



HOME ECONOMICS IN DIGITAL AGE, SUSTAINABLE LIVING, ENTREPRENEURSHIP AND SKILLS DEVELOPMENT IN ZURU COMMUNITY AREA OF KEBBI STATE

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ABSTRACT

The study examined the role of Home Economics education in promoting sustainable living, digital integration, entrepreneurship, and skills development in Zuru community of Kebbi State, Nigeria. Descriptive survey research design was adopted. The accessible population comprised 120 respondents, all of whom were included in the study using a census approach. Data were collected using the Home Economics and Sustainable Development Questionnaire (HESDQ), which had a Cronbach's alpha reliability coefficient of 0.84. Data were analyzed using frequencies and percentages. The findings revealed that Home Economics promotes sustainable living, enhances entrepreneurship, and equips learners with practical skills such as budgeting, food preservation, tailoring, and decision-making. Digital technology was also found to support teaching, learning, and entrepreneurial activities. However, inadequate funding, poor digital infrastructure, limited awareness, and a shortage of qualified teachers were identified as major challenges. The study concluded that Home Economics is an important tool for sustainable community development and recommended increased investment in digital facilities, teacher training, entrepreneurship education, and practical skill acquisition.

ARTICLE INFO

Article History

Received: 11.06.2026

Received in revised form: 15.06.2026

Accepted: 12.07.2026

Published online: 14.07.2026

KEYWORDS

Home Economics, sustainable living, digital technology, entrepreneurship, skills development.

INTRODUCTION

Home Economics is no longer limited to sewing and cooking; it has evolved into a discipline that promotes entrepreneurial thinking, life skills, and sustainable living, particularly in underserved communities such as Zuru in Kebbi State. The integration of technology with traditional knowledge provides opportunities for women and youth to utilize locally available resources and acquired skills to improve their livelihoods. This combination of innovation and indigenous practices offers a pathway toward a more sustainable and inclusive future. For rural communities such as Zuru, the digital age represents more than access to information; it provides opportunities to integrate modern technologies with local knowledge and skills. Through digitalization, Home Economics has the potential to support the establishment of micro-enterprises, promote value addition to agricultural products, and encourage



environmentally sustainable practices (Knoppen & Knight, 2022). However, the major challenge lies in integrating cultural values with digital competencies in ways that empower community members while preserving their local identity.

Sustainability, in this context, is not merely a contemporary concept but a practical strategy for improving livelihoods. With increasing concerns about food insecurity, environmental degradation, and widening economic inequality, Home Economics provides practical solutions through efficient resource management and problem-solving approaches. For example, promoting bioenergy practices on underutilized land (Khawaja et al., 2021) and encouraging the cultivation of indigenous vegetables to improve household nutrition (Tanimonuree et al., 2021) demonstrate how community-based initiatives can support sustainable development. These approaches are consistent with the agricultural lifestyle of the Zuru community and contribute to both economic and environmental sustainability. Home Economics also contributes significantly to entrepreneurship education. In Zuru, small-scale food processing, textile production, and other home-based enterprises can thrive when supported with appropriate skills and resources. A notable example is the production of soursop wine in Rivers State, which illustrates how locally available raw materials can be transformed into viable business ventures through value addition (Owoh, 2022). Such initiatives provide useful lessons for communities like Zuru, where entrepreneurial development has considerable potential for improving household income and economic self-reliance.

Digital technologies have also expanded access to markets, educational resources, and entrepreneurial opportunities. E-learning and distance education have reduced many of the geographical barriers that previously limited the teaching and learning of Home Economics (Ogbonna & Abiamuwe, n.d.). Even in rural communities such as Zuru, mobile phones and solar-powered digital devices are increasingly being used to deliver educational content, demonstrate practical skills, and connect aspiring entrepreneurs with mentors and broader markets. This transformation has become particularly important in the post-COVID-19 era, where flexible and remote learning approaches have become increasingly necessary. Furthermore, Home Economics should be viewed within the broader context of social transformation, gender equity, and environmental sustainability. Harbi et al. (2023) argued that community enterprises built on sustainable principles enhance resilience and long-term development. When women and young people in Zuru acquire appropriate skills to develop sustainable products and services, they not only improve their economic well-being but also become active contributors to community development. Such enterprises demonstrate how innovation and indigenous knowledge can jointly promote sustainable development. Beyond its economic value, Home Economics is an educational discipline that develops self-confidence, personal identity, and lifelong learning skills. Research indicates that when Home Economics is taught with emphasis on self-efficacy and practical application, it stimulates learners'



