

School Feeding Program in Nigeria: Ethical Issues

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Abstract

In Nigeria, the National Home-Grown School Feeding Program (NHGSFP) has the potential to support regional agricultural economies and give pupils wholesome meals. Nonetheless, a careful examination is necessary due to worries about its operational effectiveness and ethical purity. This study assesses how the NHGSFP affects academic achievement, school attendance, and community involvement. The study examines claims of misconduct and corruption in the program and suggests methods to improve ethics. The study's conclusions provide insight into how views of the NHGSFP are correlated with demographic patterns, including age, occupation, community type, state of residence, and education level. Using a mixed-methods approach, this study looked at corruption claims and ethical issues inside the NHGSFP in addition to quantitatively analyzing survey data. A sample of respondents spanning a range of variables, including age, gender, education level, community type, state of residence, and occupation, were given a structured questionnaire. The questionnaire was designed to obtain complete data on participants' opinions and experiences linked to the NHGSFP. Using SPSS software, data analysis was done to evaluate the program's impact, demographic trends, and perceptions of corruption claims. Descriptive statistics, regression analysis, chi-square testing, and correlation analysis were used to investigate correlations between variables. The analysis highlights the influence of education on opinion formation by showing that respondents with greater levels of education often had more positive evaluations of the NHGSFP's impact. Furthermore, compared to their rural counterparts, urban dwellers typically express more positive opinions, suggesting regional differences in program perception. Additionally, the NHGSFP is more well-liked by responders from some states than others, highlighting the necessity of individualized interventions based on regional context. Occupational analysis highlights the variety of viewpoints held by stakeholders, underscoring the significance of focused communication tactics. It's interesting to see that believing in the program's beneficial impact is correlated with being aware of corruption claims; this suggests a complex link that needs more investigation. To prevent corruption within the NHGSFP, the study suggests strong financial controls, ethics training, and open procurement procedures. In addition, it promotes streamlined enrolment processes and improved information sharing to guarantee fair access to the program's advantages. These results offer insightful information to stakeholders and policymakers, supporting evidence-based decision-making and the moral development of the NHGSFP to better serve communities and learners in Nigeria

Keywords: School feeding, ethical problems, academic achievements, analysis

1.1 Introduction

School feeding programs are not new. These are programs that have been with us since the late 18th century when Germany recorded their first school feeding program in 1790 to later be joined by countries such as France, the United Kingdom, and the United States throughout the 19th century (Njeri, 2021). In the mid-20th century, several countries initiated school feeding programs even as they gained independence from their colonial masters. During the period of independence, the World Food Organization and other institutions under the United Nations helped the newly formed countries and other established ones to implement their school feeding programs (Nzoka 2018). The popularity of school-feeding countries all over the world can be attributed to its obvious benefits which have included enabling underprivileged children from poor family backgrounds to easily attend school, thereby being able to obtain much-needed education (Idoko and Udentia,

2023; Zheng *et al.*, 2022).

According to Bekidusa (2020), school feeding programs are programs set up for schools to provide free or cheap food to poor, impoverished, and malnourished children. Germany is the first country to have officially provided a school feeding program as documented history shows that they started the program in 1790. Almost one hundred years later France joined Germany in providing food to students in school, and England joined in 1906. The United States also started school lunches in the early 1900s, especially during the hard times of the Great Depression and World War II (Cupertino *et al.*, 2022). The school feeding programs became more popular in the second half of the 1900s when many countries gained independence but faced problems of poverty, hunger, and low education. International entities, including the United Nations, played a pivotal role in advocating and supporting school feeding programs as both humanitarian and developmental interventions (World Bank Blogs, 2015). The World Food Program (WFP), initiated school meals provision in 1963, and currently stands as the world's largest provider of school feeding assistance, reaching over 16 million children in 60 countries (Bande, 2021).

Different regions have implemented school feeding programs from a wide variety of spectrums that are diversified by different designs and a variety of delivery methods, with outcomes that depend on the distinct contexts, goals, and resources of individual countries or regions. These spectrums, as enumerated by Pastorino *et al.* (2023), have included on-site feeding, take-home rations, and food-for-education approaches.

On-site feeding is one of the prevalent approaches for school feeding programs and it involves schools offering cooked or ready-to-eat meals or snacks to students during regular school hours. This strategy not only promptly addresses hunger, enhances attendance, and improves concentration but also fosters a heightened interest in local food, influencing increased buying and selling activities. Illustrative instances include the United States' National School Lunch Program, Brazil's National Program of School Feeding, and Ethiopia's Home-Grown School Feeding Program (Escobar *et al.*, 2020; Pastorino *et al.*, 2023; Sabina *et al.*, 2021; Shrestha *et al.*, 2020).

The take-home rations method is yet another way schools have implemented the school feeding programs. In the modality of take-home ration, schools provide food items or vouchers to students or their families, contingent on school attendance or academic performance (Schultz and Ruel-Bergeron, 2021). This alternative aim to entice students into staying in schools longer with the hope that they will ultimately graduate from the school. The take-home rations modality is also aimed at helping families add disposable income that can support women and girls to enroll and stay in schools. Some examples of this alternative are the girls' stipend program in Pakistan, and the school feeding and girls' education program in Ghana (Aurino *et al.*, 2020; Fariha and Mansour, 2023).

A third way of delivering the school feeding programs is food for education. In the food-for-education modality, schools or communities get food or cash rewards, if they meet certain education standards or goals (Roothaert *et al.*, 2021). These programs help improve the quality, fairness, and management of education. They also help the local area and the people get involved. Some examples are the quality education support program in Cambodia and the school improvement program in Nepal (Long *et al.*, 2021; Shrestha *et al.*, 2020).

As explained by Amolegbe (2020), Rossi *et al.* (2021), Wang and Cheng (2022), and several other scholars, the goals and objectives of the school feeding programs include improving children's health, education, and well-being, and helping local food and economy. By making students go to school, stay longer in schools, learn more, and perform better in schools, the school feeding programs make parents want to send their children to school because they don't have to worry about feeding the children or losing their work.

Derese and Marisennayya (2023) highlight the multifaceted benefits of school feeding programs. These initiatives effectively address hunger and malnutrition among students, enhancing their cognitive abilities and concentration. Simultaneously, the programs contribute to overall health and nutrition, fostering students' growth, development, and disease prevention. By providing essential nutrients that might be lacking in regular diets, these programs mitigate issues such as anaemia, stunting, wasting, and obesity. As Jomaa *et al.*, (2011) pointed out, school feeding programs promote social inclusion and equity, particularly benefiting marginalized groups like girls, ethnic minorities, and the economically disadvantaged. School

feeding programs have had extensive benefits, particularly for the girl child. The girls have example have had instances where they have delayed pregnancies, stay longer in schools, and avoid early marriages (Wodon *et al.*, 2018). With these advantages, the school feeding programs have been able to foster improved intergroup relations among students from diverse backgrounds, offering them opportunities for collaboration and dialogue (Aldana and Checkoway, 2016).

Beyond the educational and social aspects, Neglo *et al.*, (2021) and other scholars have noted that school feeding programs play a pivotal role in supporting local farming and economies through the purchase of food from local farmers hence stimulating increased production and income for the agricultural sector. The stimulated economic activities on the other hand have come in handy to generate employment opportunities and financial gains for individuals involved in food production, including cooks, caterers, and transporters (Beatrice and Cesare, 2023; Sitao, 2018). The widespread consensus is that school feeding programs yield substantial benefits for students, their families, and society at large. Notably, these initiatives align with the Sustainable Development Goals, contributing to the overarching objectives of ending hunger, enhancing education, promoting gender equality, and reducing poverty. This underscores the critical importance of such programs in addressing various societal challenges.

