

Participation of Farmers in Planning and Designing of Extension Support Through Stakeholder Platforms: Lessons from Strengthening Agriculture and Nutrition Extension Project in Malawi

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ABSTRACT

Agricultural extension systems continue to shift from a centralised, public, top-down system to a more pluralistic, demand-driven system. However, in many countries, principles and institutional arrangements of the latter have not been adequately achieved. This study was conducted to evaluate the effectiveness of the Strengthening Agriculture and Nutrition Extension (SANE) project on the Malawi decentralised agricultural extension services system (DAESS) in improving farmers' participation in the design of extension support. A structured questionnaire was administered to 389 randomly selected SANE farmers of Dedza district and 22 service providers from governmental and non-governmental organisations involved with SANE. Using descriptive and content analysis, the study found that 76% of the farmers participated in discussions on DAESS platforms regarding planning and extension support. Still, only 1.7% and 0.9% were involved in the actual “needs identification” and “proposal development,” respectively. Although DAESS platforms were perceived as ‘tolerant’ and as allowing farmers the freedom of expression, they were not the preferred choice for seeking advice due to issues of inaccessibility: driven by their reliance on periodic meetings, limited expertise among platform members, lack of enforcement authority, and insufficient resources within the platforms to effectively address farmers’ needs. Overall, the study showed that SANE increased opportunities for farmer participation in extension planning; however, it also indicated that DAESS platforms remain underdeveloped. The study recommends that all

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agricultural projects be implemented through DAESS platforms.

Keywords: Agricultural Extension System, Farmer Participation, Demand-Driven, Extension Planning.

1. INTRODUCTION

With approximately 85% of Malawi's population depending on smallholder farming (World Bank, 2022), agriculture is a mainstay of the country's economy, contributing 30% of gross domestic product GDP (World Bank, 2025a), 62% of the labour force (World Bank, 2025b) and over 80% of foreign exchange earnings (World Bank, 2025c). Agricultural extension is central to development and crucial for delivering knowledge, technologies, market connections, and other solutions to the rural economy. (Ongachi & Belinder, 2025; Mungaia, Messinaa, Zulub, Chikowo & Snapp, 2024; Abhijeet *et al.*, 2023; Loki & Mdoda, 2023). Extension systems outline how extension is organised, implemented, financed and coordinated in a country (Christoplos, 2010). Malawi's farmalised extension system began under colonial rule in around 1903 and has since been dominated by the government (Chiwasa & Kambewa, 2018). The Ministry of Agriculture is the main provider of extension services to the majority of smallholder farmers who mostly produce maize, the country's staple food (Masangano & Mthinda, 2012). Primarily, agricultural extension was to "force" farmers to adopt prescribed farming practices, notably land resource management technologies, to increase the production of raw materials like cotton for European industries (Peters, 1997). Following independence in the 1960s, the extension system moved to a more persuasive model-farmer approach, in which the government supported individual farmers with agricultural messages and inputs for the rest of the farmers to emulate their valuable farming practices. Later in the 1980s, with an aim of being more inclusive, extension shifted to a group-based approach: the Block Extension System (BES). This was a modification of the World Bank-funded Training and Visit system, with strict supervision and rigorous programming of farmer training. Like the previous systems, BES used the top-down model of extension delivery, where the transmission of national interests was emphasised over farmers' individual interests (Masangano *et al.*, 2016). This is what the BES was blamed for, and, paradoxically, the approach is still predominant in the current extension system after BES was phased out (Chiwasa & Kambewa, 2018). Management of extension was also affected by the birth of multiparty democracy in the 1990s. There was an emergence of new players to complement the

government's efforts, and farmers were accorded greater power and authority to hold service providers accountable. In 2000, Malawi adopted the decentralised agricultural extension services system (DAESS) which bases on the model village approach - “a process of getting farmers to analyse their situations, articulate demands and needs, generate solutions and options and demand quality extension services from service providers available in their respective areas” (Chinsinga, 2008:12). Decentralised agricultural extension service system operationalises Malawi's extension policy whose key principles include accountability, pluralism and demand-driven, aligning with the government's decentralisation agenda (Masangano & Mthinda, 2012). The system is therefore built on four pillars: farmer demands articulation and organisation; stakeholder engagement and innovation in responding to demands; stakeholder coordination; and collective resource mobilisation. The decentralised agricultural extension service system integrates into the district assembly structure, comprising the district assembly's agriculture subcommittee (elected members and chiefs), the district executive committee's agriculture subcommittee (representatives of extension service providers) and stakeholder panels at district, area and village levels representing all actors in the agricultural sector, including farmers, farmer organisations, and NGOs (Masangano & Mthinda, 2012). These stakeholder panels serve as fora for dialogue, where farmers can demand services directly from private and public service providers while maintaining the quality and standards of the services (Masangano & Mthinda, 2012). However, by 2015, many elements of the DAESS remained unimplemented due to capacity constraints (Soroko *et al.*, 2019), vindicating the need for a system-strengthening intervention, the Strengthening Agriculture and Nutrition Extension (SANE) project. Besides, Chiwasa & Kambewa (2018) noted that the extension system remained dominated by the state in terms of funding, coverage, and staffing levels, providing quality control and supporting public good services such as achieving food security. Public extension offices, such as the Extension planning area (EPA) office, are meant to serve as secretariats for the DAESS.

