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Critical Factors Affecting Inter-Organisationl Collaboration Among MDA'S In Public Housing Progamme Delivery In Kebbi State

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ABSTRACT
This study explores the critical factors impacting inter-organisational collaboration among ministries, departments, and agencies (MDAs) in public housing project delivery in Kebbi State, Nigeria. Collaboration in the public sector is vital for effective housing delivery, yet several barriers and drivers influence the success of these efforts. Through a survey of construction professionals across six agencies, factors such as coordination, accountability, commitment, and involvement of key partners emerged as significant barriers to collaboration. Conversely, factors like partner selection, project staffing, and effective quality control were identified as drivers facilitating collaboration. Statistical analysis, including Spearman's correlation, was used to assess the relationships between barriers and drivers. Results indicate a complex interplay where certain factors function both as barriers and drivers, suggesting areas for targeted improvement. The findings offer insights into how strategic enhancement of critical factors can improve collaboration and, consequently, the quality and efficiency of housing projects.

Keywords: Inter-organisational , Public housing delivery, Barriers, drivers, Collaboration

I. INTRODUCTION

It is globally accepted that inter-organisational collaborative housing project delivery represent a key means of improving housingproject performance and delivery (Herrera, Mourgues, Alarcon &Pellicer, 2020). Executing any housing projects requires the collaboration of many different specialties and competences that do not necessarily exist in within the boundaries of a single firm or organisation(Bygballe&Swa,2019). According to Ndaleni, Innocent and Justus (2020) inter-organisational collaboration can be regarded as any joint activity by two or more agencies working together that is intended to increase public value by their working together rather than separately. In the public sector, inter-organisational collaboration has received unfaltering interest for two decades, resulting from the growing complexity of social problems. In addition, inter-organisational collaboration has been proven to enable meeting social needs in an easier and more effective manner than through individual actions (Pinto,Vallone&Honores,2019; Herrera,Mourgues,Alarcon&Pellicer, 2020). However, inter-organisational collaboration is often affected by critical factors which include top management support, selection of an appropriate partner,commitment, no-blame culture, communication, fair distribution of responsibility among others (Faris et al., 2019;Msomba, Matiko&Mlinga, 2018), which hinder the successful collaborative effort by the collaborating agencies.

Accordingly, the housing sector constitutes an important aspect of the society's wellbeing, touching significantly at the core of their social and economic lives(Aliyu, 2019). In addition, the public housing sector is responsible for providing houses for people of low income subsidized by public funds. According to the World Bank Report (2019), Nigeria, with an increasing population of approximately over 190 million in 2018 is considered to host an uncomfortable large percentage of the global figure of homeless people, including people living in substandard houses.

The successful housing delivery largely depends on number of actions, one of which is collaboration with different stake holders. However, Scholars highlighted potential dividends of collaboration implementation in their studies, among identified benefits are improvement in construction quality, time, cost overrun, risk sharing, and innovation (Hasanzadeha et al., 2014; Adeniran,Roslan, Polycarp&Mukaila, 2018; Ogunsanya, Aigbavboa&Thwala,2016;Ojo&Jagboro, 2015).

Notably, collaboration in housing delivery progamme between Ministries, department and agencies (MDA'S) in kebbi state existed since the creation of the state in 1991. In order to meet the housing needs of the people, kebbi state government has constructed series of estate from its inception to date, notably among them include; DG. Quarters in BirninKebbi, Gesse Phase I BirninKebbi, Gesse Phase II BirninKebbi, Argungu, Yauri, Zuru, Jega and Aliero, MuhammaduAdamuAliero Qtrs. In BirninKebbi, Larix quarters and Nasamu quarters in BirninKebbi, (Ministry of Lands, Housing and Urban Development(MLHUD), 2019).Despite all efforts by the state government and collaborative MDA'S, the available record indicates that none of the housing

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projects executed in Kebbi state since the creation in 1991 were successfully completed in terms of quality in construction, completion time and cost of construction(MLHUD, 2021).