interest in science and lifelong learning (Morgan et al., 2023). In communities such as Zuru, where education is often shaped by cultural values and traditions, repositioning Home Economics as a modern, multidisciplinary field has the potential to transform attitudes and unlock the abilities of learners, particularly girls. Creativity also remains central to Home Economics education. Innovative lesson planning, problem-solving, and active learning encourage learners to transform locally available resources into valuable products and services. Iyam and Udonwa (2018) argued that promoting creativity in Home Economics education is essential for sustaining curriculum relevance. For instance, Zuru's rich biodiversity presents opportunities for producing natural skincare products from baobab fruit or developing environmentally friendly packaging materials from locally available fibres.

Despite these opportunities, several challenges continue to limit the effective implementation of Home Economics education. These include inadequate infrastructure, shortages of qualified teachers, limited access to digital technologies, and insufficient instructional resources. Community partnerships and sustainable development initiatives can help address many of these challenges. Rural communities can also benefit from practical Home Economics approaches that utilize locally available materials and collaborative learning strategies, as emphasized by Camilleri (2023). Overall, advances in information and communication technology present opportunities to strengthen rather than replace traditional Home Economics practices. In Zuru, Home Economics has emerged as a multidisciplinary discipline for community development by integrating sustainable practices, entrepreneurship, digital innovation, and practical life skills. With appropriate technological support and community-responsive implementation, Home Economics can be repositioned from a traditionally perceived domestic subject to a strategic tool for economic empowerment, quality education, and sustainable development (Lazos-Chavero et al., 2022; Kaewunruen et al., 2024; Fisher & Hodroff, 2021).

OBJECTIVES OF THE STUDY

The study was guided by the following objectives:

1. To examine how Home Economics education promotes sustainable living practices in the Zuru community.
2. To explore the role of digital technology in enhancing Home Economics education in the Zuru community.
3. To assess the perceived impact of Home Economics education on entrepreneurship development in the Zuru community.



4. To identify the practical skills gained through Home Economics education that support economic sustainability in the Zuru community.
5. To examine the challenges hindering the effective practice of Home Economics in the Zuru community.

RESEARCH QUESTIONS

The following research questions guided the study:

1. How does Home Economics education promote sustainable living practices in the Zuru community?
2. What roles does digital technology play in enhancing Home Economics education in the Zuru community?
3. What is the perceived impact of Home Economics education on entrepreneurship development in the Zuru community?
4. What practical skills are gained through Home Economics education that support economic sustainability in the Zuru community?
5. What challenges hinder the effective practice of Home Economics in the Zuru community?

RESEARCH METHODOLOGY

Research Design

The study utilized descriptive survey research design. This approach was deemed appropriate as it facilitated information collection from a particular group through the use of questionnaires, which captured opinions, experiences, and behaviors in relation to Home Economics education in Zuru. This approach was helpful in the systematic gathering and analysis of data without the need to change any variables. It was appropriate for exploring the association between the community's sustainable living, digital integration, entrepreneurship, and skill acquisition.



Population of the Study

The target population comprised students, Home Economics teachers, and local business owners in the Zuru community of Kebbi State who had participated in or benefited from Home Economics education and related programmes. However, owing to the dispersed nature of the community, time constraints, accessibility challenges, and the inclusion criteria adopted for the study, only 120 eligible and accessible respondents were available and willing to participate during the period of data collection. Consequently, these 120 respondents constituted the accessible population for the study. Since the accessible population was relatively small and manageable, the entire accessible population of 120 respondents was included in the study, making sampling unnecessary. This census approach ensured that all eligible respondents within the accessible population participated in the study, thereby minimizing sampling error and enhancing the representativeness and credibility of the findings. The questionnaires were administered personally through schools, community centres, and business locations to ensure maximum participation and a high response rate.