Strengthening Agriculture and Nutrition Extension was a USAID/Malawi project implemented in collaboration with the Malawi Department of Agricultural Extension Services (DAES) from 2015 to 2020, across the 10 districts of the Feed the Future (FTF) Expanded Zone of Influence (E-ZOI) in Malawi³ (USAID, 2017). Strengthening Agriculture and Nutrition Extension aimed at

³ Feed the Future zone of influence districts in Malawi are Mnchinji, Lilongwe, Dedza, Ntcheu, Mangochi, Blantyre, Chikwawa, Nsanje, Machinga and Balaka

strengthening DAESS platforms to support farmers' voices and to coordinate and collaborate among service providers, contributing to better access to and improved quality of extension services (Álvarez-Mingote, Moore & McNamara, 2020). Álvarez-Mingote *et al.* (2020) and Soroko *et al.* (2019) reported improvements through SANE in transforming DAESS platforms into functional, coordinated extension service provider platforms in Malawi, thereby increasing farmers' voice and their ability to raise their needs. However, Ragasa and Comstock (2019) reported that although coordination of extension services improved due to the SANE project, the percentage of farmers requesting information from extension services decreased from 12% in 2016 to only 4% in 2018.

Why do farmers hesitate to seek extension advice from the extension service system? Literature highlights several factors, including farmers' lack of awareness of their information needs (Sani, Boadi, Oladokun & Kalusopa, 2014), limited empowerment (Masangano & Mthinda, 2012), inappropriate communication channels (Talib, Ashraf, Agunga & Chaudhary, 2018), and concerns about the credibility of the extension system (Stevens & Ntai, 2011; Maake & Antwi, 2022). In Malawi, Chowa, Garforth, and Cardey (2013), along with more recent studies by Chiwasa and Kambewa (2018), Stull, Kambewa and Tchuwa (2020), Mikwamba, Dessein, Kambewa, Messely and Strong (2020), and FAO (2021), have documented similar experiences of a weak pluralistic and demand-driven extension system. However, none of these studies provides a clear explanation of the underlying causes of this issue. It is against this background that the study was conducted in Dedza district to provide empirical evidence on the status of pluralistic, demand-driven extension and to fill a gap in the literature regarding the effectiveness of the extension service system in Malawi in increasing farmers' voice after the SANE project was phased out. This article, therefore, seeks to determine whether DAESS platforms and networks under SANE have improved farmers' participation in planning and designing extension support.

2. RESEARCH METHODOLOGY

The study was conducted in Dedza district, one of the districts that implemented the SANE project. The literature reviewed (Suvedi, 2011; Dedza SEP, 2013; Ragasa & Niu, 2017; Chiwasa & Kambewa, 2018; Stull *et al.*, 2020; Tchuwa, 2021) played a crucial role in guiding the selection of the district. Dedza had had a relatively longer-term active engagement with the SANE project, a factor necessary for evaluation studies. Besides, Dedza has perfect representations of all the topographic areas in which the SANE project worked, as discussed in the following sections. The

district has also been part of research areas for most studies around extension systems. These studies present a basis for comparison with the current research.

Dedza lies in the Central Region of Malawi at 14.3817°S, 34.3255°E. It borders the southern part of Lilongwe, the capital city district. To the east lies part of Lake Malawi, and to the southwest lies the Malawi-Mozambique border. Dedza covers a total land area of 3,624 square kilometres, about 4% of Malawi's total land surface area (94,276 square kilometres) (Dedza SEP, 2013). The district has four topographic zones: (i) the Lilongwe-Kasungu Plain in the northern and western parts of the district, lying at an altitude of 1100-1300 metres; (ii) Dedza Highlands; (iii) the Escarpments zone, falling steeply to the Great Rift Valley; and (iv) the Coastal Plain of Lake Malawi in the Great Rift Valley. Each zone has distinctive climatic features, geomorphology, soils and human factors that affect agricultural development differently (Remington, 1963). Dedza has eight traditional authority (TA) areas with 222,416 farming households. The district is also demarcated into 10 extension-planning areas (EPAs) and 169 sections for agricultural operations. An Assistant Agricultural Extension Development Officer is supposed to staff each section. At the time of the study, only 62 sections were staffed, implying a staff: farm household ratio of 1:3 587, against a recommendation of 1:750 (MoAIWD). Seven non-governmental organisations are also involved in the district, providing agricultural services.

A mixed-methods approach was used to conduct the study, combining quantitative and qualitative research methods (Johnson & Onwuegbuzie, 2004). This approach offered opportunities for between-methods triangulation and explanation of existing causal relationships (Johnson, Onwuegbuzie & Turner, 2007). Results of the descriptive and content analyses of the extension system's performance were compared with baseline information collected from studies conducted at different stages of project implementation to determine whether any improvements had occurred.

2.1. Sampling

A total of 931 farm households had participated in at least one SANE activity in Dedza district and were therefore sampled. A disproportionate multi-stage random sampling method was used to select 389 respondents from all eight district TAs for the study. The list for SANE participating farmers was obtained from SANE project offices.

TABLE 1: Number of Group Villages and Farm Households in Dedza and the Sampled Farmers

Name of TA/ASP	Number of Group Villages	Number of Farm Households	Participating houses/ sampled farmers	Sampling fraction
Kachere	46	47 582	122	0.4
Chilikumwendo	34	23 132	128	0.4
Kamenyagwaza	7	11 902	168	0.3
Kachindamoto	20	31 819	146	0.3
Kaphuka	74	48 883	125	0.4
Kasumbu	21	25 302	118	0.4
Tambala	22	25 161	65	0.8
Chauma	10	8 635	59	0.8
Total	234	222 416	931	0.4

Source: SANE registers, own calculation (2021)

Purposive sampling was used to identify 22 key informants, extension service providers from government and non-government organisations such as United Purpose, International Potato Centre (CIP), SANE and Mlimi wa Nzeru Agrodealer, based on their involvement with the SANE project and their experience with the districts' DAESS. Data were collected through structured household questionnaires administered in the TAs and semi-structured interviews with the informants.

