Jher Vol. 33 No. 1 September 2026, pp. 32 – 43

Home Management Extension Programmes in Rural Areas of Ogun State, Nigeria

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Abstract

The study focused on home management extension programmes in rural areas of Ogun State, Nigeria. Specifically, it determined existing home management extension programmes in the area; level of women participation; ways programmes influence household welfare; and constraints to programme implementation. A survey research design was adopted. Population comprised 68 agricultural extension officers and 17,670 rural household women in Obafemi-Owode and Abeokuta North Local Government Areas. Data were collected using questionnaire and analysed using frequency, percentage, mean, standard deviation, and t-test statistics at the 0.05 level of significance. Results show that 13 home management extension programmes were available to rural women households, including family planning (170; 87.6%), child health management (159; 82.0%), and women empowerment and skill development (153; 78.9%). Rural women recorded a high level of participation in the programmes ($\overline{X}_g$ = 2.76), with adoption of home management techniques ($\overline{X}_g$ = 3.14) and attendance at training sessions ($\overline{X}_g$ = 2.93) ranking highest. The programmes positively influenced household welfare (overall grand mean = 4.04), particularly through child health awareness ($\overline{X}_g$ = 4.22), and access to safe drinking water ($\overline{X}_g$ = 4.20). Major constraints included poor accessibility to rural areas ($\overline{X}_g$ = 3.97), and inadequate government support ($\overline{X}_g$ = 3.84).

Keywords: Home, Management, Extension, Management, Participation, Programmes, Women, Empowerment, Services.

Introduction

Agricultural extension services are crucial for rural development, especially in developing countries such as Nigeria where agriculture continues to be a major livelihood source (Ongachi & Belinder, 2025). Agricultural extension is a kind of non-formal education and advisory services which transfer knowledge, technologies and innovations to farmers and rural households for increasing their productivity, income and welfare (Xu, 2023; Anam et al., 2025). According to the Food and Agriculture Organization (Antwi-Agyei & Stringer, 2021), extension services enhance agricultural production,

food security, sustainable resource management and living standards. However, extension activities in Nigeria have historically concentrated on crop and livestock production, with scant attention on household welfare and management (Aremu & Reynolds, 2024).

Home management extension is a special branch of agricultural extension dealing with the improvement of household wellbeing through education in nutrition, health, childcare, family welfare and domestic resource management. It empowers rural households, especially women, with skills to productively use scarce resources and improve livelihoods (Kwena & Vuma, 2025). As Aremu and Reynolds (2024) note, home management extension connects agricultural production with improved household nutrition, health and economic stability. The extension of home management is of multi-dimensional significance. It enhances household health and nutrition through dietary diversity, hygiene and preventive health practices (Haque et al., 2024; Adebayo et al., 2025).

Additionally, it helps households' budget, save, and deal with economic shocks by enhancing financial literacy and resource management (Kyeyune & Ntayi, 2025). Furthermore, it promotes family welfare and childcare, both of which are critical for the development of human capital (Schochet, 2022). Additionally, by expanding women's access to information, skills, and decision-making opportunities, home management extension fosters women's empowerment. Empowering women has been linked to better child nutrition, education, and income diversification, according to studies (Doss et al., 2021; Nahar & Mengo, 2022).

Nutrition education, health and sanitation practices, family resource management, income-generating activities, and environmental management like garbage disposal and home gardening are all frequently included in home management extension programs. These programmes' main goals are to increase food security, decrease poverty, improve household welfare, and encourage sustainable livelihoods (Nyathi, 2025).

The Agricultural Development Programme (ADP) and other governmental and non-governmental projects are the primary means of implementing agricultural extension services in Ogun State. Women-in-Agriculture efforts, nutrition campaigns, cooperative training, and skill-acquisition programmes aimed at rural households are examples of current home management extension programs (Aremu & Reynolds, 2024). Although their reach and efficacy vary by community, these programmes seek to enhance family welfare, household income diversification, and food utilisation.

Home management extension programmes in Ogun State confront a number of difficulties notwithstanding their significance. Because home management is not sufficiently integrated into mainstream extension services, production is prioritised over comprehensive livelihood enhancement (Ongachi & Belinder, 2025). Programme execution is also impacted by inadequate institutional support and finance (Elomien et al., 2022). Time restrictions, low awareness, and sociocultural hurdles all contribute to rural women's low engagement (Hanan, 2022). Additionally, inadequate infrastructure and

communication networks restrict outreach to isolated rural populations (Kaiser & Barstow, 2022), and a lack of qualified extension workers lowers programme effectiveness (Belay & Abebaw, 2004).