II. LITERATURE REVIEW

2.1 Concept of Collaboration

There is no one universally accepted definition for collaboration. The vast majority of researchers agree that collaboration is about jointly working towards achieving common goals (Dietrich et al., 2010; Patel et al., 2012; Ozturk, et al., 2016). Collaboration refers to a process in which information, activities, responsibilities, and resources are shared to jointly plan, implement, and evaluate a progamme of activities in order to achieve a common goal and a joint generation of value (Camarinha-Matos., 2009). The concepts of collaboration in the construction project are complex and are influenced by different factors during the execution of projects (Patel et al., 2012). Although there is evidence that collaboration as a management strategy (Bidabadi, et al., 2016) improves project performance.

The project-based nature of the of housing project delivery justifies the need to focus on the collaboration process, in order to solve problems and exploit opportunities (Cao and Zhang, 2011and Ozturk et al., 2016). Through collaboration, simple construction processes are created; better quality service is provided (Emuze and Smallwood, 2014), better relationships between stake holders are created (Schottleet al., 2014), quality performance is influenced (Deacon, 2016; Tau and Seoke, 2013), and performance in the efficient housing delivery improves (Bidabadi et al., 2016; Cao and Zhang, 2011).

2.2 Benefits of Collaboration

Benefits of collaboration may include improvement in construction quality, time, cost overrun risk sharing, and innovation (Hasanzadeha et al., 2014), creativity and working relationship (Smith and Thomasson, 2018), information sharing, and better communication (Rahman et al., 2014). It may also include project efficiency improvements and the development of shared vision or objective (Fulford and Standing, 2014, Bidabadi et al., 2016), productive conflict-resolution strategy, mutual trust (Mensah, 2016), and reduction of supply-chain costs (Bidadabi et al., 2015). Collaboration facilitates a combination of resources and expertise to increase project performance (Faris et al., 2019). Collaboration leads to high levels of productivity among project participants and reduced reworks (Torneman, 2015). Past studies have provided several benefits of collaboration to health and safety management. Collaboration between project stakeholders can lead to success in health and safety management (Lingard, et al., 2009). Examples of collaboration benefits to housing delivery include better buildability and integration (Lingardet al., 2014). Collaboration can facilitate trust, improve communication and better working relationships (Jitwasinkul and Hadikusumo, 2011; Deacon, 2016), and can help share health and safety information and resources (Vinodkumar and Bhasi, 2020).

2.3 Critical Factors for Collaboration

Factors critical for collaboration include top management support, selection of an appropriate partner, and commitment (Hasanzadeh, et al., 2014), no-blame culture, communication, fair distribution of responsibility, and proactive problemsolving (Msomba,et al, 2018), mutual goals, gain-pain sharing, early involvement of key participants, and trust (Faris et al., 2019). Other factors such as continuous improvement (Meng, 2012), mutual goals (Hosseini, et al., 2016 and Meng, 2012) and trust between actors (Dietrich et al., 2010; Hosseini et al., (2016), communication, conflict resolution, and understanding roles (Rahman, et al., 2014; Dietrich et al., 2010 and Mensah, 2016) have been mentioned as critical for collaboration.