2.2. Data Collection and Analysis

Primary data were collected through structured household questionnaires administered in the TAs and semi-structured interviews with informants. Surveys using a standardised questionnaire are effective for obtaining quantitative data from large samples (Creswell, 2014). Semi-structured interviews complemented the surveys by providing insights from service providers. Combining both methods enhanced the reliability and richness of the data, which aligns with best practices in mixed-methods research (Creswell, 2014). Secondary data were collected through project document reviews, including SANE project reports, studies and Dedza Agricultural Office reports. This data was collected from the official USAID-funded projects link. The criteria for selecting the documents were that they were not older than 2015, when the SANE project started, and that the relevant controlling officers approved them or that they had been peer-reviewed.

Data were analysed using descriptive, content analysis, and cross-tabulation methods. Quantitative

data were analysed using Statistical Package for the Social Sciences (SPSS) to compute descriptive statistics (frequencies, means, and standard deviations) and to perform statistical tests. Descriptive statistics then allowed comparisons between the derived information and baseline or prior-study information. Qualitative data from key informant interviews' checklists were assessed using content analysis to develop themes and narratives (Creswell, 2014). The content analysis involved familiarising with the data, identifying categories and main themes, creating themes and sub-themes, and coding, charting, and running code reviews to identify agreements, similarities, and differences. This analysis provided additional insights and concrete examples of SANE's impact, and where necessary, the coded responses were also quantified.

3. RESULTS AND DISCUSSION

3.1. Farmer Participation in the Planning of Extension Support Through Platforms

Farmer participation in extension is effective through decentralised platforms (Okorley, 2007; MoAI, 2000), which are expected to give rural people a vehicle to voice and pursue broader concerns (Davis, Faure, Nahdy, & Chipeta, 2009; Okorley, 2007). One of the study's thrusts was to identify these types of platforms. In addition to DAESS platforms, respondents identified platforms of other decentralised structures: local government structure (LGS) platforms, nutrition coordinating committees, EPA office-affiliated platforms like lead farmer networks, and 'other platforms' specific to departments or NGOs. In the previous two years, farmers participated in discussions related to the planning of extension support on DAESS platforms (76%), LGS platforms (50%), Nutrition platforms (43%), EPA offices (34%), and other platforms (22%). This means that DAESS platforms are among the most important platforms on which farmers discuss issues related to the planning and design of extension support in the Dedza district. This was not surprising, as the DAESS platform has agricultural agendas as its core business. A considerable percentage of farmers participating in the planning of extension support in LGS and nutrition platforms indicate that other platforms, not necessarily agricultural, are involved in taking on board farming needs. This result is not surprising, as most development and nutrition projects include an agricultural component. The result is interesting because it calls for coordination across platforms of different fields. Okorley (2007) noted that other government departments' decentralised platforms are an important external factor influencing the performance of the decentralised extension system. Drawing on the Agricultural Innovation Systems (AIS) framework, which views innovation as a product of networking among

diverse actors (Klerkx, Aarts & Leeuwis, 2006), the involvement of platforms such as local governance in extension planning illustrates innovation networks operating within a broader environment where effective coordination is crucial. These findings suggest that enhancing farmer participation depends not only on strengthening DAESS but also on improving integration across platforms.

A comparison of the current results with IFPRI surveys in 2016 and 2018 shows an increase in the percentage of farmers participating in DAESS. Only 39% and 40% of households participated in DAESS's VACs in 2016 and 2018, respectively (Ragasa & Comstock, 2019).

3.2. Type of Planning Activities in Which Farmers Are Involved

The type of planning activities in which farmers are involved reflects the significance of their participation and its potential contribution to demand-driven extension. Having measured the proportion of farmers participating in extension planning, the study identified the types of planning activities in which farmers are involved, as shown in Figure 1.