Home management extension is still very important for lowering poverty in rural areas. Ogun State's rural households still struggle with issues like low income, inadequate healthcare, bad nutrition, and poor money management. Many rural populations live below the poverty line, with women and children being the most impacted, according to reports from the National Bureau of Statistics (Akoji & Abaji, 2025). These circumstances emphasise the necessity of integrated extension strategies that take into account household welfare as well as production.

Nevertheless, there are very few empirical research on Ogun State's home management extension programmes. The majority of current research concentrates on agricultural productivity, paying little attention to household-level interventions and their effects (Castle et al., 2021). As a result, little is known about the programmes that are offered, women's involvement, how the programmes affect household welfare, and implementation challenges.

Purpose of the Study

This study focused on home management extension programmes in rural areas of Ogun State, Nigeria. Specifically, it determined:

1. types of Home Management (H/M) extension programmes available to households (women) in rural areas of Ogun State;
2. level of participation of women in available H/M extension programmes;
3. ways the H/M programmes influence welfare of the households;
4. constraints limiting operation of H/M extension programmmes in the area.

Hypotheses (HOs)

There is no significant difference in the mean responses of rural household women and agricultural extension officers in Ogun State on:

HO_1: influence of home management extension programmes on household welfare.

HO_2: constraints limiting operationS of home management extension programmes.

Methodology

Design of the Study: The research design used in the study was survey.

***Study Area*:** The study was carried out in Ogun State, Nigeria, where rural households' main source of income is agriculture (Adeosun et al., 2024). It concentrated on Obafemi-Owode and Abeokuta North local government areas, which are known for their low-income households and smallholder farming. The majority of families are extended, with women handling the finances, food, and health. To augment their income, many households participate in agro-processing and small-scale trading (Abdullahi, 2021). However, wellbeing is hampered by poor access to sanitation, healthcare, and extension services (Akoji & Abaji, 2025). Because of these factors, the area is appropriate for evaluating household well-being and home management extension programmes.

***Population for the Study*:** The study population included 68 agricultural extension officers in charge of home management extension services and rural

household women in Ogun State. These included 8,710 in Obafemi-Owode and 8,960 in Abeokuta North Local Government Areas. These women are the main recipients of home management extension programmes (Ogun State Agricultural Development Programme (OGADEP) office and local government records, December 10 – 22, 2024)

***Sample for the Study*:** A multi-stage sampling procedure was adopted. First, Obafemi-Owode and Abeokuta North Local Government Areas were purposively selected due to the concentration of rural households and the implementation of home management extension programmes. Second, from a sampling frame of 17,670 rural household women (8,710 in Obafemi-Owode and 8,960 in Abeokuta North), 144 women were selected using the Taro Yamane formula at a 5% precision level and simple random sampling. Finally, 50 agricultural extension officers from the population of 68 agricultural extension officers were purposively selected. Thus, the total sample comprised 194 respondents.

***Instrument for Data Collection*:** Data were collected using a structured questionnaire, which also served as an interview guide for illiterate respondents. It was made up of four sections A, B, C and D, corresponding to the specific objectives. Section A items were structured to 2-point scale of "Yes/No", Section B (participation) had 4-point response options of "Always" (A) = 4; "Occasionally" (O) = 3; "Rarely" (R) = 2; "Never" (N) = 1 while Sections C (influence) and D (constraints) were structured into 5-point response options of: Section C as "Strongly improved" (SI) = 5; "Slightly improved" (SlI) = 4; "Moderately improved" (MI) = 3; "Less improved" (LI) = 2; "Never improved" (NI) = 1, and Section D as "Very severe constraints" (VSC) = 5, "Severe constraints" (SC) = 4, "Moderate constraints" (MC) = 3, "Slightly constraints" (SlC) = 2, "Not a constraints" (NC) = 1. The questionnaire was validated by three university experts in Home Management. To determine reliability, the instrument was pilot-tested using 28 respondents outside the main study area. The reliability analysis using the Cronbach Alpha technique yielded a coefficients of 0.88 for participation level, 0.74 for programme influence on welfare, and 0.78 operational constraints, confirming the tool's internal consistency and dependability.

***Data Collection Method*:** A total of 194 questionnaires were administered by hand to 50 agricultural extension officers and 144 rural household women. All the 194 copies of the questionnaires were correctly filled out and returned, yielding a 100 percent response rate.

