mahmood, Z., San. O. T., Said, R. M. and Bakhsh, R. (2020). Coercive, normative and mimetic pressures as drivers of environmental management accounting adoption. *Sustainability* 12(4506): 1–14.
- McGill, R. (1994). Institution development and the notion of sustainability. *International Journal of Public Sector Management*, 7(6): 26-40.
- Meyer, J. W. and Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. American Journal of Sociology, 83(2): 340-363.
- Mkomagi, J. V., Devotha, B. M. and Ahmad. K. A. (2022).

 Beneficiaries' attitudes towards resources withdrawal for selected donor-funded agriculture-related projects in Tanzania: A social cognitive theory perspective. International Journal of Research in Business & Social Science 11(3): 206-216
- Muluh, N., Kimengsi, J. N. and Azibo, N. K. (2019). Challenges and prospects of sustaining donor-

- funded projects in rural Cameroon. *Sustainability* 11(6990): 1–25.
- Musaana, E. J. (2019). Community Participation as a Determinant of Project Sustainability beyond Donor Support. The Case of Zambia. Munich, GRIN Verlag. 96pp.
- Mwanyoka, I. (2017). Promoting modern beekeeping in the East Usambara mountains: what are the challenges and opportunities? *International Journal of Agriculture and Environmental Research*, 3(6): 4198 4212.
- Ngongolo, K. and Chota, A. (2021). Chicken production, flock size, management systems, and challenges in the Dodoma region in Tanzania. Poultry Science, 100(6):101136.
 - North, D. C. 1990. Institutions, institutional change and economic performance. Cambridge: Cambridge University Press.
- North, D.C. (1997). Economic performance thought the time [in] Nobel lectures in economic sciences (1991-1995), World Scientific Publishing.
- Nemoto, T. and Beglar, D. (2014). Developing Likert-scale questionnaires. In N. Sonda and A. Krause (Eds.), JALT2013 Conference Proceedings. Tokyo: JALT.
- Nthabiseng, M. (2016). Assessment of the sustainability of donor-funded Agricultural Projects: a case study of Sustainable Agriculture and Natural Resource Development Programme in Mafeteng, Lesotho. A thesis submitted for the award of a master's degree from the University of the Free State, South Africa. 71pp.
- Obar, E. E., Adekoya, A. E. and Nkwocha, C. A. (2017). Community participation and beneficiaries' perceived sustainability of the community and social development in Ibadan, Oyo State, Nigeria. *Nigerian Journal of Rural Sociology*, 17(1): 27-36.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1): 145-179.
- Oyelami, B., Akinwale, J., and Ladele, A. (2018). Lead farmer extension approach and sustainable extension service delivery in Oyo state, Nigeria. *Contemporary Agriculture*, 67 (3-4): 233-241.
- Ridley-Duff, R. and Wren, D. (2018). Social enterprise, Sustainable development and the FairShares model. *Japanese Journal of Human Welfare Studies*, 11(1): 23-42.
- Ringo, D. E. (2020). Personality traits of high-performing lead farmers in farmer-to-farmer extension projects employing the RIPAT approach in Tanzania. A thesis for the award of the degree of doctor of philosophy of Sokoine University of Agriculture. Morogoro, Tanzania. 204pp.
- Ruef, M. and Scott, W. R. (1998). A multidimensional model of organizational legitimacy: Hospital survival in changing institutional environments. *Administrative Science Quarterly* 43 (4): 877–904.
- Savaya, R., Spiro, S. and Elran-Barak, R. (2008). Sustainability of social programs. A comparative case study analysis. *American Journal of Evaluation*, 29(4): 478-493.
- Scheirer, M.A. (2005). Is Sustainability Possible? A Review and commentary on empirical studies of program

ISSN: 2619-8894 (Online), 2619-8851 (Print)



- sustainability. *American Journal of Evaluation*, 26(3): 320-347.
- Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493–511.
- Scott, W. R. (1995). Institutions and Organizations. Ideas, Interests and Identities. Sage. 360pp.
- Scott, W.R. (2013). Institutions and organizations: Ideas, interests and identities. 4th edn. Sage Publications Inc, Thousand Oaks, United States.
- Scott, w.r. (2014). *Institutions and organizations: Ideas, interests and identities*. 4th edn. Sage, Los Engels, United States.
- Simane, B. and Zaitchik, B. F. (2014). The sustainability of community-based adaptation projects in the Blue Nile Highlands of Ethiopia. *Sustainability* 6: 4308-4325.
- Söderlund, J., (2004). Building theories of project management: past research, questions for the future. *Int. J. Proj. Manag.* 22, 183–191.
- Tutuba, N. B. and Vanhaverbeke, W. (2018). Beekeeping in Tanzania: why is beekeeping not commercially viable in Myomero? *Afrika Focus*, 31(1): 213-239.
- Uphoff, N. (1986). Local institutional development: An analytical sourcebook with cases. West Hartford, CN: Kumarian Press, 419 pp.
- Uphoff, N. (1992). Local institutions and participation in sustainable development. Gatekeeper series No. 31. International Institute for Environment and Development.
- UN Women (2018). The gender gap in agricultural productivity in Sub-Saharan Africa: causes, costs and solutions. *Policy brief* No. 11
- URT (1999). *The Tanzania development vision 2025*. Planning Commission, Government Printers, Dar es Salaam. 21pp.
- Winch, G.M. and Maytorena-Sanchez, E. (2020). Institutional projects and contradictory logics: Responding to complexity in institutional field change. *International Journal of Project Management*, 38(6): 368-378.
- Williamson, O. E., (1985). The Economic Institutions of Capitalism, New York: Free Press.
- Williams, R. (2006). Generalized ordered logit/partial proportional odds models for ordinal dependent variables. The Stata Journal, 6(1): 58–82.
- Zucker, L. G. (1987). Institutional theories of organisation.

 Annual Review of Sociology, 13(1): 443 464.