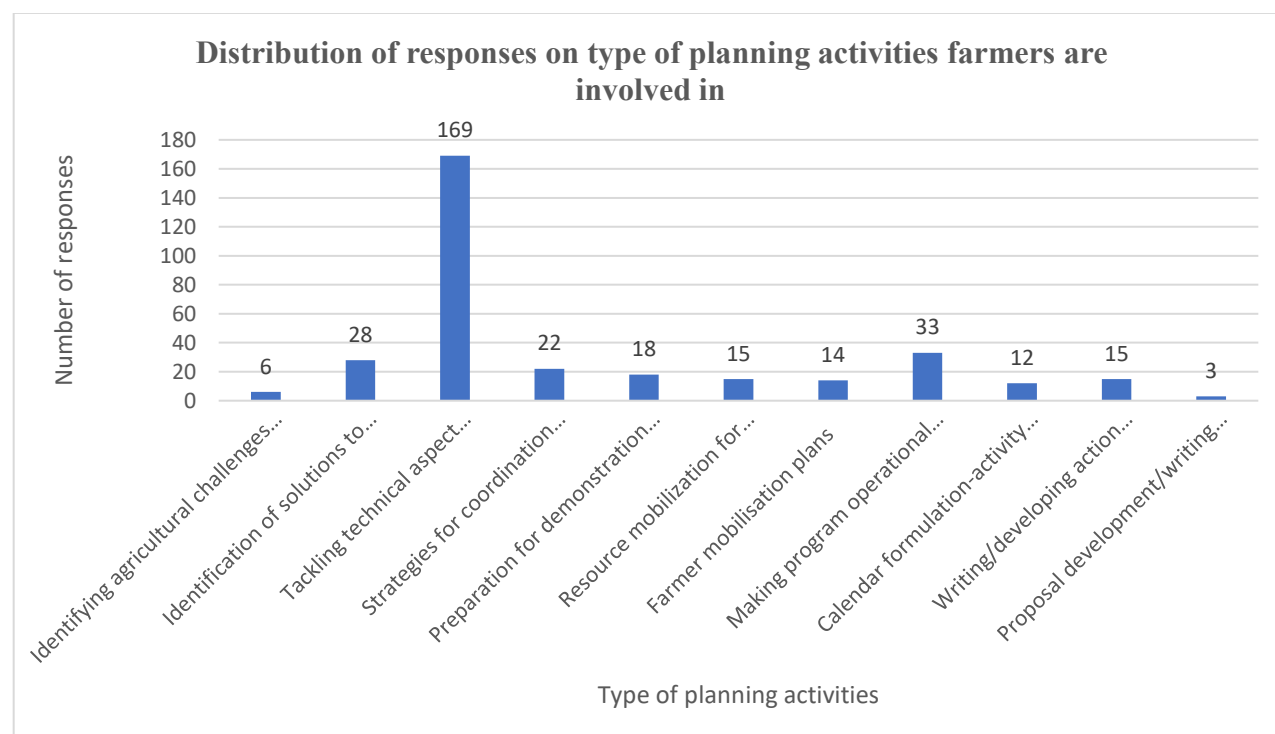


FIGURE 1: Distribution of Types of Planning Activities Farmers Are Involved in Per TA

'Tackling technical aspects' was farmers' most frequently mentioned type of planning activity, occurring 169 times and accounting for 50% of responses. This was followed by *'making program operational plans'* (33 mentions), such as the livestock pass-on program, and *'identifying solutions to challenges'* (28 mentions). *'Proposal development'* was the least frequently mentioned activity, recorded only three times (0.9%), followed by *'identifying agricultural challenges in local areas'* (six mentions).

These results indicate that farmers are still not very involved in needs identification and proposal development-type planning activities on DAESS platforms, but rather in tackling the technical aspects. The following are possible reasons for this result. Firstly, SANE may not have sufficiently strengthened the platforms' capacity to facilitate needs identification and proposal development. FAO (2021) reported a shortage of skills among platforms in resource mobilisation, including donor liaison and drafting fundable proposals. Secondly, due to staff shortages, platforms tend to be used as technology channels (lead farmers), as stated by Stull *et al.* (2020). This is worrisome because it is at the expense of their core purpose of making the extension demand-driven and self-financing. This finding is consistent with Chiwasa and Kambewa (2018), who found limited farmer involvement in extension planning. Still, it contrasts with Álvarez-Mingote *et al.* (2020), who reported high platform effectiveness in identifying farming needs. The results of Álvarez-Mingote *et al.* (2020) are based on self-reported data by platform leaders, which may explain the divergence. Decentralised agricultural extension services system implementation guidelines stipulate that to achieve demand-driven extension, platforms should identify needs through participatory rural appraisals, develop and handle project proposals, and identify service providers (MoAFS, 2006). Drawing on PRAs' theory (Chamber, 1994), PRAs help communities develop, identify, and assimilate local knowledge into needs assessments and agenda-setting.

3.3. Levels of Farmer Participation

Farmer participation in extension planning activities can occur at various levels along a continuum, including receiving information, passive information-giving, consultation, collaboration, and self-mobilisation (Leeuwis & van den Ban, 2004). For a demand-driven extension system, the required level of participation is self-mobilisation (Okorley, 2007). Each farmer was asked to identify the typologies describing their involvement in the planning activities they attended. Table 2 shows the results.

TABLE 2: Proportion of Farmers Involved in Each Level of Participation in Planning (n=389)

Levels of Participation		N	%
5	Initiating and working on a project independently (self-mobilisation)	127	33
4	Jointly decide on the project objectives with service providers	166	43
3	Giving views and opinions openly without restrictions	240	62
2	Responding to questions from service providers	251	65
1	Informed of what the project will do by the service providers	270	69

Nearly 69% of respondents described their participation in planning extension activities as *‘being informed about what the project will do’*. In contrast, a smaller proportion (33%) indicated *‘initiating, working on, and independently deciding on a project’* as their mode of participation. This suggests that most farmers in Dedza remain at the lower levels of participation in extension planning. Since the required level of demand-driven extension is ‘self-mobilisation’, these results imply that the DAESS in Dedza is not yet a demand-driven extension system. The finding agrees with Stull *et al.* (2020), who reported that Malawi's extension system is not yet fully demand-driven. However, with SANE’s efforts, achieving this goal appears highly feasible. Chowa *et al.* (2013) reported an equally unfavourable status of the demand-driven principle in the system before SANE. If SANE could influence policy so that all agricultural projects are implemented through the DAESS, the capacity of DAESS platforms for demand-driven procedures would increase, as most of these projects involve resource mobilisation, which aligns well with these procedures. Drawing on social constructionist theory (Gergen, 1994), high-quality social interactions among actors in DAESS through the projects will improve the platforms’ functionality, leading to stakeholders’ positive behaviours towards extension services and farming. It goes beyond an individual's cognitive capabilities.

3.4. Farmers' Identification of Farming Needs and Activities

Identifying farming needs is critical for demand-driven extension. Farmers were asked to describe how they usually identify their farming needs and activities, and Figure 2 shows the results.