School feeding programs help a lot, but they also have big problems like not enough money and things, making it hard to give good food to schools that need it (Zuercher *et al.*, 2022). Needing help from outside or not sure of government help makes the problem worse, along with problems in getting, keeping, and moving food, especially in far or dangerous places. Working with different people, like education, health, and agriculture parts, local leaders, communities, and non-government groups, makes the program harder to do well. Also, checking the program's results is a big problem (Zuercher *et al.*, 2022).

In as much as almost every country today has a school feeding program, these countries do not implement their programs from a common standard. Several modalities for implementing the programs have emerged over the years, but the most popular modalities that are currently being used across the board are on-site feeding, take-home rations, and food-for-education initiatives (Pastorino *et al.*, 2023). No matter the modality opted for, extensive research has indicated the students, the parents, the schools, the communities, and the nations reap remarkable benefits from the school feeding programs such as improved school enrolment, increased child retention in schools (low school dropout rates), better academic performance for the students, and notable economic gains for the communities (Sabina *et al.*, 2021).

Nigeria has not been left behind regarding the school feeding programs. Being a country that has one of the lowest child enrolment rates and with many children suffering from malnutrition, the country has attempted to address these issues by implementing its version of the school feeding program through initiatives such as the Home-Grown School Feeding Program (HGSF). HGSF was initiated in 2004 to address the educational and nutritional needs of disadvantaged children. Despite facing challenges, the program ceased in 2010, but the government soon realized that they needed to have a school feeding program in place, so in 2016, the National Home-Grown School Feeding Program (NHGSFP) was put up as the new school feeding program (Okolo-Obasi and Uduji, 2022). Some of the controversies that have surrounded the NHGSFP include allegations of corruption, unfairness, and unsustainability, coupled with doubts regarding the program's integrity and justice (Lawal *et al.*, 2024). These ethical concerns are crucial, given that the effectiveness of the NHGSFP relies heavily on public trust and respect.

According to the United Nations Children's Fund (UNICEF), by 2013 there were about 10.5 million Nigerian children who were not in school, and one out of every five children who do not go to school in the world is in Nigeria (UNICEF, 2013). Also, according to UNICEF (2015), Nigeria has the second highest number of children who are too short for their age in the world, with 32 percent of children under five having this problem. One way to resolve the low enrolment in Nigerian schools and the stunted growth in children is to implement the school feeding program. At some scale, School Feeding Programs (SFPs) have been present in Nigeria since the colonial period when some schools run by missionaries gave food to their students (Aderinto, 2015). But, as stated by Adekunle and Christiana (2016), the first official SFP in Nigeria was started in 2004 by the Federal Government, and it was called Home Grown School Feeding (HGSF). The HGSF was a test program that wanted to make school children healthier and smarter, and also help local farmers and communities by buying food from them. The HGSF was done by the Federal Ministry of

Education in 12 states and the FCT, chosen from the six regions (Okolo-Obasi and Uduji, 2022).

The Home-Grown School Feeding had many problems like not enough money, bad coordination, corruption, and not checking and measuring the program well. The problems made the HGSP stop in 2007 but some states kept their SFPs going. SFPs did well in some of the states, and this made the federal government start the HGSP again in 2016 with a new name – the National Home-Grown School Feeding Program (NHGSFP) (Paulinus Sunday Okah *et al.*, 2023). Jev *et al.* (2023) say that the NHGSFP was part of the Social Investment Program (SIP) of the current government under the Federal Ministry of Humanitarian Affairs, Disaster Management, and Social Development, with help from the state governments and private people. The NHGSFP wants to make school children healthier and smarter, make more children go to school, make schools better for learning, and help farmers sell their food (Jey *et al.*, 2023). The NHGSFP uses school feeding with local food making, changing, and selling, helping small farmers, especially women and young people (Beáta *et al.*, 2023). The program is run by the Federal Ministry of Humanitarian Affairs, Disaster Management, and Social Development, with help from other partners like the World Food Program, Partnership for Child Development, and Action Health Incorporated (Nwaobi. 2023).

The NHGSFP has grown to include all 36 states and the FCT, reaching over 9 million students in over 50,000 public primary schools by 2020 (Agbade and Bassey, 2023). The program gives one healthy meal per day to each student, using food that is made locally (Solomon and Yusuf, 2022). The program also trains and helps over 100,000 cooks, who are mostly women and works with over 300,000 small farmers, who give the food (Eberechiibekwe, 2022). The program also has other parts, like giving medicine to stop worms, giving more nutrients, teaching about being clean and growing plants in school (Jey *et al.*, 2023).

Studies by scholars like Obumneke-Okeke *et al.*, (2019) and Agu *et al.* (2023) and others say that the National Home-Grown School Feeding Program has made more children go to school, made less hunger, solved malnutrition, and made less poverty for children and their families. The studies also say that the program has helped local places by creating jobs, making money chances, and making food and farming better. The program did well because it worked with education, health, justice, agriculture, budget, and planning parts at the federal government, state governments, and local community levels. To make the program work well, the Federal Government takes care of feeding children in primary 1 to primary 3, while state governments that want to join can take care of primary 4 to 6.

This study critically examines and analyses the ethical dimensions and challenges associated with the implementation of the School Feeding Program (SFP) in Nigeria. Despite being a well-intentioned initiative aimed at addressing malnutrition, enhancing educational outcomes, and promoting social welfare, the School Feeding Program in Nigeria is beset by numerous ethical issues and controversies (Aliyar *et al.*, 2015). These issues undermine the effectiveness, equity, and integrity of the program, thereby hindering its ability to achieve its stated objectives and maximize social impact. The study is raised as a result of the serious concern that has been raised regarding the equitable distribution of resources and benefits within the School Feeding Program, with disparities observed in the quality and coverage of meals across different regions, schools, and socioeconomic groups (Anaduaka and Okafor, 2013). Additionally, several studies have indicated that transparency and accountability mechanisms within the School Feeding Program are often lacking or inadequate, leading to issues such as corruption, mismanagement of funds, and diversion of resources (Lukman and Hamadi, 2014). Based on the highlighted ethical issues, this study tends to investigate the allegations that have been made towards NHGSFP, identify the sources of said controversies, and recommend amicable solutions.

This study is being conducted with the primary objective of examining the ethical considerations in Nigeria's School Feeding Program; with the ethical issues having been identified to include the aspects of corruption, food quality, discrimination, and enrolment obstacles. This main objective is being pursued to obtain profound insights and practical recommendations for enhancing the ethical aspects of the National Home-Grown School Feeding Program (NHGSFP) through a comprehensive analysis of several factors that have been deemed as affecting the ethical standing of the entire school feeding programs in Nigeria. Once the desired insights have been obtained, the study is expected to contribute to the growing body of knowledge that adds to the sustainability discourse of school feeding programs in Nigeria and similar contexts. The specific research objectives include:

1. To explore the perspectives, opinions, and experiences of various stakeholders involved in the School Feeding Program.
2. To assess the ease with which deserving students are enrolled in the NHGSFP program
3. To assess the effectiveness and impact of the School Feeding Program from an ethical standpoint.
4. To propose ethical guidelines, best practices, and recommendations for enhancing the ethical conduct and governance of the School Feeding Program in Nigeria

These selected goals and objectives are meant to identify potential impediments to the program's ethical adherence. This is because the objectives have been strategically designed to address diverse ethical challenges within the National Home-Grown School Feeding Program (NHGSFP) in Nigeria by contributing to the investigation into disparities in opportunities, instances of discrimination, and enrolment issues, all of which have the potential to impair the effective operation of the NHGSFP. Since the ultimate aspiration of this study is to function as a potent catalyst for positive transformation, exerting a palpable influence on the advancement, refinement, and sustained viability of school feeding initiatives, manifesting its impact both within the local context and reverberating across the broader international landscape, the research is being conducted in a way that seeks to augment the ethical dimensions of school feeding programs within the Nigerian context, nurturing their enduring nature and heightened efficacy, but also endeavors to contribute profoundly valuable insights to the overarching global discourse surrounding the ethical considerations within analogous programs.