Table 2.1 Summary of Factors affecting Collaboration

Factors	Authors/Year
Top management support	(Hasanzadeh et al., 2014); (Smith and Thomasson, 2018),), (Rahman et al., 2014a).
Commitment	(Hasanzadeh et al., 2014); (Msomba et al., 2018);), (Rahman et al., 2014a).
Mutual Trust	(Hosseiniet al., 2016; Meng, 2012); (Faris et al., 2019); (Dietrich et al., 2010; Hosseini et al., 2016),
Selection of appropriate partner	(Hasanzadeh et al., 2014); (Keith and Yumena, 2007),
Communication	(Msomba et al., 2018); (Rahman et al., 2014a; Dietrich et al., 2010; Mensah, 2016).
Fair distribution of responsibility	(Msomba et al., 2018); (Smith and Thomasson, 2018),
Mutual goals	(Msomba et al., 2018); (Ikenna and sebnem, 2019). (Le-Hoai et al., 2020);
Proactive problem solving	(Msomba et al., 2018); (Alexandra and Lisa. 2008).
Blame culture	(Msomba et al., 2018); (Keith and Yumena, 2007),
Conflict resolution	(Rahman et al., 2014a; Dietrich et al., 2010; Mensah, 2016; (Ikenna and Sebnem, 2019).
Involvement of key partners	(Faris et al., 2019); (Rahman et al., 2014a).
Risk sharing	(Hasanzadeh et al., 2014);), (Rahman et al., 2014a).

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Information sharing	(Smith and Thomasson, 2018), (Rahman et al., 2014a). (Le-Hoai et al., 2020);
Coordination	(Adeniran et al., 2018); ((Ikenna and Sebnem, 2019); (Alexandra and Lisa, 2008).
Terms of engagement	(Keith and Yumena, 2007); (Ayman et al., 2016); (Ikenna and Sebnem, 2019).
Language barrier	(Al-Haddad and Kotnour, 2015); (Meng, 2013); (Vikas, et al., 2015), (Adeniran, et al., 2018).
Knowledge of collaboration	(Le-Hoai et al., 2020); (Keith and Yumena, 2007).
Expectations	(Fulford and Standing, 2014, Bidabadi et al., 2016); (Xerri et al., 2015); (Cha and Kim, 2018); (Ylitalo et al., 2005).
Justification on power sharing	(Smith and Thomasson, 2018); (Ikenna and Sebnem, 2019); (Rahman et al., 2014a).

III. RESEARCH METHODOLOGY

This study adopts a quantitative approach to investigate factors driving collaboration with a view to ascertaining their impact on successful housing delivery. The quantitative approach involves the process of collecting, analyzing, interpreting, and writing the results of a study. This study, utilized the survey method to determine the variables under review. The administration of the questionnaire was done directly to building construction professionals and staff under public government agencies relevant to public housing project in Kebbi state. Data was collected from the questionnaire within the same period at the same point in time using the cross-sectional method of data collection. This study used a systematicsampling technique with a calculated sample size of 333 out of the population of 2152 individuals from six agencies. Systematic random sampling provided each member with an equal chance of selection, reducing bias and ensuring a representative distribution. Data was analysed through the Statistical Package for Social Science (SPSS) version 23. Descriptive statistics, including frequency distribution and mean calculation along with inferential statistics were used. Spearman's rho correlation analysis was utilized to determine the strength and direction of relationships between variables. This methodology enables the study to generalized findings and assess key factors influencing partnership in public housing projects.

IV. RESULTS AND DISCUSSIONS

4.1 Response Rate

Table 4.1: Showing questionnaires response

	Frequency	**Percentage (%)**
Returned/Valid	242	72.7
Not Returned/Invalid	91	27.3
Total	**333**	**100**

Source: Field Survey (2024)

Table 4.1 shows the details of distribution and return of questionnaire in tables of frequency and percentages. Out of the 333(100%),242 (72.7%) of the administered questionnaire were returned and 91(27.3%) were not returned. Hence 242 (72.7%) of the questionnaire were used for analysis.

4.2 Socio Demographic and General Information

Table 4.2: Sociodemographic Information

Variable	**Frequency (n)**	**Percent (%)**
Gender		
Female	38	15.7
Male	204	84.3
Total	242	100
Educational Qualification		
MSC	30	12.4
BSC	55	22.7
HND	140	57.9
ND	9	3.7
Others	8	3.3
Total	242	100
Position (level)		
6-7	8	3.3