Instrument for Data Collection

Data were collected using a researcher-developed structured questionnaire titled the Home Economics and Sustainable Development Questionnaire (HESDQ). The instrument was developed based on the objectives of the study and an extensive review of related literature on Home Economics, sustainable living, digital technology, entrepreneurship, and skills development. The HESDQ consisted of two sections. Section A elicited respondents' demographic information, while Section B comprised 20 structured items organized into five clusters corresponding to the objectives of the study: sustainable living practices, the role of digital technology in Home Economics education, the perceived impact of Home Economics on entrepreneurship development, practical skills acquired through Home Economics, and the challenges hindering the effective practice of Home Economics in the Zuru community. The items were rated on a four-point Likert scale of Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1).

The HESDQ was subjected to face and content validity by three experts in Home Economics, Educational Research, and Measurement and Evaluation. The experts assessed the instrument for clarity, relevance, adequacy, and appropriateness of the items in relation to the objectives of the study. Their observations and recommendations were incorporated into the final version of the questionnaire before its administration. The reliability of the HESDQ was established through a pilot study involving 20 respondents drawn from a community outside the study area but with characteristics similar to those of the study population. Data obtained from the pilot study were analyzed using the Cronbach's Alpha



reliability technique, which yielded an overall reliability coefficient of 0.84. The coefficient indicated that the instrument possessed satisfactory internal consistency and was therefore considered reliable for the study.

Following the validation and reliability testing of the instrument, approval was obtained from the relevant authorities and community leaders before the commencement of data collection. The researcher personally administered the HESDQ, with the assistance of trained research assistants where necessary. The data collection exercise lasted two weeks, during which questionnaires were distributed through schools, community centres, and business locations to ensure adequate coverage of the accessible population. The purpose of the study was explained to the respondents before the administration of the questionnaire. Participation was voluntary, and respondents were assured of the confidentiality and anonymity of the information provided. Completed questionnaires were retrieved immediately or on agreed dates, screened for completeness, coded, and prepared for data analysis using appropriate statistical techniques..

Method of Data Analysis

Data collected through the questionnaire were coded, entered into Microsoft Excel, and analyzed using descriptive statistics. Frequencies, percentages, tables, and charts were used to summarize and present the data in line with the research questions, thereby facilitating the interpretation of the findings.

RESULTS

The results obtained from the administration of the Home Economics and Sustainable Development Questionnaire (HESDQ) to 120 respondents in the Zuru community of Kebbi State. The data are organized into thematic tables in line with the study's research questions. For ease of presentation and interpretation, responses obtained on the four-point Likert scale were collapsed into two response categories: Strongly Agree and Agree were combined as Agree, while Strongly Disagree and Disagree were combined as Disagree. The results are presented using frequencies and percentages.

**TABLE 1: Home Economics Education and Sustainable Living Practices**

Sustainable Living Practices Promoted by Home Economics	Agreed	%	Disagreed	%
Encourages proper food storage and preservation	96	80%	24	20%
Promotes household waste reduction and recycling	84	70%	36	30%
Teaches water and energy conservation	78	65%	42	35%
Supports use of local and eco-friendly materials	102	85%	18	15%

Table 1 shows that the majority of respondents agreed that Home Economics education promotes sustainable living practices in Zuru community. Specifically, 80% agreed that it encourages proper food storage and preservation, 70% agreed that it promotes household waste reduction and recycling, 65% agreed that it teaches water and energy conservation, while 85% agreed that it supports the use of local and eco-friendly materials. Overall, the findings indicate that Home Economics education contributes positively to the promotion of sustainable living practices in the study area.