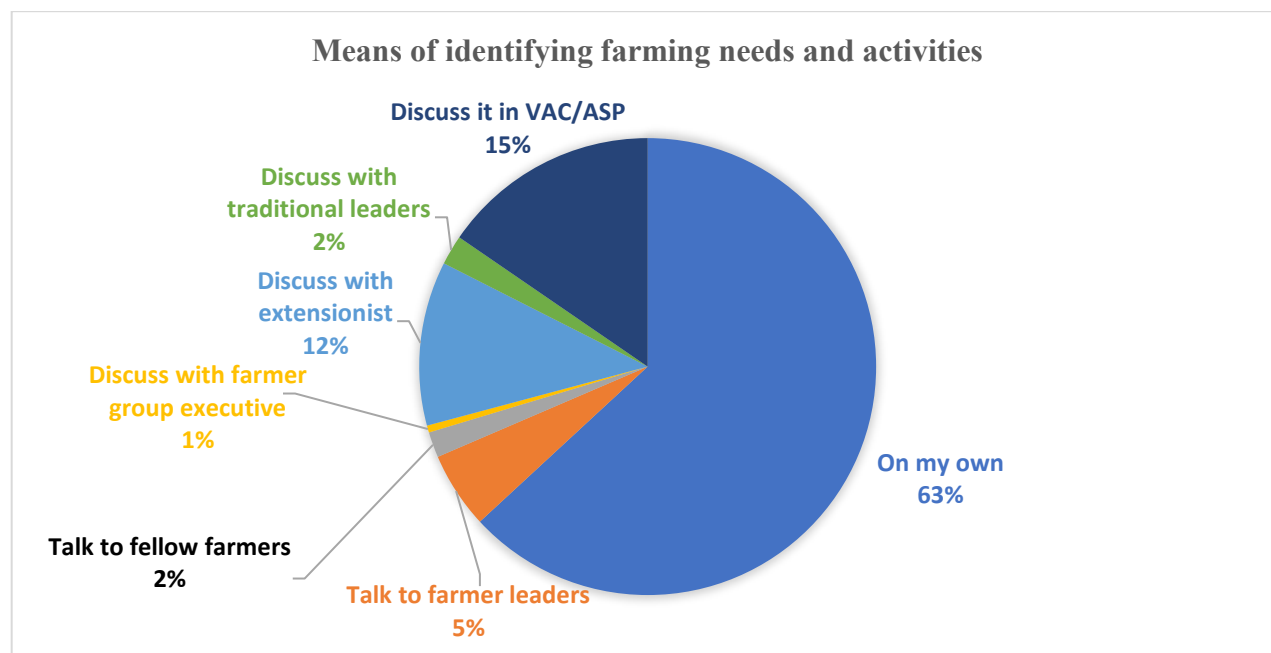


FIGURE 2: The Proportion of Farmers Using Each Means of Needs and Activity Identification

The most frequently mentioned farmers' usual means of identifying farming needs and activities was 'on their own' (63%), followed by 'discussions in DAESS platforms' (15%). In 2016, only 3% of farmers sought support through DAESS platforms (Ragasa & Niu, 2017). While these findings highlight persistent challenges, they indicate progress in DAESS's recognition as a demand-driven extension system among farmers. Similarly, Álvarez-Mingote *et al.* (2020) reported that SANE increased farmers' voice and ability to identify needs. Identifying farming needs and activities on one's own, being the most frequently mentioned usual means for smallholder, resource-poor, and largely illiterate farmers, indicates the deprivation of most farmers to come up with meaningful farming needs for extension support objectively. The finding agrees with Chiwasa and Kambewa (2018), who found that extension service providers in Dedza identify extension needs through baseline surveys. This confirms that a challenge still exists regarding having a proper demand-driven extension system. This challenge can best be understood through the lens of Participatory Development Theory, which emphasises that genuine participation requires facilitated, inclusive, and empowering processes rather than mere individualised engagement (Chamber, 1994). When farmers are left to articulate needs in isolation, the participatory promise of systems like DAESS is not fulfilled. Instead, platforms must foster deliberation, knowledge exchange, and co-learning to enable meaningful participation. Without these structural supports, participation remains nominal rather

than transformative.

3.5. Farmers' Extension Needs and Preferred Demand Platform

To validate whether farmers have specific extension needs, the study assessed the proportion of farmers who would use a voucher to trade for preferred advice. Farmers indicated the services they would select in exchange for a voucher, ensuring targeted advice. The voucher system considers the economic dimension of the demand-driven extension approach, as it captures farmers' willingness to pay for services (Klerkx *et al.*, 2006). Table 3 presents the results.

TABLE 3: Proportion of Farmers Who Would Use a Voucher to Trade for Advice (n=389)

Number of advice	Total	%
One	386	99
Two	313	80
Three	140	36

Most sampled farmers (99%) would request at least one extension of advice, and 36% would request up to three. This confirms that farmers have farming needs which require extension advice. This aligns with the statements of all interviewed service providers, who emphasised that farmers have needs that require extension support. Given that the farming population interviewed is from the smallholder subsector, which requires significant support to make informed decisions, this finding is not surprising. The finding confirms a study by Phiri, Chipeta and Chawinga (2019), which found that farmers in Malawi have information needs for their farming activities. Similarly, Momodu (2002) reported that agricultural information is one of the important needs of farmers in Nigeria. Moreover, Masangano *et al.* (2016) stated that, in Malawi, farmers have multiple interests in extension services, but their expenditure on extension services is limited. The finding not only justifies the need for demand-driven, bottom-up extension approaches but also offers hope that they are possible. Unlike the current status of extension delivery, where a top-down approach is still dominant with messaging mostly focused on the production of staple foods for the attainment of national food security, the findings show that demand-driven extension is possible even in publicly funded extension. This finding underscores the need for investments in demand-driven extension programmes if agricultural development is to be meaningful.

Further analysis was conducted on the types of technical advice for which farmers would exchange the voucher. Table 4 shows the results.