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8-12	68	28.1
13-16	166	68.6
Total	242	100
Work experience		
31 and above	51	21.1
26-30 years	13	5.4
21-25 years	53	21.9
16-20 years	50	20.7
11-15 years	35	14.5
5-10 years	40	16.5
Total	242	100
Area of Specialization		
Electrical engineering	21	8.7
Mechanical engineering	10	4.1
Estate management	24	9.9
Town planning	16	6.6
Civil engineering	54	22.3
Building	20	8.3
Quantity surveying	57	23.6
Architecture	13	5.4
Others	27	11.2
Total	**242**	**100**

Source: Field Survey (2024)

Table 4.2 and Table 4.3 presents demographic and general information of respondents. The Table presents the gender, educational qualification, position, work experience, area of specialization, department, area of participation of housing project and professional membership status. The findings revealed that female respondent to be 38 (15.7%) and male to be 204 (84.3%), indicating that majority of the respondents are male gender with fewer female gender. For the educational background of the respondents, 30 (12.4%) have MSc certification, 55 (22.7%) have Bsc, 140 (57.9%) have HND, (9(3.7%) have ND and 8 (3.3%) constitute other certifications. Indicating that majority of the respondents are HND holders. For the position (rank) of respondents, 8 (3.3%) happened to fall within level 6-7, 68 (28.1%) fall within level 6-12 and 166 (68.6%) fall within level 13-16. This indicates that majority of the respondents fall within level 13-16. Finding from the work experience reveals that 51 (21.1%) of the respondents have a working of 31 years and above, 13(5.4%) with 26-30 years of experience, 53(21.9%) with 21-25 years of experience, 50(20.7%) with 16-20 years of experience, 35(14.5%) with 11-15 years of experience and 40(16.5%) with 5-10 years of experience. This indicates that majority of the respondents have a working experience of 21-25 years. In terms of area of specialization, the study reveals 21 (8.7%) of the respondents to specialized in electrical engineering, 10(4.1%) in mechanical engineering, 024(9.9%) in Estate management, 16 (6.6%) in town planning 54(22.3%) in civil Engineering, 20 (8.3) in building, 57(23.6) in quantity surveying, 13(5.4%) in architecture and 27(11.2%) in others. This indicate that majority of the respondents are specialized in quantity surveying and civil engineering.

Table 4.3: General Information

Variable	Frequency (n)	Percent (%)
Department		
Ministry of finance	27	11.2
Ministry of water resources	56	23.1
Housing corporation	4	1.7
Ministry of works and transport	69	28.5
Kebbi home savings	8	3.3
Ministry of land and housing	78	32.2
Total	242	100
Area of participation		
Basic infrastructure	10	4.1
Housing administration	29	12.0
Construction	78	32.2
Tendering	47	19.4
Design	46	19.0
Others	32	13.2
Total	242	100

Source: Field Survey (2024)

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Table 4.3 reveals the departments, area of participation and professional membership status. With respect to the departments, 27(11.2%) of the respondent are from the ministry of finance, 56(23.2%) from the ministry of water resources, 4 (1.7) from housing corporation, 69(28.5%) from ministry of works and transport, 8 (3.3%) from Kebbi home savings and 78 (32.2%) from ministry of land and housing. This indicates that majority of the respondents are working in the land and housing and ministry of water resources. Regarding area of participation of the respondents, 10(4.1%) of the respondents participate in basic infrastructure, 29(12.0) in housing administration, 78(32.2%) in construction, 47 (19.4) in tendering, 46(19.0%) in design and 32(13.2) in others areas probably not in the scope of the study. This indicates that majority of the respondents participate in construction activities.