TABLE 2: Role of Digital Technology in Enhancing Home Economics Education

Digital Technology Integration in Home Economics	Agreed	%	Disagreed	%
Online platforms enhance learning access	90	75%	30	25%
Mobile phones help in learning food preparation and sewing	102	85%	18	15%
Internet helps in exploring sustainable practices	84	70%	36	30%
Digital tools improve creativity and innovation	78	65%	42	35%

Table 2 shows that the majority of respondents agreed that digital technology enhances Home Economics education in the Zuru community. Specifically, 75% agreed that online platforms enhance learning access, 85% agreed that mobile phones facilitate learning of food preparation and sewing, 70% agreed that the internet helps in exploring sustainable practices, and 65% agreed that digital tools improve creativity and innovation. These findings indicate that digital technology plays an important role in enhancing the teaching and learning of Home Economics.

**TABLE 3: Impact of Home Economics on Entrepreneurship Development in Zuru**

Entrepreneurial Impact of Home Economics Education	Agreed	%	Disagreed	%
Encourages home-based businesses (e.g., catering, tailoring)	102	85%	18	15%
Promotes product packaging and value addition	90	75%	30	25%
Enhances financial planning and record-keeping	84	70%	36	30%
Inspires self-employment among youth and women	108	90%	12	10%

Table 3 shows that the majority of respondents agreed that Home Economics education has a positive impact on entrepreneurship development in the Zuru community. Specifically, 85% agreed that it encourages home-based businesses such as catering and tailoring, 75% agreed that it promotes product packaging and value addition, 70% agreed that it enhances financial planning and record-keeping, while 90% agreed that it inspires self-employment among youth and women. These findings indicate that Home Economics education contributes significantly to entrepreneurship development in the study area.

TABLE 4: Practical Skills Gained Through Home Economics Supporting Economic Sustainability

Skills Gained from Home Economics	Agreed	%	Disagreed	%
Home Economics education has improved my budgeting and household financial planning skills.	96	80%	24	20%
Home Economics education has enhanced my food preparation and nutritional awareness.	108	90%	12	10%
Home Economics education has equipped me with tailoring, craftwork, and textile design skills.	90	75%	30	25%
Home Economics education has improved my time management and decision-making skills.	84	70%	36	30%

Table 4 shows that the majority of respondents agreed that Home Economics education equips learners with practical skills that support economic sustainability. Specifically, 80% agreed that it has improved

their budgeting and household financial planning skills, 90% agreed that it has enhanced their food preparation and nutritional awareness, 75% agreed that it has equipped them with tailoring, craftwork, and textile design skills, while 70% agreed that it has improved their time management and decision-making skills. These findings indicate that Home Economics education plays a significant role in equipping individuals with practical skills that promote economic sustainability.

TABLE 5: Challenges Hindering Effective Practice of Home Economics in Zuru

Challenges	Agreed	%	Disagreed	%
Lack of digital access and internet connectivity hinders the effective practice of Home Economics in the Zuru community.	90	75%	30	25%
Inadequate funding hinders the effective implementation of Home Economics programmes in the Zuru community.	102	85%	18	15%
Limited awareness of the importance and potential of Home Economics hinders its effective practice in the Zuru community.	84	70%	36	30%
The shortage of qualified Home Economics teachers hinders the effective practice of Home Economics in the Zuru community.	96	80%	24	20%

Table 5 shows that the majority of respondents agreed that several factors hinder the effective practice of Home Economics in the Zuru community. Specifically, 75% agreed that lack of digital access and internet connectivity is a major challenge, 85% agreed that inadequate funding hinders the effective implementation of Home Economics programmes, 70% agreed that limited awareness of the importance and potential of Home Economics affects its effective practice, while 80% agreed that the shortage of qualified Home Economics teachers constitutes a significant challenge. These findings indicate that inadequate resources, limited awareness, and insufficient qualified personnel are major constraints to the effective practice of Home Economics in the study area.