1.2 Research Questions

Based on the research objectives, the research questions of this study are:

1. What are the ethical dimensions of the NHGSFP?
2. Are there inequitable access or discrimination issues within the school feeding program in Nigeria?
3. What is the overall ethical integrity of NHGSFP?
4. What are some of the recommendations that can be made to NHGSFP for ethical improvement?

1.3 Justification of the Study

Accepted as crucial endeavors, school feeding programs (SFPs) emerge as significant initiatives striving to enhance the health, nutrition, and education of schoolchildren, particularly in economically disadvantaged nations such as Nigeria, where a substantial portion of the youth populace faces barriers to education and adequate nutrition (Adeomi *et al.*, 2021). Commencing in 2016 under Nigeria's Social Investment Programme, the National Home-Grown School Feeding Program (NHGSFP) garnered commendation for its potential benefits, including increased school attendance, alleviation of hunger and poverty, support for local farmers, and job creation (Oladejo and Okoli-Uwajumogu, 2019). However, amidst the laudable objectives, the program is not without ethical quandaries, prompting this research to unveil and address these issues, offering insights for resolution.

A primary ethical concern within the NHGSFP pertains to the quality and quantity of school meals, where studies highlight the inadequacy and lack of nutritional value in the provided food, potentially impacting the health and learning capabilities of the children (Alabede *et al.*, 2020). Furthermore, cultural and dietary mismatches have been raised as grievances, emphasizing the need for a more inclusive and culturally sensitive approach to meal provisions.

Omoera *et al.*, (2021) mentioned the lack of accountability among the officials of NHGSFP as one of the most important ethical challenges that need addressing. Address such a challenge likely requires the involvement of multiple stakeholders from the government, private sector, civil society, and communities so that they can together put in place proper guidelines, checks, and balances, and feedback mechanisms that can potentially pave the way for dealing with corruption, mismanagement, and financial or food-related malfeasance, that have compromised the program's quality and long-term viability. This research is therefore being conducted to provide a glimpse of how such a stakeholder forum can be formed and to also provide a framework through which the forum can rely on implementing any changes to the school feeding program through the NHGSFP. At the end of the day, this research aspires to furnish valuable information and guidance extending beyond the confines of the specific program, contributing to the broader discourse on the effective implementation of school feeding programs, not only in Nigeria but in diverse contexts

facing analogous challenges.

3.1 Research Design

In this study, a quantitative research design is meticulously crafted to delve into the multifaceted ethical dimensions embedded within Nigeria's School Feeding Program, with a particular spotlight on the National Home-Grown School Feeding Program (NHGSFP). Quantitative methodologies are selected for their ability to offer systematic and numerical insights into stakeholders' perceptions, experiences, and attitudes concerning ethical challenges within the NHGSFP. The structured questionnaire employed in this research is thoughtfully designed to elicit both categorical and ordinal data, facilitating comprehensive analysis and interpretation of stakeholders' responses. By embracing a quantitative research paradigm, this study endeavors to furnish empirical evidence capable of guiding policy formulations and interventions aimed at ameliorating ethical conduct and governance within the NHGSFP, thereby fostering transparency, accountability, and effectiveness in program implementation.

The quantitative research design adopted in this study provides a robust framework for investigating the intricate interplay of factors influencing ethical considerations in the NHGSFP. By employing standardized data collection instruments and statistical analyses, this approach ensures a systematic exploration of stakeholders' perspectives while facilitating the identification of overarching trends and patterns. Moreover, the quantitative nature of the research design enhances the reliability and generalizability of findings, allowing for comparisons across different demographic groups and geographical regions. Through a judicious combination of quantitative methods and rigorous analytical techniques, this research aims to illuminate the ethical challenges inherent in Nigeria's School Feeding Program and offer evidence-based recommendations for enhancing its ethical conduct and governance.

Furthermore, the quantitative approach enables the synthesis of large volumes of data, enabling researchers to discern subtle nuances and variations in stakeholders' perceptions and experiences with the NHGSFP. By quantifying stakeholders' responses to specific survey questions, researchers can identify key areas of concern and prioritize interventions to address them effectively. Additionally, the structured nature of the questionnaire ensures consistency and reliability in data collection, minimizing the risk of measurement error and enhancing the validity of research findings. Overall, the quantitative research design adopted in this study offers a rigorous and systematic framework for examining the ethical dimensions of the NHGSFP, providing valuable insights for policy-makers, practitioners, and researchers seeking to promote ethical governance and accountability in school feeding programs.

3.2 Population of the Study

Within the understanding that a population is the entire collection of individuals, objects, or events that the researcher is interested in learning about; or rather a representation of the complete set from which information is desired (Mohajan, 2020), the population of this study is therefore the various stakeholders involved in Nigeria's School Feeding Program (NHGSFP), including government officials, program administrators, school staff, parents, community members, and beneficiaries of the program. The population of this study is composed of individuals who represent a diverse range of roles and perspectives within the context of the NHGSFP, each contributing uniquely to its implementation, oversight, and impact. Government officials, for instance, play a central role in policy-making, funding allocation, and program management, shaping the overarching framework and direction of the NHGSFP while the program administrators are tasked with day-to-day operations, coordination, and monitoring of activities, ensuring the smooth functioning and effectiveness of the program at the grassroots level.

School staff, including teachers and administrators, serve as frontline implementers of the NHGSFP, facilitating the distribution of meals, overseeing meal quality, and monitoring student participation as parents, being the primary caregivers and stakeholders in their children's education and well-being, providing crucial perspectives on the accessibility, adequacy, and impact of the program on their families. Community members, including local leaders and representatives, contribute to the contextual understanding of the NHGSFP within the broader socio-cultural and economic landscape, influencing community support, participation, and engagement with the program whereas the beneficiaries of the NHGSFP, comprising schoolchildren from disadvantaged backgrounds, are at the heart of the study population. Their experiences, perceptions, and outcomes related to program participation, food provision, and educational attainment are

central to understanding the program's effectiveness and ethical considerations.

3.3 Sampling and Sample Size

The target population for this study comprises various stakeholders involved in or affected by the National Home-Grown School Feeding Program (NHGSFP) in Nigeria, including government officials, school administrators, teachers, parents or guardians of beneficiaries, community members, and beneficiaries themselves. A convenience sampling technique will be employed to select participants based on their accessibility and willingness to participate in the study. Despite potential limitations in representativeness, convenience sampling is chosen for its practicality and feasibility in reaching a diverse range of stakeholders within the constraints of time and resources.

A good representation of the population is determined by two main factors, the sampling technique where random sampling is the most ideal, and the sample size. The sample size refers to the discrete number of individuals randomly selected from the population to act as the sample for the population of the study. To obtain a close enough representation of the population, researchers consider factors such as the desired level of precision which refers to the acceptable margin of error in the study's results, and the desired confidence level which reflects the degree of certainty researchers want in their findings typically expressed as a percentage e.g., 95%, the variability of the metric of interest in the population where if the population is highly diverse, a larger sample is needed to capture this variability and ensure the chosen group accurately represents the broader population, and the practical considerations like budget, time, and accessibility since larger samples may be statistically ideal but researchers must also consider resource constraints (Jenkins and Quintana-Ascencio, 2020; Vozzi et al., 2021).