***Data Analysis Technique*:** Data were analyzed using frequencies, percentages, means and standard deviations. Data on types of Home Management (H/M) extension programmes were analysed using frequencies and percentages, while means ($\bar{X}_g$) and standard deviations were used to analyze data on level of participation; perceived impacts and constraints to H/M extension programmes. Percentage of 50 (50%) and mean ratings of 2.50 and 3.50 were used for decision making. Hypotheses were tested with t - test at 0.05 level of significance.

Results

Socio-economic characteristics of the respondents

Most extension officers were aged 41–50 years (76.0%), married (86.0%), Christians (60.0%), had tertiary education (84.0%), earned ₦100,001–₦200,000 monthly, and were government employees (50.0%). Most rural women were aged 31–50 years (68.1%), married (79.2%), Christians (54.2%), had primary education (48.6%), lived in households of 6–10 members (45.8%), earned below ₦100,000 (93.1%), and were mainly traders and artisans.

Table 1: Frequency and Percentage Responses on Home Management Extension Programmes Available to the Rural Women in Rural Areas of Ogun State, Nigeria

S/N	H/M Extension Programmes	$F(\%)_1$	$F(\%)_2$	$F(\%)_0$	R
1	Family planning programme	128(88.9)	42(84.0)	170 (87.6)	A
2	Household budgeting and financial planning programme	118(81.9)	32(64.0)	150 (77.3)	A
3	Child health management programme	114(79.2)	45(90.0)	159 (82.0)	A
4	Food preservation and processing programme	114(79.2)	27(54.0)	141 (72.7)	A
5	Backyard gardening for food security programme	110(76.4)	40(80.0)	150 (77.3)	A
6	Women empowerment and skill development programme	108(75)	45(90.0)	153 (78.9)	A
7	Water purification and safe drinking water programme	108(75)	23(46.0)	131 (67.5)	A
8	Domestic violence awareness and family planning	108(75)	29(58.0)	137 (70.6)	A
9	Rural financial literacy and savings management	102(70.8)	35(70.0)	137 (70.6)	A
10	Household disaster preparedness and emergency response programme	94(65.3)	38(76.0)	132 (68.0)	A
11	Food and nutrition extension programme	92(63.9)	48(96.0)	140 (72.2)	A
12	Home based income generation programme	90(62.5)	50(100.0)	140 (72.2)	A
13	Home sanitation and waste management programme	82(56.9)	41(82.0)	123 (63.4)	A

N_1: Number of Rural Women = (144); N_2: Number of Extension Officers = (50); $\{F(\%)\}_1$= Frequency and Percentage Response of Rural women; $\{F(\%)\}_2$= Frequency and Percentage Responses of Extension Officers; $\{F(\%)\}_0$ = Overall Frequency and Percentage Responses; R= Remarks; A = Available.

Table 1 shows that, based on the 50 percent benchmark, all 13 home management extension programmes were available to rural women in Ogun State. Family planning is the most available (87.6%) while home sanitation is least available (63.4%).

Table 2: Mean Responses and Standard Deviation on Participation Level in Home Management Extension Programmes in Rural Areas of Ogun State, Nigeria

S/N	Participation level	$\bar{X}$	SD	R
1	Adopting new home management techniques taught	3.14	0.68	HP
2	Attending training sessions	2.93	0.70	HP
3	Applying the knowledge gained in daily home management	2.89	0.72	HP
4	Sharing the knowledge with other community members	2.72	0.76	LP
5	Engaging in group activities organized by extension agents	2.54	0.79	LP
6	Seeking advice from extension agents	2.36	0.80	LP

N_1: Number of Rural Women = (144); $\bar{X}$ = Mean; SD = Standard Deviation; Overall Grand Mean = 2.76; R = Remarks; HP = High Participation; LP = Low Participation.

Table 2 shows overall grand mean ($\bar{X}$ = 2.76) which reveals a high level of participation with home management extension programmes. The majority of the respondents used new techniques ($\bar{X}$ = 3.14), participated in training ($\bar{X}$ = 2.93), and used acquired knowledge ($\bar{X}$ = 2.89) and participation in group activities, knowledge sharing and seeking extension advice were relatively low.