Table 4.4: Critical Factors Affecting Inter-Organisational Collaboration (Barrier and Drivers)

Factors	**Barrier** Code	**Mean**	**SD**	**Rank**	**Factors**	**Driver** Code	**Mean**	**SD**	**Rank**
Coordination	F14B	3.65	1.247	1st	Commitment	F2D	3.46	1.074	1st
Involvement of key partners	F11B	3.49	1.266	2nd	Selection of appropriate partner	F4D	3.43	1.297	2nd
Accountability	F23B	3.48	1.320	3rd	Project staffing	F30D	3.42	1.179	3rd
Commitment	F2B	3.47	1.105	4th	Effective quality control	F26D	3.42	1.364	4th
Fair distribution of responsibility	F6B	3.45	1.366	5th	Enforcement of building code	F29D	3.40	2.906	5th
Conflict resolution	F10B	3.41	1.312	6th	Community participation	F25D	3.40	1.163	6th
Effective logistic planning	F27B	3.35	1.197	7th	Transparency	F22D	3.33	1.001	7th
Enforcement of building Codes	F29B	3.35	1.257	8th	Information sharing	F13D	3.30	1.299	8th
Proactive problem solving	F8B	3.34	1.285	9th	Language barrier	F16D	3.29	1.356	9th
Information sharing	F13B	3.29	1.112	10th	Conflict resolution	F10D	3.27	1.376	10th
Brisk sharing	F12B	3.29	1.232	11th	Justification on power sharing	F19D	3.23	1.238	11th
Selection of appropriate partner	F4B	3.26	1.199	12th	Accountability	F23D	3.22	1.308	12th
Justification on power sharing	F19B	3.21	1.338	13th	Political and agency leadership	F20D	3.22	1.230	13th
Successful damage assessment	F28B	3.19	1.301	14th	Mutual trust	F3D	3.19	1.173	14th
Project staffing	F30B	3.16	.999	15th	Practical problem solving	F8D	3.16	1.226	15th
Language barrier	F16B	3.15	1.385	16th	Coordination	F14D	3.16	1.382	16th
Mutual goals	F7B	3.14	1.269	17th	Knowledge collaboration	F17D	3.09	1.233	17th
Expectation	F18B	3.13	1.194	18th	Blame culture	F9D	3.09	1.285	18th
Blame culture	F9B	3.12	1.279	19th	Effective logistic planning	F27D	3.07	1.424	19th
Communication	F5B	3.12	1.153	20th	Terms of engagement	F15D	3.06	1.173	20th
Effective	F26B	3.11	1.405	21st	Communicati	F5D	3.05	1.366	21st

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quality control					on				
Community participation	F25B	3.11	1.191	22nd	Involvement of key partners	F11D	3.04	1.256	22nd
Transparency	F22B	3.11	1.141	23rd	Risk sharing	F12D	3.04	1.194	23rd
Knowledge of collaboration	F17B	3.08	1.332	24th	Expectations	F18D	3.03	1.311	24th
Effective Bureaucracy and decentralization	F21B	3.07	1.160	25th	Effective bureaucracy and decentralization	F21D	3.02	1.106	25th
Political and agency leadership	F20B	3.07	1.326	26th	Mutual goals	F7D	2.95	1.255	26th
Technical Staff Support and expertise	F24B	3.06	1.321	27th	Top management support	F1D	2.88	1.439	27th
Mutual trust	F3B	3.04	2.361	28th	Technical staff support and expertise	F24D	2.76	1.362	28th
Terms of engagement	F15B	3.03	1.276	29th	Successful damage assessment	F28D	2.66	1.316	29th
Top management support	F1B	2.81	1.089	30th	Fair distribution of responsibility	F6D	2.60	1.221	30th

Legend: 1 – Never (N) 2 – Rarely (R) 3 – Sometimes (S) 4 – Often (O) 5 – Always

4.3 Factors Affecting Inter-Organisational Collaboration

Table 4.4 presents the descriptive analysis for the factors affecting inter organisational collaboration under barrier and drivers. Under the barrier, coordination is ranked 1st with the mean score 3.65, involvement of key partners is ranked 2nd with the mean 3.49, accountability is ranked 3rd with mean score 3.48, commitment is ranked 4th with the mean score 3.47, fair distribution of responsibility is ranked 5th with mean score 3.41, conflict resolution is ranked 6th with mean score 3.41, effective logistic planning is ranked with mean score 3.35, enforcement of building codes is ranked 8th with the mean score 3.35, proactive problems solving is ranked 9th, while information sharing is ranked 10th with mean score 3.34.