In the context of this study on the ethical considerations in Nigeria's School Feeding Program (NHGSFP), both qualitative and quantitative analyses require careful consideration of sampling techniques and sample sizes to ensure the validity and representativeness of the findings. For the quantitative analysis, a stratified random sampling approach may be employed to select participants for surveys. This involves dividing the population into homogeneous subgroups or strata based on relevant characteristics, such as geographical location (urban/rural), school size, socioeconomic status, and program participation status, and from each stratum, a random sample of participants was selected to ensure adequate representation across different demographic and program-related variables. The sample size for quantitative analysis was determined based on statistical considerations, such as desired confidence level, margin of error, and anticipated effect size. Given that the population of this study was assumed to be infinite, the sample size formula given below yielded a sample size of 385 (rounded up to 400).

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$$n = \frac{Z_{1-\frac{\alpha}{2}}^2 * \sigma^2}{d^2} \quad (3.1)$$

Where n is the sample size, $Z_{1-\frac{\alpha}{2}}$ is the standardized value for the corresponding level of confidence (at 95% CI, it is 1.96) d is the margin of error or rate of precision, and σ is the expected standard deviation (Sharma *et al.*, 2020).

3.4 Data Collection Process

Because this study employed a mixed-methods research design, structured surveys were used to gather both quantitative and qualitative data from a representative sample of the stakeholders involved in the NHGSFP, which included beneficiaries, program administrators, government representatives, teachers, parents, and community members. To ensure that the assessment is based on properly structured survey questions that were carefully crafted based on the research objectives and previous literature, the survey instrument was created to evaluate perceptions, experiences, and attitudes regarding ethical issues such as corruption, food quality, discrimination, and enrollment obstacles within the NHGSFP. It also included both closed-ended and Likert-scale items to facilitate quantitative analysis. The survey instrument (Appendix 1), has been designed with closed-ended questions to capture the quantitative part of the data, and open-ended questions to capture the qualitative part of the data.

Throughout the data collection process, rigorous quality control measures were implemented to ensure the reliability and validity of the data; and this was done by ensuring that only trained researchers or facilitators conduct interviews and FGDs using standardized protocols, and maintaining consistency and impartiality in data collection procedures. Surveys were pre-tested to identify and address any ambiguities or issues with questionnaire items, and data collection instruments were piloted with a small subset of participants to assess feasibility and comprehension, and also to test for the validity of the survey instrument.

3.5 Data Analysis

Phase 1 of the study's data analysis was done for quantitative data, while Phase 2 was done for qualitative data. This process of data analysis was similar to that of data collecting. The procedures of data cleansing, data exploration, and data organization in Microsoft Excel were followed in the quantitative data analysis. After that, the structured data was imported into IBM SPSS for both inferential and descriptive analysis. To gain an overview of the data's central tendencies and dispersions, a descriptive analysis was conducted. To quickly grasp the dataset's distribution, statistics like the mean, median, mode, standard deviation, minimum, and maximum were computed.

Visualizations were performed on the dataset with charts and graphs such as histograms, pie charts, and bar charts used to represent the distributions of various types of data depending on whether the data is numeric or of a categorical nature. Inferential analysis using correlation and regression techniques was used to compare the numeric data against the various categorical groups that were collected from the participants. The inferential tests were conducted to test hypotheses that were derived from the research questions. Hypothesis testing was done at 95% confidence level which is the confidence level that is useful for most studies (Wang, 2023).

Following the quantitative analysis, the second phase involved qualitative data analysis in which a thorough examination of the open-ended responses, observations, and other non-numerical data collected during the study was conducted. The qualitative data were analyzed using thematic analysis during which patterns and themes within the data were identified and interpreted to provide a deeper understanding of the research problem, complementing the quantitative findings. The integration of both quantitative and qualitative data analyses ensured a comprehensive understanding of the research problem, thereby providing robust and reliable findings. Ultimately, the results from both phases of data analysis were interpreted in light of the research objectives, leading to meaningful conclusions and recommendations. This comprehensive approach to data analysis ensured that the study's findings were as accurate and insightful as possible, contributing significantly to the existing body of knowledge.

3.6 Ethical Considerations

This study was conducted under the ethical guidance stipulated by the University, and at the same time ensuring that the accepted and standardized guidelines for conducting research are fully adhered to. In particular, the study ensured that the participants of the study were respected, their privacy and confidentiality information were protected and that the participants were treated with utmost respect and decorum (Ford and Scandura, 2023). More specifically, this study ensured that the points outlined below are strictly followed:

1. **Informed Consent:** To ensure that the participants provide their consent before participating in the study, the participants were fully informed about the purpose and procedures of the survey, potential risks and benefits, and their rights, including the right to withdraw at any time without penalty.
2. **Confidentiality and Anonymity:** Once data is collected from the participants, any privacy information from the participants, though such information was avoided at all costs to ensure the confidentiality of participants' responses and the anonymity of the participants was guaranteed. This was achieved by using unique identifiers instead of names, securely storing data, and restricting data access to authorized researchers only.
3. **Respect for Participants:** The privacy of the participants, their dignity, and cultural norms were respected.
4. **Minimizing Harm:** Though this research doesn't have any physical risks associated with it, the participants were informed that there is an unlikely possibility that they may be exposed to unforeseen risks while participating in the study.

5. **Transparency and Honesty:** The researcher was transparent and honest with participants, and this was done by providing accurate information about the study's purpose and objectives, and any potential conflicts of interest.
6. **Professional Integrity:** Ultimately, this research was conducted in a manner that adheres to ethical standards of research conduct and professional integrity, including honesty, objectivity, and accountability. Ethical approval was sought from relevant institutional review boards or ethics committees before the study began

4.1 Analysis and Results

Nigeria's premier program, the National Home-Grown School Feeding Program (NHGSFP), aims to both boost local agricultural economies and give pupils in the country wholesome meals. However, it is essential to undertake a thorough examination of the program's effects on students, schools, and communities, as well as to address any ethical problems that may arise, to ensure both the program's efficacy and ethical integrity. This study aims to evaluate the effect of the NHGSFP on community engagement, school attendance, and academic performance using the Statistical Package for the Social Sciences (SPSS). The analysis also attempts to pinpoint and suggest methods for improving the program's ethical foundation. To facilitate effective statistical processing, variables were coded from textual to numerical values before analysis. Using this meticulous analysis, we aim to offer significant perspectives on the program's effectiveness and moral implications, ultimately aiding in its ongoing enhancement and accomplishment of its goals.

4.2 Demographic analysis

4.2.1 Data Size and Sampling

Initially, three primary schools were chosen for the study, representing different geographic areas of Nigeria: Model Primary School in Birnin Gwari, Bagoma (North West), Ugboko Primary School in Ugboko (South-South), and Community Primary School in Obaseere, Ibadan (South West). 21 research questionnaires were sent to each school. Of them, 100 responses that might be used were obtained, and 14 surveys were discarded because of mistakes. With an emphasis on the NHGSFP specifically, this large dataset allowed for a thorough examination of ethical issues related to Nigeria's school feeding program.

Table 1: NHGSFP school attendance, and academic performance base on Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3.0	3.0	3.0
Female	37	55.2	55.2	58.2
Female, Prefer not to say	1	1.5	1.5	59.7
Male	26	38.8	38.8	98.5
Prefer not to say	1	1.5	1.5	100.0
Total	67	100.0	100.0	

4.3 Variables Analysis Summary

4.3.1 Demographic Information

The respondents' demographic profile displays a wide variety of traits. First, in terms of age distribution, the bulk of responders—44.8% of the sample—come from the 30- to 39-year-old age range, suggesting a notable representation of this demographic. The age group of 18 to 29 years old accounts for 25.4% of the total respondents, which is a significant proportion of younger people in the sample. Less respondents from the 40–49 age group (20.9%) and other age groups are also included in the statistics; these respondents make up less than 2% of the sample as a whole. This distribution emphasizes how crucial it is to take age diversity into account when figuring out respondents' opinions of the NHGSFP.