TABLE 4: Proportion of Farmers Preferring a Particular Type of Advice to Trade With a Voucher

Type of advice	N	%
Crop production techniques	203	53
Livestock production techniques	108	28
Soil fertility improvement and management	87	22
Good nutrition and food processing	66	17
Crop protection from pests, disease, and weeds	47	12
Irrigation farming methods	46	12
Soil and water conservation techniques	45	12
Farming system techniques	38	10
Seed varieties selection	36	9
Linkages and coordination mechanisms	33	8
Ways of accessing cheap farm inputs and livestock breeds	26	7
Forestry and beekeeping	22	6
Veterinary service	19	5
Farm business and produce marketing	19	5
Post-harvest handling techniques	18	5
Farm and household planning	12	3
How to access financial loans for an agricultural enterprise	9	2

The most significant proportion of SANE participating farmers in Dedza (53%) would prefer to trade their vouchers for advice on cropping techniques such as *plant spacing* or *ridge making*. The second-largest proportion (28%) would prefer to trade their voucher for advice on livestock production techniques such as housing, feeding, or *breeding*. About 22% of farmers would prefer to trade their voucher for soil fertility improvement and management advice. Farmers also mentioned extension needs, such as crop protection techniques (12%) and veterinary services (5%). The type of advice cited by the least proportion of farmers is on access to agricultural loans and financial advice (2%).

While the results further confirm the existence of farmers' extension needs, they also highlight their diversity, revealing that more farmers prioritise trading for extension services in livestock and crop production techniques over managerial skills like financial management. Similarly, crop husbandry needs were the most frequently mentioned among the diverse needs reported in northern Malawi by Phiri *et al.* (2019). This was the least expected, as farmers are assumed to know about production from their experiences. The finding is important because it shows that while extension workers play a linkage function, they should not stop focusing on their education function. Diversified extension needs also mean that public-dominated extension services focusing on national food security, as is the case with Malawi (Chiwasa & Kambewa, 2018), may not adequately address most other interests of farmers, such as access to financial loans and access to affordable farm inputs, because of their limited resource capacity as an entity. In pluralistic, demand-driven extension services, the diversity of needs implies that demand-driven and privatised extension services are feasible among smallholder farmers in Malawi. Technical advice related to veterinary services, crop protection, seed variety selection, farm and household planning, and access to loans can easily be made exclusive by tying it to the sale of goods and services. For example, crop protection information can be bundled with the sale of herbicides by a private farm input dealer. Chiwasa and Kambewa (2018) reported similar farming needs in Dedza, including pests and diseases, farming implements, access to markets, and low incomes. The finding that demand-driven and privatised extension services are feasible is in line with Loki *et al.* (2019), who found in South Africa that 64% of land reform beneficiaries favoured a privatised extension service and were willing to pay for private extension services. However, privatisation only addresses demand-driven extension in the economic sense and not the substantive sense, that is to say, “the interest that clients have in certain services and in the contents of these services and the questions that clients pose (Klerkx *et al.*, 2006: 198). Demand-driven extension services in the substantive sense depend greatly on the quality of interaction between service providers and farmers (Klerkx *et al.*, 2006), calling for greater attention to the process of formulating and meeting needs. When there are tensions between public interests, as defined by the government, and the private interests of farmers, it is obvious that this may create substantial complexities and inconsistencies. Moreover, even in cases where there is no such tension, there is still a need for critical reflection on the quality of the needs articulation process. Farmers’ ability to observe, learn as a farm unit or group, and articulate their needs through participatory approaches is crucial to the formulation of substantive needs (Chiwasa & Kambewa, 2018). The Agricultural

Innovation Systems upon which DAESS is based outline an opportunity for farmers to jointly establish a common discussion that continues throughout the innovation process as partners leave or enter the network or circumstances change. Accordingly, DAESS would be the preferred platform.

The study assessed farmers' preferred platforms for demanding extension support. For each piece of advice, a farmer said, they stated their preferred platform for requesting information (Figure 3).