On the driving factors, Commitment is ranked 1st with the mean score 3.46, selection of appropriate partner is ranked 2nd with the mean score 3.43, project staffing is ranked 3rd with the mean score 3.42, effective quality control is ranked 4th with the mean score 3.42, enforcement of building code ranked 5th with mean score 3.40, community participation is ranked 6th with mean score 3.40, transparency ranked 7th with mean score 3.33, information sharing is ranked 8th mean score 3.30, language barrier ranked 9th with mean score 3.29 , while conflict resolution is ranked 10th with mean score 3.27. This indicates that the major factors for affecting inter-organisational collaboration identified as barriers in this study include coordination, involvement of key partners, accountability and commitment, fair distribution of responsibility and conflict resolution. Whereas, major factors driving inter-organisational collaboration identified as drivers include commitment, selection of appropriate partner, project staffing, effective quality control, enforcement of building code. These factors are regarded as the top five factors under barrier and drivers established in this study respectively.

4.4 Critical Factors Affecting Inter Organisational Collaboration Among MDAs

Referring to Table 4.4, coordination is recorded as the highest factor “sometimes” a barrier tending towards “often” a barrier for affecting inter-organisational collaboration among MDAs in Kebbi state with the highest mean score of 3.65. However, the factors under drivers, commitment was recorded as the highest factor “sometimes” a barrier affecting inter-organisational collaboration among MDAs in Kebbi state. Therefore, this study established that coordination and commitment are critical factors that affect inter-organisational collaboration among MDAs in Kebbi state when improved upon as “sometimes” a barrier and driver respectively.

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Relationship Between Factors Affecting Inter-organisational Collaboration

Table 4.7: Correlation Between Factors Affecting Inter-organisational Collaboration (Barrier & Drivers)

Variables		F2D	F11D	F23D	F10D	F6D	F14D
F2B	Correlation Coefficient	.336**	.103	.006	-.136*	-.107	.194**
	Sig. (2-tailed)	.000	.109	.923	.034	.095	.002
	N	242	242	242	242	242	242
F11B	Correlation Coefficient	.051	-.001	-.173**	-.103	-.074	-.130*
	Sig. (2-tailed)	.431	.986	.007	.109	.254	.043
	N	242	242	242	242	242	242
F10B	Correlation Coefficient	-.015	-.287**	-.263**	.151*	.157*	-.160*
	Sig. (2-tailed)	.819	.000	.000	.019	.015	.013
	N	242	242	242	242	242	242
F6B	Correlation Coefficient	.366**	-.039	-.071	.105	.223**	.204**
	Sig. (2-tailed)	.000	.541	.270	.103	.000	.001
	N	242	242	242	242	242	242
F14B	Correlation Coefficient	.254**	-.076	-.081	-.071	.111	.225**
	Sig. (2-tailed)	.000	.236	.208	.273	.085	.000
	N	242	242	242	242	242	242
F23B	Correlation Coefficient	-.112	-.070	.038	-.356**	-.105	-.142*
	Sig. (2-tailed)	.082	.276	.559	.000	.105	.027
	N	242	242	242	242	242	242

Legend: F11B&D-Involment of Key Stakeholders; **F23B&D**-Accountability; **F2B&D**-Commitment; **F10B&D**-Conflict resolution; **F14B&D**-cordination. **Strength of relationship**: 0.1-0.29: small; 0.3-0.49: medium; 0.5-1.0: large.