Table 2: Part A; Demographic information by Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	4.5	4.5	4.5
18-29 years old	17	25.4	25.4	29.9
18-29 years old, 30-39 years old	1	1.5	1.5	31.3
30-39 years old	30	44.8	44.8	76.1
40-49 years old	14	20.9	20.9	97.0
50-59 years old	1	1.5	1.5	98.5
Less than 18 years old	1	1.5	1.5	100.0
Total	67	100.0	100.0	

4.3.2 Education Level Analysis

Regression analysis showed that respondents' educational level and their belief in the National Home-Grown School Feeding Program's (NHGSFP) good influence on communities were significantly positively correlated ($\beta = 0.254$, $p = 0.038$). This suggests that people with greater levels of education are generally those who have more positive opinions on the influence of the NHGSFP. According to the coefficient of determination ($R^2 = 0.064$), respondents' opinions on the NHGSFP's influence account for around 6.4% of the variance in education level.

Table 3: Education Level Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.254 ^a	.064	.050	.779	.064	4.468	1	65	.038

4.3.3 Community Type Analysis

Thirty percent of rural residents disagreed (No), sixty percent agreed (Yes), and ten percent expressed uncertainty (Yes, No). Urban residents, on the other hand, showed greater support; only 1.8% expressed uncertainty, 52.7% disagreed, and 45.5% agreed. A significant correlation was found by using the chi-square test between the type of community and the perception of the impact of the NHGSFP ($\chi^2 = 47.359$, $df = 6$, $p < .001$). The overall analysis indicates a noteworthy relationship between community type and attitudes toward the impact of NHGSFP, with urban residents exhibiting more positive perceptions than their rural counterparts, even though some cells have expected counts below 5, indicating caution in interpretation.

Table 4: Degree of NHGSFP Impacts on the communities it serves

Count		10. Do you believe that the NHGSFP has had a positive impact on the communities it serves?				Total
		No	Yes	Yes, No		
4. What is the type of community you live in?	Rural	2	0	0	0	2
	Urban	1	3	6	0	10
	Total	3	32	31	1	67

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	47.359 ^a	6	.000
Likelihood Ratio	19.604	6	.003
N of Valid Cases	67		

4.3.4 State of Residence Analysis

Remarkably, the greatest percentage of positive beliefs was exhibited by respondents from Lagos state, where 58.3% of them agreed that the NHGSFP had a positive effect.

Table 5: NHGSFP Residence Analysis on positive impacts on communities

Count		10. Do you believe that the NHGSFP has had a positive impact on the communities it serves?				Total
			No	Yes	Yes, No	
5. What is your state of residence in Nigeria?		2	1	0	0	3
	Abuja	0	1	1	0	2
	Akure	0	0	1	0	1
	Anambra	0	0	3	0	3
	Anambra State	0	1	0	0	1
	Delta	0	1	0	0	1
	Delta state	0	0	0	1	1
	Edo	0	0	1	0	1
	Edo State	0	0	1	0	1
	Edo state	0	0	1	0	1
	Edom state	0	0	1	0	1
	Ekiti	0	1	0	0	1
	Enugu	0	1	0	0	1
	FCT	0	3	1	0	4
	Imo	0	1	4	0	5
	Kwara State	0	0	1	0	1
	Lagos	0	5	7	0	12
	LAGOS	1	0	0	0	1
	Ogun state	0	0	1	0	1
	Ogun State	0	1	0	0	1
	Omo State	0	1	0	0	1
	Ondo	0	1	0	0	1
	Oyo	0	0	1	0	1
	Port Harcourt	0	2	0	0	2
	Portharcourt	0	0	1	0	1
	Portharcut	0	1	0	0	1
	River State	0	0	1	0	1
	Rivers	0	4	0	0	4
	Rivers state	0	1	3	0	4
	Rivers State	0	6	2	0	8
	Total	3	32	31	1	67

In contrast, sentiments were more divided in River's state, where 12.5% expressed uncertainty, 37.5% disagreed, and 50% agreed. Despite the majority of cells having anticipated counts below 5, which suggests caution in interpretation, the chi-square test revealed a significant connection between the state of residency and perception of NHGSFP influence ($\chi^2 = 154.008$, $df = 87$, $p < .001$). The need for focused interventions suited to particular geographic contexts is highlighted by this analysis, which also highlights regional differences in opinions of the efficacy of the NHGSFP.

4.3.5 Occupation Analysis

In the investigation of respondents' jobs and their assessments of the NHGSFP's influence on communities, several noteworthy observations emerge. Among persons engaged in the private sector, 46.2% said the NHGSFP had a beneficial influence, making it the supportive group. Individuals employed in the public sector, with 53.8% expressing positive opinions, closely followed this group. Notably, self-employed individuals also expressed a positive view, with 36.4% noting the program's impact. Conversely, students and the unemployed displayed more balanced viewpoints, with 40% and 50% agreement percentages, respectively. This intricate pattern emphasizes the range of viewpoints among different professional groups and underscores the need for specific tactics to handle varying stakeholder perceptions effectively.

4.4 Perceptions of NHGSFP Analysis

4.4.1 Awareness and Knowledge Level Analysis

Respondents' assessments of the program's impact and their self-reported knowledge levels were shown to be significantly correlated in the regression analysis on the positive belief in NHGSFP's influence on communities, with the knowledge rating of NHGSFP serving as the predictor. A somewhat positive link was shown by the correlation coefficient (r) of 0.411 between the NHGSFP knowledge assessment and belief in the program's favorable impact. With the NHGSFP knowledge rating acting as a predictor for positive belief in NHGSFP's influence on communities, the regression model was statistically significant ($F(1, 62) = 12.627, p = .001$). A one-unit rise in NHGSFP knowledge rating is associated with a comparable increase in positive confidence in NHGSFP's influence of about 0.411 units, according to the standardized coefficient (Beta) of 0.411. This suggests that those who have greater ratings of their level of knowledge about the NHGSFP are more likely to think that it has a good effect on communities.

The respondents who think the NHGSFP had no good effect are more likely to be those who ranked their knowledge lower (for example, of those who assessed their knowledge at 1.0, 17 replied "No" and 6 said "Yes"). Alternatively, for every 5.0 knowledge rating, 6 respondents replied "Yes" and 1 said "No"; this indicates that more respondents believe in the favorable influence of NHGSFP as knowledge ratings rise. This supports the results from the regression analysis, which show that higher knowledge evaluations are linked to greater belief in the beneficial effects of NHGSFP on communities, and implies a possible relationship between perceived knowledge and belief in the program's role.

4.5 Food Quality and Corruption Allegations Analysis

4.5.1 Model Summary

Respondents' assessments of the program's impact and their self-reported knowledge levels were shown to be significantly correlated in the regression analysis on the positive belief in NHGSFP's influence on communities, with the knowledge rating of NHGSFP serving as the predictor. A somewhat positive link was shown by the correlation coefficient (r) of 0.411 between the NHGSFP knowledge assessment and belief in the program's favorable impact. With the NHGSFP knowledge rating acting as a predictor for positive belief in NHGSFP's influence on communities, the regression model was statistically significant ($F(1, 62) = 12.627, p = .001$). A one-unit rise in NHGSFP knowledge rating is associated with a comparable increase in positive confidence in NHGSFP's influence of about 0.411 units, according to the standardized coefficient (Beta) of 0.411. This suggests that those who have greater ratings of their level of knowledge about the NHGSFP are more likely to think that it has a good effect on communities.

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Table 6: Degree of corruption and mismanagements in the NHGSFP

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.704 ^a	.495	.476	.365	.495	26.016	2	53	.000

a. Predictors: (Constant), 13. Have you heard about any allegations of corruption or mismanagement in the NHGSFP?, 12. In a scale of 1 to 5, how would you rate the quality of food provided under the NHGSFP?