Table 3: Mean Responses, Standard Deviation, and t-test on Perceived Impacts of Home Management Extension Programmes in Rural Areas of Ogun State, Nigeria

S/N	Ways	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_g$	t –	p-	R
1	Adoption of family planning techniques	4.25	0.74	4.13	0.83	4.19	0.56	0.001	S
2	Child health awareness	4.17	0,76	4.27	0.74	4.22	0.61	0.015	S
3	Food preservation	4.15	0.79	4.22	0.76	4.19	0.56	0.001	S
4	Participation in cooperative saving	4.15	0.79	4.13	0.83	4.14	0.55	0.001	S
5	Access to clean and safe drinking water	4.11	0.83	4.28	0.75	4.20	0.56	0.001	S
6	Reduction in domestic violence through family	4.03	0.85	4.00	0.86	4.02	0.71	0.221	NS
7	Women participation in economic activities and decision making	4.00	0.86	4.30	0.85	4.15	0.58	0.013	S
8	Household financial management and savings habit	3.97	0.86	4.10	0.84	4.04	0.52	0.031	S
9	Food security through backyard gardening	3.90	0.87	4.30	0.85	4.10	0.53	0.011	S
10	Nutrition practices and family health	3.81	0.87	4.31	0.85	4.06	0.53	0.035	S
11	Income generation through home based business	3.76	0.81	4.10	0.83	3.93	0.61	0.613	NS

Table 3 Continues

12	Sanitation and waste management	3.54	0.89	3.70	0.81	3.62	0.66	0.411	NS
13	Knowledge of disaster preparedness and emergency response	3.51	0.89	3.73	0.82	3.62	066	0.411	NS

N_1: Number of Women Household = (144); N_2: Number of Extension Officers = (50); $\bar{X}_1$= Mean of women; SD_1 = Standard Deviation Women; $\bar{X}_2$ = Mean of Extension Officers; SD_2 =Standard Deviation Extension Officer;$\bar{X}_g$ = Grand Mean; Overall Grand Mean = 4.04; t = t-test Results; R = Remarks; p= 0.005; Degree of freedom (Df) = 192; S = Significant; NS = Not Significant.

Table 3 which reveals that the overall mean ($\bar{X}_g$ = 4.04) for home management extension programmes was positive and thus had an impact on household welfare. The areas that had the highest scores were child health awareness ($\bar{X}_g$ = 4.22), safe drinking water ($\bar{X}_g$ = 4.20), and family planning and food preservation ($\bar{X}_g$ = 4.19). The t test indicated significant differences for nine items and no significant difference for four items between the respondents at 0.05 level of significance.

Table 4: Mean Responses, Standard Deviation, and t-test on Constraints of Home Management Extension Programme in Rural Areas of Ogun State, Nigeria

S/N	Constraints	$\bar{X}_1$	SD_1	$\bar{X}_2$	SD_2	$\bar{X}_g$	t –	p-	R
1	Poor accessibility to rural areas due to bad roads	3.96	0.92	3.98	0.91	3.97	0.63	0.001	S
2	Poor government support and policy implementation	3.78	0.96	3.90	0.92	3.84	0.61	0.001	S
3	Low awareness and participation of rural households	3.60	1.25	3,80	0.93	3.70	0.64	0.021	S
4	Limited access to credit and financial support	3.49	1.10	3.62	1.25	3.56	0.66	0.015	S
5	High level of illiteracy affecting understanding and adoption	3.44	0.94	3.90	0.92	3.67	0.61	0.001	S
6	Language barrier between extension agent and rural households	3.42	0.93	3.73	0.97	3.58	0.60	0.001	S
7	Poor communication network	3.36	099	3.88	0.95	3.62	0.59	0.005	S
8	Gender bias affecting women's participation	3.21	1.31	3.88	0.95	3.55	0.59	0.618	NS
9	Resistance to change by rural households	3.13	1.45	3.12	1.57	3.13	0.55	0.422	NS
10	Cultural and religious belief	3.13	1.45	3.02	1.35	3.08	0.58	0.127	NS

N_1: Number of Women Household = (144); N_2: Number of Extension Officers = (50); $\bar{X}_1$= Mean of women; SD_1 = Standard Deviation Women; $\bar{X}_2$ = Mean of Extension Officers; SD_2 =Standard Deviation Extension Officer;$\bar{X}_g$ = Grand Mean; Overall Grand Mean = 3.57; t = t-test Results; R = Remarks; p= 0.005; Degree of freedom (Df) = 192; S = Significant; NS = Not Significant.

Table 4 shows that respondents agreed that 10 factors that hinder home management extension programmes. Poor rural accessibility ($\bar{X}_g$ = 3.97) ranked highest followed by poor government support and policy implementation ($\bar{X}_g$ = 3.84), the t-test revealed seven significant constraints ($p < 0.05$), three constraints were not significantly different between both respondent groups.