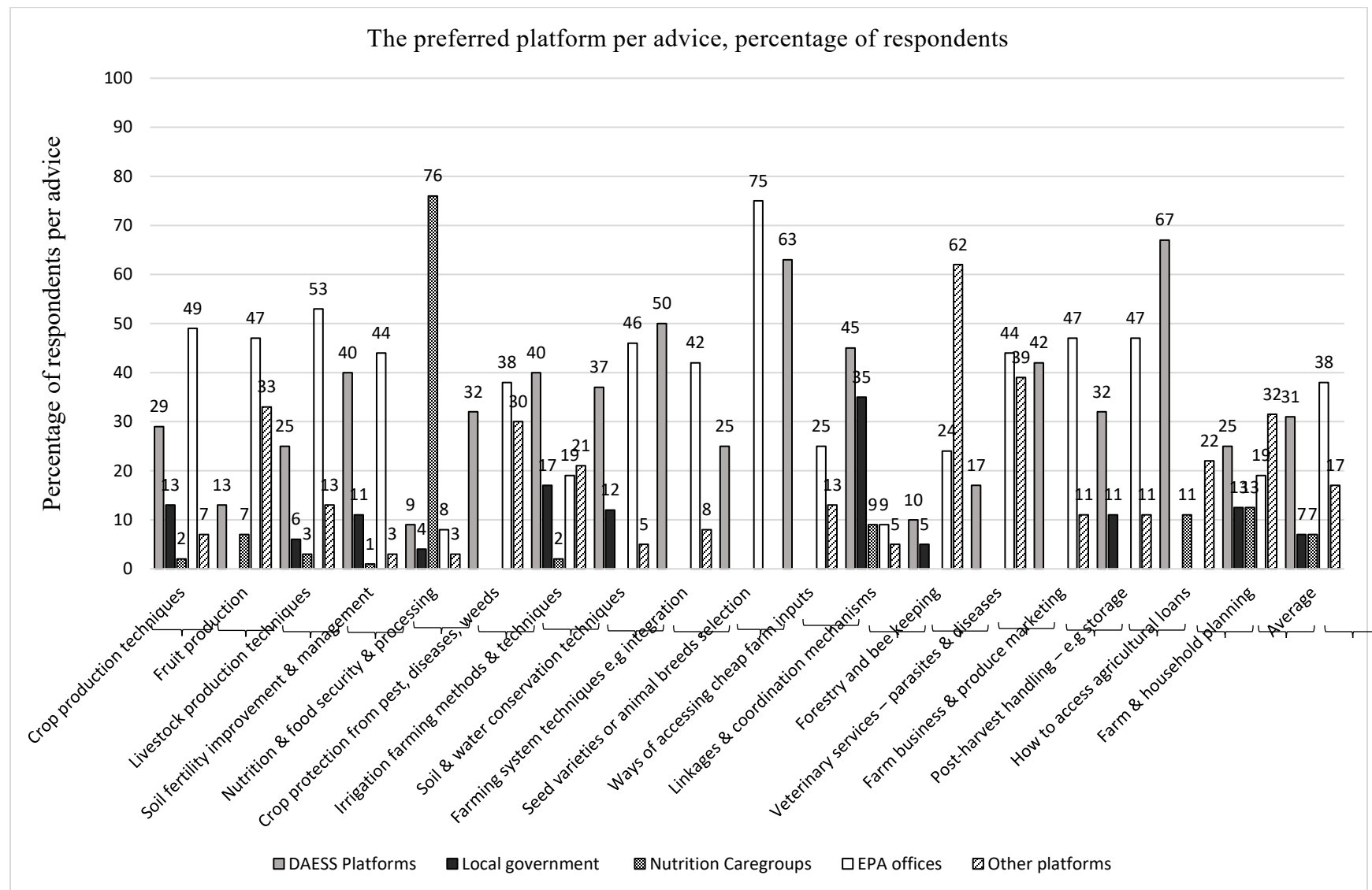


FIGURE 3: The Preferred Platform Per Advice, the Percentage of Respondents

Results in Figure 3 show that, across most types of advice, farmers preferred EPA offices (38%) on average, followed by DAESS platforms (31%). Extension-planning area offices have the highest percentages of farmer preferences of advisory services in various agricultural domains, including seed variety and animal breed selection (75%), livestock production (53%), crop production (49%), post-harvest handling, farm business, and fruit production (47%), soil and water conservation (46%), as well as veterinary services and soil fertility improvement (44%). Decentralised agricultural extension service platforms had the second-highest percentages of farmer preference for most types of advice. However, they ranked highest in guiding access to agrarian loans (67%) and affordable farm inputs (63%). Along the same vein, facilitation of access to credit and provision of farm inputs were associated with the non-public extension in Nigeria (Ogbonna, Onwubuya, Akinnagbe & Iwuchukwu, 2016; Burkina Faso Sylla, Al-Hassan, Egyir & Anim-Soumah, 2019). The results indicate that farmers consider only EPA offices as the most important platforms for requesting technical support, rather than the pluralistic DAESS platforms. This supports the results of Stull *et al.* (2020) and Chiwasa and Kambewa (2018), who found that pluralism might not occur consistently in the system. Similar results were reported in South Africa by Loki *et al.* (2020), who found that 61% of farmers rated public extension as very good, compared with only 18% for pluralistic extension. Results showing that pluralistic extension systems are not yet popular among poor smallholder farmers were also reported in Nigeria (DLEC/GFRAS, 2017) and in the Democratic Republic of Congo (Ragasa, Ulimwengu, Randriamamonjy & Badibanga, 2016). This can be explained by the persistent dominance of public extension, upon which even NGOs rely for technical training, as is the case in Malawi (Masangano, Kambewa, Bosscher & Fatch, 2017). Hence, the farmers' positive perception towards public extension. The finding is concerning, as it undermines efforts to achieve a power balance between farmers and extensionists for effective demand articulation, as required in AIS (Landini, 2015).

Further analysis was conducted to determine why farmers preferred certain platforms for specific types of advice. Figure 4 shows the results of the analysis.