4.6 Effectiveness and Support Analysis

A regression analysis was performed on the attitudes of respondents on the continuation of government support for the National Health and Wellness Programme (NHGSFP), and the results are informative. It has been found that there is a significant positive association between the dependent variable, which represents whether respondents believe the government should continue to support the program or disband it, and their perceptions of the efficacy of the NHGSFP in meeting its mandate. This correlation is robust and statistically significant ($p = 0.000$), which indicates that there is a strong association between the two variables.

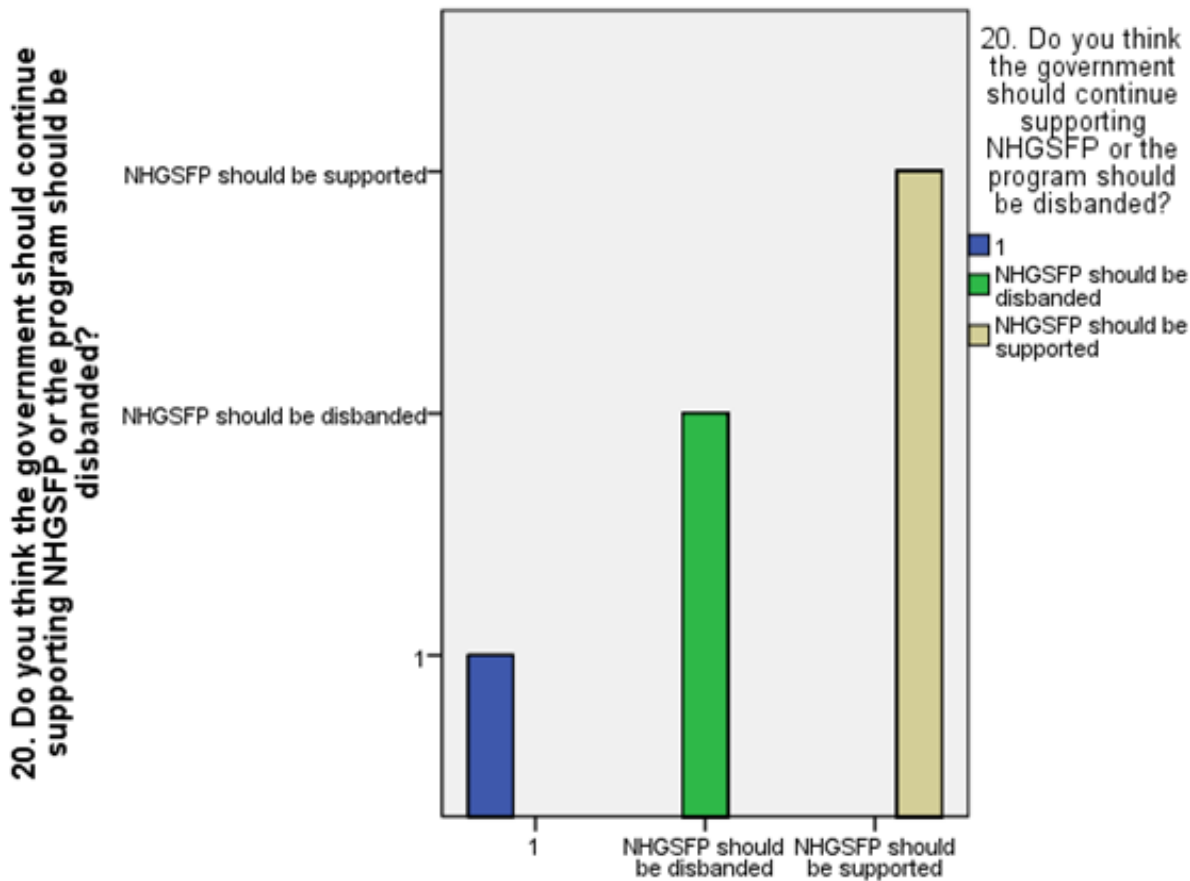


Figure 1: Governmental supporting rule to NHGSFP growth

On a scale that ranges from one to five, respondents who give the (NHGSFP) a better rating in terms of its effectiveness are more inclined to advocate for the program's continued support from the government. Further confirmation of this relationship is provided by the regression model, which demonstrates that the perceived effectiveness of the NHGSFP operates as a strong predictor of views toward the support it receives from the government. The effectiveness assessment has a positive influence on individuals' support for the program, as indicated by a beta value of 0.650 ($p = 0.000$). This highlights the significance of perceived performance in moulding public opinion and policy preferences about the National Health and Nutrition Service Programme (NHGSFP).

4.7 Results Discussion

4.7.1 Allegations of Corruption against NHGSFP

This study investigates the connection between public sentiment and allegations of misconduct in governmental initiatives. Numerous studies have indicated this correlation (Gutmann *et al.*, 2020; Akimova *et al.*, 2020; Hauk *et al.*, 2022). Specifically, the absence of transparency regarding government expenditure and the allocation of funds impacts the level of trust in these initiatives (Grimmelikhuijsen *et al.*, 2020). Transparency enables public oversight and involvement, leading to decreased suspicions of corruption (Grimmelikhuijsen *et al.*, 2020). Additionally, individuals' encounters with corrupt practices can have a substantial impact on their perceptions regarding initiatives against corruption, as stated by Li and Meng in 2020.

In line with prior research (Gutmann *et al.*, 2020; Akimova *et al.*, 2020; Hauk *et al.*, 2022), this research discovered a substantial number (37.3%) of respondents possessing knowledge of reported corruption or misallocation in the NHGSFP. This widespread consciousness goes beyond individual instances, indicating a deeply ingrained worry that is commonly held by a large portion of the population. These perceptions most likely originate from a variety of sources, such as media portrayals, informal communication methods like word-of-mouth, or personal experiences with the program.

Public trust is crucial for the successful execution and growth of social programs. If a large number of people believe corruption or mismanagement is happening, it can create doubts about the effectiveness and honesty of the program. This doubt could discourage those who are eligible from joining, weaken backing from the community, and impact policy decisions related to the program.

Interestingly, the research also discovered a slight positive connection, revealing a surprising result that requires more exploration. Individuals aware of accusations of corruption were more likely to believe in the advantages of the program. This apparent contradictory connection calls for investigation through the perspective of two possible reasons. First, some people may recognize the program's potential value despite the accusations. Second, those more informed about the program (and thus aware of the allegations) might have a more realistic understanding of its challenges and how it works. The study additionally found a link between education level and perception of the program's impact on the community. People with higher education may be better informed about the program's goals and workings, leading to a more positive view of how it is being run ethically. These findings highlight the importance of addressing public concerns about corruption in the NHGSFP. The research also highlights the significant disparity in perceptions between urban and rural residents, indicating the need for the NHGSFP to prioritize community engagement strategies tailored to specific contexts. Rural communities might require more targeted outreach and capacity building to ensure they fully understand and benefit from the program. The study points out regional variations in sentiment, with Lagos state exhibiting the strongest positive views, suggesting potential geographical inequalities. The NHGSFP would benefit from a more nuanced understanding of these regional disparities to ensure a more geographically balanced approach.

The occupational analysis reveals a generally supportive stance from the private sector, indicating the potential for public-private partnerships in promoting ethical practices (Riese, 2023). However, the diversity of viewpoints across professions underscores the complexity of stakeholder perceptions. The NHGSFP must consider these varied perspectives to develop effective communication and engagement strategies. The study's exploration of education, community type, and stakeholder professions sheds light on the multifaceted ethical landscape of the NHGSFP. By acknowledging the influence of these factors, the program can implement targeted interventions that promote transparency, address geographical inequalities, and cultivate trust across communities (Bojana *et al.*, 2023). This will pave the way for a more ethically sound and equitable NHGSFP, ultimately benefiting the program's sustainability and impacts.