Discussion

The results showed that both rural women and extension officers were mostly in the economically active age group and this represented the strong possibility of their involvement in home management extension programmes. People in this stage of life are more involved in livelihood activities and more open to innovations (Madende et al., 2023). Marital status also showed a significant influence on participation among the women of rural areas, contributing accounts of married respondents being the most prevalent among the women and extension staff, further supporting that marital status affects participation in extension activities and decision making (Shahbaz, 2022). While not a restriction, religion was a significant factor as it was the predominant faith within the sociocultural contexts of the study area (Christianity and Islam) (Khalil, 2024). Although there is minimal difference between education levels of the extension officers and the rural women, there is a possibility that the understanding and implementation of innovations will be different, with lower education level of women being a barrier to the adoption of extension information (Zondo & Ndoro, 2024). Similarly, increased household size and poverty could limit participation and uptake of better practices (Pathak, 2022; Sadiq et al., 2025; Tanku & Kumera, 2026).

The study found that all the identified home management extension programmes were accessible to rural women; family planning, child health management, nutrition and home-based income generation being most noticeable. This means that this is being distributed widely in the extension system. This discovery corroborates research indicating that successful extension programs positively impact household welfare, health, and empower women (Belaid et al., 2024) and confirms institutional initiatives aimed at improving food security and livelihoods (Ongachi & Belinder, 2025). However, there is inequitable coverage as seen in the relatively lower prevalence of disaster preparedness and water purification and sanitation programmes (Atsbeha & Gebre, 2021; Nyberg et al., 2025; Becerra-Encinales et al., 2024).

The findings also indicate that women in rural areas were actively participating in the adoption of home management practices, attending trainings, and utilizing the knowledge they gained, indicating their willingness to enhance their household welfare. This is supported by evidence that women are more willing to embrace childcare, nutrition, sanitation innovations when extension services are provided to them (Tornel-Vázquez et al., 2024). This high level of engagement during the training sessions highlights the practicality of home management extension training (Okunlola, 2022), and participatory learning would help to increase retention and implementation of the training (Lazaros et al., 2026). Limited involvement in group activities and interaction with extension agents,

however, indicates low follow-up and contact, which align with constraints associated with time constraints and poor extension reach (Challa, 2024).

The results also showed that the home management extension programmes positively impacted on household welfare based on the grand mean of 4.04 in Ogun State. These focused activities were associated with improved child health awareness, availability of safe drinking water, family planning, and food preservation – the key benefits demonstrated the importance of their contribution to the strengthening of the well-being of households. The t-test result showed that there were significant differences between most of the perceived impacts of the rural women and the extension officers and therefore HO_1 was rejected. But there were no significant differences in the areas of domestic violence reduction, income generation, sanitation and disaster preparedness.

Lastly, the results indicate that the effectiveness of the programme is significantly hampered by infrastructural, institutional and socio-economic factors. Lack of roads, government support, awareness, illiteracy and weak communication was a significant obstacle to access and dissemination. These constraints are similar to those found by Kaiser and Barstow (2022) and Becerra-Encinales et al. (2024) in extension delivery systems. In addition, the differences in perception of constraints were significant between respondents, which also caused HO_2 to be rejected.

Conclusion

The study concludes that home management extension programmes are widely available and have made substantial contributions to improving household welfare in rural areas of Ogun State. Rural women demonstrated active participation, particularly in adopting recommended home management practices and attending extension training, reflecting the relevance and usefulness of the programmes. The interventions significantly enhanced child health, family planning, food preservation, access to safe drinking water, household financial management, food security, and women's economic participation, thereby promoting sustainable livelihoods. Despite these achievements, the effectiveness of the programmes is constrained by poor rural infrastructure, inadequate government support, low awareness, illiteracy, limited access to credit, and weak communication networks. Therefore, strengthening institutional support, improving rural infrastructure, and expanding extension outreach are essential for maximizing programme effectiveness and achieving sustainable rural household development.

Recommendations

1. Home management extension programs should be continued and extended, especially in child health, nutrition, sanitation, water purification and disaster preparedness, by government and extension agencies to benefit household welfare.
2. Extension agencies should carry out follow-up visits and involve rural women in group activities and increase the frequency of interaction for sharing knowledge and adoption of recommended practices.
3. Improve existing programmes in their most effective aspects and strengthen

less successful ones through targeted training, follow-up and improved resource provisioning for rural welfare.

4. .Government should enhance the process of policy implementation, increase funding and expand communication and extension services to strengthen programme accessibility, effectiveness and sustainable rural household development as well as improving rural infrastructure.

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