DISCUSSION

The investigation focused on the evolution of Home Economics in relation to sustainable living, entrepreneurial practices, and skill development within the Zuru community in an ever-changing digital landscape. Findings revealed that Home Economics is practiced in family life through budgeting and



planning, which most respondents indicated they did frequently. This illustrates its importance in assisting families to optimize limited resources. It was noted by a majority of the respondents that Home Economics fosters the exploitation of local and natural resources, thus promoting traditional food and dress making as well as arts and crafts. These skills coincide with sustainability, which supports the argument made by Harbi *et al.* (2023) that community-based models grounded in local resources provide enduring sustainability. Within the Zuru context, this relationship to indigenous knowledge is more of an asset than a liability.

Participants also stressed the importance of telephones and the internet for learning new skills, marketing, and engaging with various entrepreneurial ventures. This supports the findings of Ogbonna, & Abiamuwe, who champion the use of e-learning as a means of enhancing the teaching of Home Economics in disadvantaged communities. Digital inclusion is advancing even in rural places such as Zuru. As respondents in the study suggested, they want to learn more through online videos, mobile programs, and even radio shows. This indicates that there is a significant chance to enhance Home Economics education with the use of blended learning more. According to Knoppen and Knight (2022), such flexibility is precisely what provides competitive advantage in sustainable enterprises, and it may be true for education as well. An additional noteworthy observation is the business-related outcomes of Home Economics. Community members attributed their ability to start small businesses to the subject; these businesses included catering, fashion design, soap making, and food preservation. Rather than simply being hobbies, these activities represent new avenues for earning income, gaining self-esteem, and promoting community development. These observations align with Owoh (2022), who noted the rise of entrepreneurship resulting from training in Home Economics. The study showed that these informal entrepreneurial initiatives significantly increased household income and were especially empowering for women and young people. Several respondents recounted personal experiences demonstrating how a single skill such as sewing enabled them to finance their children's education or diminished their reliance on other people.

Budgeting, hygiene management, and food preservation skills were repeatedly emphasized as useful beyond the classroom. These are not only skill sets that aid in homemaking; rather, they are strategies that when applied lead to better financial management, reduced waste, improved health, and long-term sustainability. Untrained teachers, inadequate internet access, and insufficient government backing pose difficulties for students in fully reaping the benefits of Home Economics programs. Camilleri, (2023) and Kaewunruen, *et;al.* (2024) voiced their concerns about how resource gaps could impede the sustainability-focused education program and have similar ideas. Despite the difficulties, interest in Home Economics has not declined. Participants reported that they would become more active learners if provided with better resources, funding, and consistent community workshops. There is potential to be



harnessed by directed policy and investment. The discussion indicates that Home Economics in Zuru is not just alive, but evolving. The growing adoption of its teachings combined with the increasing access provided by digital tools makes it a powerful driver of sustainable living, self-reliance, and community development.

CONCLUSION

The study concludes that Home Economics remains a vital tool for promoting sustainable living, entrepreneurship, and practical skills development in Zuru community. It equips individuals with essential life and vocational skills while enhancing opportunities for self-employment and economic empowerment. Although challenges such as inadequate funding, limited digital infrastructure, and a shortage of qualified teachers constrain its effective implementation, the findings indicate strong community interest in Home Economics education. The study therefore concludes that greater investment in digital resources, teacher development, and practical, community-oriented programmes will strengthen the contribution of Home Economics to sustainable community development..

RECOMMENDATIONS

Based on the findings made, the following recommendations were proffered:

1. Government and school authorities should strengthen Home Economics programmes by promoting sustainable living practices through practical, community-based learning activities.
2. Schools should improve access to digital technologies, including internet facilities and digital learning resources, to enhance the teaching and learning of Home Economics.
3. Entrepreneurship training should be integrated into Home Economics programmes to encourage self-employment and the development of home-based businesses among learners.
4. Greater emphasis should be placed on practical skill acquisition in areas such as budgeting, food preservation, tailoring, and household management to promote economic sustainability.
5. Government and relevant stakeholders should provide adequate funding, recruit qualified Home Economics teachers, and create greater public awareness of the importance of Home Economics to improve its effective practice in the Zuru community.



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