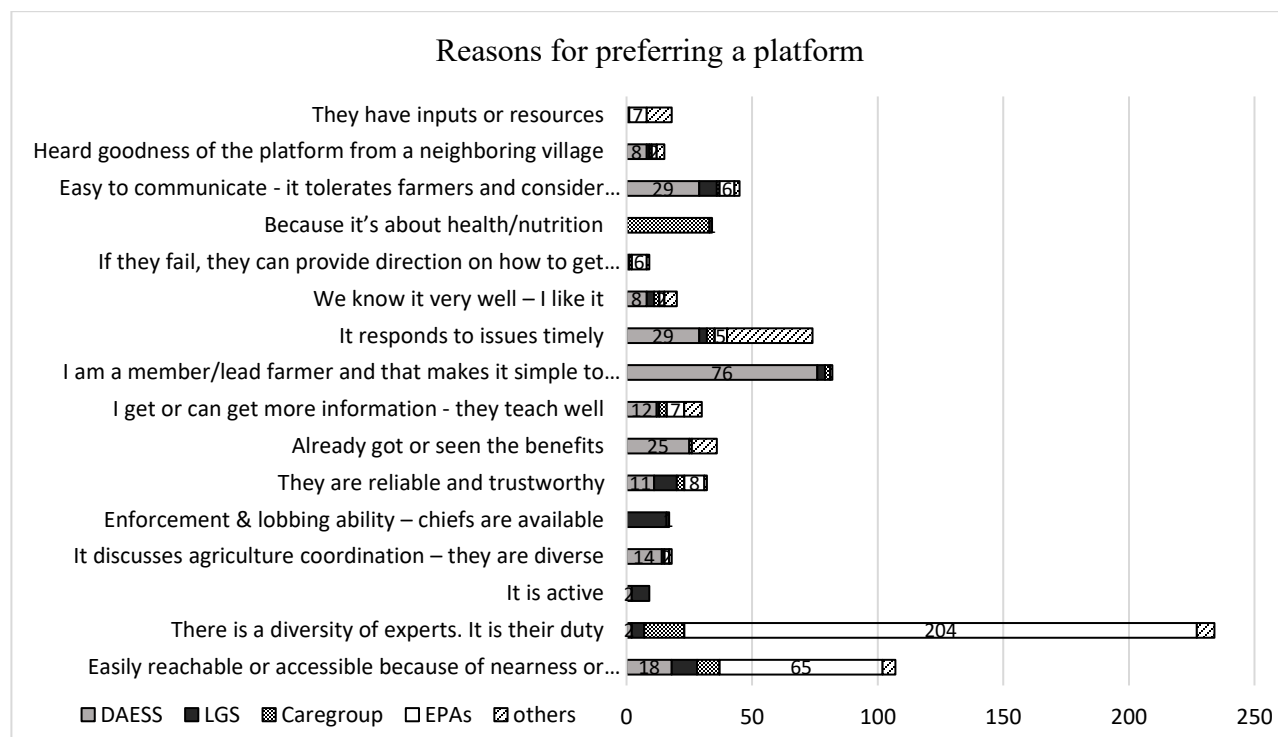


FIGURE 4: Reasons for Preferring the Platform

Note: Only values for DAESS and EPAs are shown to avoid crowding the graph.

Figure 4 shows that the most frequently cited reason for farmers preferring one platform over another was their perception that it had experts, which was mentioned 234 times. The second most frequent reason was the ease of access to the platform (107 times). Notably, both reasons were most often mentioned in relation to EPA offices, with 204 mentions for expert availability and 65 for ease of access. The third most frequently cited reason for preferring a platform was familiarity, either as a member or a lead farmer (82 times). This reason was mainly mentioned in relation to the DAESS platforms (76 times). Another reason mentioned most often about the DAESS platforms was their tolerance for farmers speaking out freely (29 times). The most commonly mentioned reason for LGS platforms was *'the ability to enforce or lobby'*. *'Responding to issues timely'* and *'possession of resources'* mainly were associated with *'other platforms'* specific to individual NGOs or departments.

These results mean that while DAESS platforms offer farmers a valuable opportunity to express their needs freely, key factors such as accessibility, expertise among platform members, enforcement authority, and resources, especially funds within the platform to address farmers' needs effectively,

are more prominent on other platforms. The Decentralised Agricultural Extension Service System's reliance on periodic meetings mainly drives inaccessibility. In contrast, EPA offices have infrastructure throughout the country maintained by the BES, making them more accessible. As stated in the previous sections, public or EPA offices are intended to serve as secretariats for the DAESS. The lack of expertise among the Decentralised Agricultural Extension Service System's membership is most likely because there is still not enough patronage from service providers on the DAESS platforms. Moreover, as discussed in the previous sections, donor-funded NGOs, which form the larger part of pluralism, tend to bring financial resources but use government extension staff for technical training. Likely, this is because these NGOs are understaffed or use it as a strategy to ensure project activities' sustainability beyond the project or as a means to easily maintain government standards. Financial resources which NGOs bring to training are a major constraint the public extension services face. Accessibility and technical expertise were also important factors influencing farmers' choice of extension sources in South Africa (Loki *et al.*, 2020). The finding supports the guidance of Neuchâtel Group (2007) that pluralistic, demand-driven services should be accessible and offer diverse expertise to provide farmers with choices. Incorporating all departments, including agriculture and other service providers, would enhance farmers' perceptions of DAESS platforms' expertise, accessibility, and available resources. Decentralised Agricultural Extension Service System also seemed to lack enforcement authority, unlike LGS platforms. The Local Government Structure platform membership has chiefs as advisors (MOLGRD, 2013). Chiefs mobilise their communities to pursue development goals using force, sometimes, because generally chiefs are autocratic (Msewa, 2005). This finding underscores the need to consider mechanisms for leveraging the chiefs' authority in the DAESS for agricultural development. In Namibia, Jona and Terblance (2018) suggested that village headmen be leaders of extension platforms, as 29% of the farmers they interviewed reported depending on such influential people for information. Drawing on AIS, the interface among diverse actors enables collaboration and knowledge exchange, enabling farmers to demand the information and services they require to solve their problems (Klerkx *et al.*, 2006).

4. CONCLUSION AND RECOMMENDATIONS

In conclusion, while DAESS platforms in the Dedza district offer opportunities for farmer participation in planning extension support, their impact remains limited due to superficial engagement. Farmers are still not much involved in needs identification and proposal development,

with most still being on the lowest level of participation, just being informed about project objectives, and the majority still identifying farming needs on their own. Although farmers have specific needs, they tend to avoid the DAESS platform because of limitations such as its reliance on periodic meetings, limited expertise among its members, lack of enforcement authority, and insufficient resources within the platform. This suggests that the extension system is not yet demand-driven, with the platforms not fully developed to foster farmers' positive behaviours of demanding services through social interactions, as emphasised by the social constructivism theory. Additionally, the limited accessibility, expertise, authority, and resources of the DAESS platforms cause farmers to prefer other platforms, highlighting an underdeveloped pluralism as outlined by the Agricultural Innovation Systems (AIS) framework.

A critical factor affecting DAESS's effectiveness is the poor composition of its platforms. Strengthening the presence of relevant activities and personnel within DAESS would enhance its credibility and functionality. The SANE project, in collaboration with the Department of Extension Services, needed to ensure that all agricultural initiatives, including national programs such as the Affordable Input Program, were implemented through DAESS. Additionally, SANE should have actively engaged and lobbied for the inclusion of all relevant NGOs at every level of the DAESS platform. The Department of Extension Services and the District Council should develop clear mechanisms to ensure comprehensive representation within DAESS, such as composition requirements for DAESS platforms. The mechanism could include establishing a regulatory framework to mandate registration and participation of all service providers across all DAESS levels.

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