Table 4.7 shows the correlation coefficient between the extent to which F2 affect inter-organisational collaboration among MDA'S in public housing project delivery in Kebbi state as a Barrier and Driver is reported as 0.336 with the P-value less than 0.05. This is a positive relationship that depicts that as F2 affects inter-organisational collaboration among MDAs as a barrier, it could result to being a corresponding driver to improve inter-organisational collaboration. Also, the correlation coefficient between the extent to which F11 affect inter-organisational collaboration among MDA'S in public housing project delivery in Kebbi state as a Barrier and Driver is reported as -0.001 which is not significant because the P-value is greater than 0.05. This is a very weak negative relationship that depicts an increase in the effect F11 as a barrier result in a corresponding slight decrease in the effect of F11 as a driver. Likewise, the correlation coefficient between the extent to which F23 affect inter-organisational collaboration among MDA'S in public housing project delivery in Kebbi state as a Barrier and Driver is reported as 0.038 which is not significant because the P-value is greater than 0.05. This is a very weak positive relationship that depicts an increase in in the effect of F23 as a barrier result in a corresponding slight increase in the effect of F23 as a driver.

Consequently, the correlation coefficient between the extent to which F10 affect inter-organisational collaboration among MDA'S in public housing project delivery in Kebbi state as a Barrier and Driver is reported as 0.151 which is significant because the P-value is less than 0.05. This is a weak positive relationship that depicts an increase in the effect of F10 as a barrier result in a corresponding slight increase in the effect of F10 as driver. Furthermore, the correlation coefficient between the extent to which F6 affect inter-organisational collaboration among MDA'S in public housing project delivery in Kebbi state as a Barrier and Driver is reported as 0.223 which is significant because the p-value is less than 0.05. This is a weak positive relationship that depicts an increase in the effect of F6 as barrier results in a corresponding slight increase in the effect of F6 as a driver. The correlation coefficient between the extent to which F14 affect inter-organisational collaboration among MDA'S in public housing project delivery in Kebbi state as a Barrier and Driver is reported as 0.225 which is significant because the p-value is less than 0.05. This is a weak positive relationship that depicts an increase in the effect of F14 as a barrier result in a corresponding little increase in the effect of F14 as driver.

V. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study examined critical factors impacting inter-organizational collaboration among

Ministries, Departments, and Agencies (MDAs) involved in public housing project delivery in Kebbi State, Nigeria. Findings reveal that while inter-organizational collaboration is essential for effective public housing delivery, several critical barriers such as coordination challenges, accountability issues, and a lack of commitment significantly hinder collaboration. Coordination was identified as the primary barrier, while commitment emerged as the primary driver, indicating that although these factors are challenging, they have the potential to drive positive outcomes if improved.

The analysis shows that certain factors, such as involvement of key partners, conflict resolution, and accountability, consistently affect collaboration either as barriers or drivers. Spearman's correlation analysis indicates a positive relationship between some barrier factors and their potential to drive improvement, suggesting that while these issues currently hinder progress, addressing them could transform these barriers into supportive elements. This underscores the importance of targeted strategies for enhancing collaboration by focusing on coordination, mutual commitment, and accountability within MDAs. Therefore, fostering better inter-agency collaboration could lead to more successful project delivery, ultimately improving the quality, timeliness, and cost-effectiveness of housing projects.

5.2 Recommendations

i. Establish a structured coordination framework with clear roles, responsibilities, and processes for all collaborating MDAs. A centralized coordination office or task force could streamline activities and reduce project delays.
ii. MDAs should cultivate a culture of commitment across all departments. This includes regular training and workshops to reinforce the importance of collaboration and engage staff in the goals of public housing delivery.
iii. Implement a transparent accountability system to monitor contributions and performance among MDAs. Clear reporting structures and progress-tracking tools can enhance responsibility and foster a no-blame culture, improving cooperation.
iv. Establish formal conflict resolution channels that allow quick and effective handling of disputes. This could include regular meetings and open forums for MDAs to address and resolve issues collaboratively.
v. Develop a shared digital platform for real-time information exchange, allowing MDAs to access data, track project progress, and coordinate resources effectively. Improved communication through regular briefings and updates will foster transparency and mutual trust.
vi. Engage key stakeholders early in the project planning process to ensure they are fully integrated into the project's goals and processes. This fosters a sense of shared responsibility and improves collaboration efficiency.

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