The study argues that effective anti-corruption strategies prioritize prevention over cure. The NHGSFP must establish transparent procurement processes, stringent financial controls, and independent audits to deter unethical behaviour. Furthermore, a comprehensive code of conduct and mandatory ethics training will instill a culture of integrity among all stakeholders (Alizadeh *et al.*, 2020). Whistleblower protection serves as a crucial line of defense. The NHGSFP must create a secure and anonymous reporting system. This system, along with robust whistle blower protection measures, will encourage the reporting of misconduct, enabling early detection and intervention. Corrective actions, when allegations arise, are equally important. The program should be conducted thoroughly and have the culprits brought to book to serve as a deterrent and demonstrate the NHGSFP's commitment to ethical conduct. Transparency is important in this process, and public disclosure of investigation outcomes will rebuild public trust. Community involvement is another powerful tool (Msenge and Nzewi, 2021). The NHGSFP can empower local communities to monitor meal distribution and resource allocation, fostering a sense of ownership and reducing opportunities for corruption. Policy reform plays a critical role in addressing systemic vulnerabilities. The NHGSFP, in collaboration with government agencies and NGOs, can advocate for legislative changes that promote fair competition, prevent conflicts of interest, and establish clear sanctions for corrupt behaviour. A comprehensive approach that combines program-level efforts with broader policy reforms will create a more robust ethical environment.

4.7.2 Ease of enrolment in the NHGSFP program

Accessibility is another crucial factor that impacts the ease of enrolment for eligible students in the NHGSFP. The results of the study suggest that accessibility goes beyond just being physically close to places where food is available. It also includes the convenience of accessing information regarding the program. The NHGSFP needs to focus on ensuring that information is readily available. This may include converting enrolment information into nearby dialects and utilizing various communication platforms like educational institutions, community hubs, and media platforms (Purnell *et al.*, 2020). Such actions can guarantee that every party involved, irrespective of their origins, can obtain information regarding the program. The results of the research are consistent with the wider body of literature on school meal initiatives. Research shows that transparent and simple enrolment procedures are crucial for social program participation (Robertson *et*

al.; Rasheed and Louca, 2024). Likewise, the idea of information equity, which guarantees information access for every stakeholder regardless of their background, is a widely accepted principle in the literature.

The selection criteria used by programs like the NHGSFP play a crucial role in determining how easily beneficiaries are enrolled. The results of this study indicate that variations in how the program is being carried out in various areas and communities could result in unequal opportunities for access. The demographic study shows a strong connection between community category and opinions on the effects of NHGSFP, with urban dwellers showing more favorable views compared to those living in rural areas. This may suggest that the advantages of the program are more visible or easily attainable in cities, possibly because of superior infrastructure or resources. This imbalance may result in unequal access to the program's advantages, putting children in rural regions at a disadvantage.

It is essential to have clear eligibility criteria to guarantee equal opportunity in the program (Lnenicka and Nikiforova, 2021). The research results indicate that belief in the positive impact of the NHGSFP is linked to understanding and awareness of the program. This means that providing clear information about the program and who is eligible for it may improve community backing and involvement. Nevertheless, the research uncovers claims of corruption and mismanagement in the NHGSFP, which may erode confidence in the initiative and discourage participation. Responding openly to these accusations and implementing measures to prevent similar incidents in the future is essential to uphold the program's credibility and trust within the community. The NHGSFP has the potential to make a significant impact on students from various socio-economic backgrounds. The initiative can alleviate food insecurity, a significant barrier to education for kids in impoverished households, by providing meals to school-aged children (Litt *et al.*, 2020). Still, the program's capacity to effectively reach these children depends on the fairness and transparency of its eligibility criteria.

The findings of the study suggest that individuals with higher education levels are more likely to have confidence in the positive impact of the NHGSFP on communities. This indicates that people with more education might better understand the benefits of the program due to their deeper comprehension or knowledge. The enrolment process in the NHGSFP program is greatly influenced by the level of awareness and information sharing among potential beneficiaries. The data analysis reveals a correlation between having a better understanding of the NHGSFP and having faith in its beneficial effects on communities. This shows that communication tactics that enhance knowledge about the program can significantly influence perspectives on its efficiency. Hence, the NHGSFP must employ effective and thorough communication strategies to ensure that prospective beneficiaries are aware of the program (Gupta *et al.*, 2021). The dissemination of information is essential in assisting with the enrolment procedure. Having a better understanding of the program raises the chances of beneficiaries signing up. Enrolment of students is particularly important in the NHGSFP, as the success of the program depends on it.

Nevertheless, the data analysis also shows that knowledge of accusations of corruption or mismanagement within the NHGSFP results in decreased confidence in the program's positive effects. This highlights how crucial transparency and accountability are in the programs functioning. Thoroughly investigating and addressing any accusations of corruption or mismanagement is crucial to upholding public trust in the program. The results of this research correspond with previous studies on school meal initiatives. Prior studies have highlighted the importance of disseminating awareness and information for the success of these efforts (Parolin and Lee, 2021; Tester *et al.*, 2020). They have also stressed the significance of being transparent and accountable to maintain public trust. Furthermore, studies suggest that effective communication strategies need to be cognizant of the cultural differences and diverse linguistic backgrounds of the individuals involved (Aririguzoh, 2022). This is especially important when considering Nigeria, a nation known for its diverse cultural and linguistic characteristics.

4.7.3 Impact of NHGSFP on students, schools, and communities

In assessing the Impact of NHGSFP on students, schools, and communities; this part shifts attention to the effect NHGSFP has had on students, schools, and communities. The conversation is focused on community involvement, nutritional effects, economic effects, and perception and backing. The involvement of local farmers, parents, and community leaders is crucial for community engagement in the NHGSFP. The program's design naturally encourages community engagement through the use of local food sources, which helps strengthen local agricultural economies (Son, 2024). This not only guarantees the program's long-term viability but also boosts economic development in the community.

Yet, data analysis shows that community engagement levels differ among various regions and demographic groups. The analysis of regression indicated a notable, favourable relationship between the educational status of respondents and their confidence in the NHGSFP's beneficial effects on communities. This indicates that people with more education are more inclined to view the program favourably, perhaps because they have a clearer grasp of its goals and advantages. Thus, educating the community about the program could lead to higher community involvement and backing for the program. The study also showed a notable correlation between community type and opinions on the effects of NHGSFP, with urban dwellers having more favourable views compared to those living in rural areas. The variances in resource availability, infrastructure, and access to information between urban and rural areas may explain this.

Consequently, specific tactics might be necessary to improve local involvement in rural regions. Additionally, the data indicated varying opinions on the effectiveness of the NHGSFP across different regions. This highlights the significance of taking into account unique situations and customizing the program's execution to address the particular requirements and conditions of diverse areas. The involvement of local farmers in the program ensures a market for their produce and access to fresh crops. The NHGSFP's goal is to offer nutritious meals to students in Nigeria, aiming to support the local farming industry and enhance students' nutritional health.

The evaluation of the program's nutritional effects involves analyzing how students' health and nutrition status have changed since the program began. Research has found that NHGSFP has also had a significant impact on the economy. One example is the National Home-Grown School Feeding Program (NHGSFP), which involves using farm products from small-scale farmers to offer nutritious meals to students daily. This program establishes a direct link between nearby farmers and schools, enhancing farmers' access to the school food market and ultimately bolstering local agricultural economies. Moreover, the NHGSFP also contributes to generating job opportunities, particularly in the food manufacturing and service sectors. Furthermore, research indicates that the program greatly benefits the health and educational success of students in rural schools, ultimately contributing to the economic development of rural regions (Zheng *et al.*, 2022; Ahmed, 2024; Laros *et al.*, 2023). People who have received more education are more inclined to see the NHGSFP as having a beneficial effect on communities, demonstrating a link between education and positive opinions of the program. Urban residents have a more positive outlook compared to rural dwellers, indicating varying opinions based on location. This highlights the importance of considering community traits when assessing the program's effectiveness. Similarly, the varying perspectives individuals hold based on their location emphasize the necessity of developing tailored interventions for specific geographical regions.

Moreover, varying opinions within professional communities highlight the importance of specific tactics to accurately manage various stakeholder perspectives. These results emphasize the many aspects of how the NHGSFP affects local agricultural economies, job creation, community involvement, and educational perspectives, requiring holistic strategies to optimize advantages and tackle possible obstacles.

Different demographic groups in Nigeria have viewed the National Home-Grown School Feeding Program (NHGSFP) in various ways. The respondents' ages varied, with a large percentage (44.8%) being between 30 and 39 years old, showing a strong presence in the sample. Moreover, 25.4% of the total respondents were in the age group of 18 to 29 years old, indicating a significant presence of younger individuals in the sample.

In addition, a strong positive connection was found between participants' level of education and their confidence in the NHGSFP's positive impact on communities. This means that people with more education generally have more positive views of the program. City dwellers showed greater favourability towards NHGSFP compared to those living in rural areas, suggesting a significant link between community settings and attitudes towards the program's impact. There was a notable correlation between the locations of residence and how the NHGSFP is perceived, highlighting the necessity for interventions that are customized to specific geographical settings. The research also discovered a variety of opinions among various professions, emphasizing the importance of using specific strategies to manage diverse stakeholder views successfully.

The analysis found a strong correlation between how well participants believe NHGSFP is fulfilling its purpose and their backing for the program's continuation. This strong correlation, which is both robust and statistically significant, demonstrates a clear link between the perceived effectiveness of the program and the support for its continuation. The results of this study are consistent with previous research on school meal

programs, proving to enhance school attendance and stimulate the economy at a local level. Yet, the accusations of corruption and mismanagement found in this research could harm the public's confidence in the effectiveness of the NHGSFP. To sum up, despite its progress in feeding many primary school students, the NHGSFP still needs to tackle corruption and guarantee effectiveness.

5 Conclusion

The research aimed to investigate the moral aspects of Nigeria's National Home-Grown School Feeding Program (NHGSFP), looking into claims of corruption, challenges in enrolment, the effects of the program on students, schools, and communities, and ways to improve ethics. The analysis results offer a thorough comprehension of the ethical aspects of the NHGSFP and provide valuable suggestions for its enhancement.

The research discovered that a notable portion of participants know about accusations of corruption or mismanagement in the NHGSFP. This realization is linked to a decreased faith in the positive impact of the NHGSFP on societies, indicating that such accusations could harm the public's confidence in the program's effectiveness. The research uncovered a significant correlation between the type of community and views on the effects of NHGSFP, showing that urban dwellers have a more favorable outlook compared to those living in rural areas. This indicates the requirement for targeted interventions tailored to specific geographic locations.

Moreover, the research discovered a notable correlation between the perceived success of the NHGSFP and the belief that the government should sustain its backing of the initiative. This emphasizes how important perceived performance is in influencing public opinion and policy preferences regarding the NHGSFP. The research discovered that individuals who rated their understanding of the NHGSFP as high are more inclined to think it positively impacts communities. This indicates a potential connection between how much someone knows and their belief in the program's importance, indicating that raising awareness and comprehension of the NHGSFP might improve its ethical reputation.

In conclusion, while the NHGSFP has made significant strides in boosting local agricultural economies and providing wholesome meals to pupils, it is crucial to address the ethical issues identified in this study to ensure the program's efficacy and ethical integrity. The study recommends implementing focused interventions based on geographic contexts, increasing transparency to address allegations of corruption, and enhancing public awareness and understanding of the NHGSFP. These measures would not only augment the ethical dimensions of school feeding programs within the Nigerian context but also contribute profoundly valuable insights to the overarching global discourse surrounding the ethical considerations within analogous programs.

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APPENDIX 1: QUESTIONNAIRE

Dear Respondent,

I am conducting a study on the ethical considerations in Nigeria's School Feeding Program, specifically the National Home-Grown School Feeding Program (NHGSFP). This research aims to scrutinize the allegations that NHGSFP has been involved in corruption and mismanagement, assess the ease with which deserving students are enrolled in the NHGSFP program, evaluate NHGSFP's impact on students, schools, and communities, and propose strategies for NHGSFP ethical enhancement.

Your participation in this study is crucial as it will provide valuable insights that will contribute to the sustainability discourse of school feeding programs in Nigeria and similar contexts. I kindly request you to fill out the attached questionnaire. Your responses will be used solely for the purpose of this research and will be treated with the utmost confidentiality. The data collected will be anonymised and used only in aggregate form, ensuring that individual responses cannot be traced back to any respondent.

I appreciate your time and effort in participating in this study. Your contribution will help us understand the challenges and opportunities in implementing school feeding programs and propose strategies for their ethical enhancement. Thank you for your cooperation and support.

PART A: DEMOGRAPHIC INFORMATION

1. Age

- Less than 18 years old 18-29 years old
 30-39 years old 40-49 years old
 50-59 years old 60+ years old

2. Gender

- Male Female Prefer not to say

3. What is your highest level of education completed?

- No formal education Primary school Secondary school
 University/College degree Other (Please specify)

4. What is the type of community you live in?

- Urban Rural

5. What is your state of residence in Nigeria?

6. What is your occupation?

- Unemployed Employed – Public Sector

- Employed – Private Sector Self – Employed
- Student

7. What is your relationship with the National Home-Grown School Feeding Program (NHGSFP)?

- Government official School administrator/staff
- Parent/Guardian of a Beneficiary Community member
- Beneficiary (student) Other (Please specify)

PART B: KNOWLEDGE ABOUT NATIONAL HOME-GROWN SCHOOL FEEDING PROGRAM (NHGSFP)

8. Are you aware of the National Home-Grown School Feeding Program (NHGSFP) in Nigeria?

- Yes No

9. In a scale of 1 to 5, how would you rate your knowledge about the NHGSFP

- 1. Not knowledgeable at all 2. I know a little bit
- 3. I have average knowledge about NHGSFP 4. I know enough
- 5. I know everything about NHGSFP

10. Do you believe that the NHGSFP has had a positive impact on the communities it serves?

- Yes No

11. In a few words, can you describe some of the benefits the NHGSFP has provided students, parents, schools, and communities?

12. In a scale of 1 to 5, how would you rate the quality of food provided under the NHGSFP?

- 1. Very bad 2. Bad
- 3. Neither bad nor good 4. Good 5. Very Good

13. Have you heard about any allegations of corruption or mismanagement in the NHGSFP?

- Yes No

14. What is your opinion regarding the truthfulness of the allegations?

15. Have you personally experienced a corruption event involving NHGSFP? E.g., your child has faced discrimination or you were asked to pay a bribe.

- Yes No

16. Mention some of the corruption allegations that NHGSFP has been accused of which you believe are indeed true. You can mention as many as possible.

17. In a scale of 1 to 5, how effective do you think NHGSFP is regarding the fulfilment of its mandate?

1. Completely Ineffective 2. Mostly Ineffective
 3. Neither Effective nor Ineffective
 4. Mostly Effective 5. Completely Effective

18. Have you heard of any controversies or criticisms surrounding the effectiveness of NHGSFP to fulfil its mandate?

- Yes No

19. In your own opinion, do you think the controversies or criticisms surrounding the effectiveness of NHGSFP are justified? You may provide an example of a case that supports the opinion.

20. Do you think the government should continue supporting NHGSFP or the program should be disbanded?

- NHGSFP should be supported NHGSFP should be disbanded

21. If you had the resources and the authority, what changes would you make to improve the overall effectiveness of the NHGSFP?
