
Stick and Carrot Approach: A Conceptual Framework for Balancing Female Household Roles and Education Access to Reduce Out-of-school Children in Jigawa Central

Mustapha Muhammad

Jigawa State Ministry of Higher Education, Science and Technology, Dutse

Email: muhammedmustapha987@gmail.com

ABSTRACT

Out-of-school-children (OOSC) have become a major concern in Nigeria. This conceptual paper proposes “Stick and Carrot Framework” to reconcile incentive and sanction by balancing female household roles with education access in Jigawa Central Senatorial District. Three objectives and three research questions were raised for the study. Using qualitative exploratory design, semi-structured interviews were conducted with 42 participants: SUBEB/LEA officials, head teachers, parents and out-of-school girls across 7 LGAs. Data were analyzed using thematic analysis (Braun & Clarke, 2022). Findings revealed financial contribution 62% and household roles 23% as the major factors keeping girls out of formal school system. Most of the parents, 54% perceived “free education” as incomplete while 46% are unaware of UBE Act 2004 sanctions. Grounded in Human Capital Theory (Becker, 1993) and Prospect Theory (Kahneman & Tversky, 1979), the framework proposes free kits, breakfast meals and conditional cash transfers as the “Carrot”, while compliance notices with UBE Act Section 2 (3) fines as the “Stick”. The study concluded that neither stick nor carrot alone reduces OOSC, but balancing both aligns with Hausa/Fulani Muslim household structures. The paper recommends piloting the framework in 3 wards to test its workability for improving girls’ retention without alienating traditional household structures.

Keywords: Stick and Carrot, Female household roles, Education access, Out-of-school children

INTRODUCTION

Education is one of the determiners of the level of societal or individual development and is one of the fundamental rights every child should enjoy regardless of gender, race, or status. However, United Nation statistics and other reports repeatedly show that girls have lower literacy rates than boys (Maimuna, 2017). While poverty is a general factor, gendered household labour allocation disproportionately affects girls’ schooling in many rural households in Jigawa state. However, in Nigeria female children are considered important contributors in home management. Their invaluable contributions at home include meal preparation, washing of utensils, cleaning the home environment, taking care of the little ones and hawking. These household chores interfere with their formal

school attendance and invariably affect their academic performance negatively. However, traditionally, an ideal and well-trained female child is the one who master the art of household labour or home management. Therefore a balance should be struck between these two contrasting values: formal education and household chores to ensure the survival of traditional household structures and at the same time allow children to attend formal school to reduce out-of-school children (OOSC) in the society, thus the Stick and Carrot proposition.

Stick and Carrot approach implies balancing punishment and reward to reconcile female household chores with formal education to reduce out-of-school children. According to UBE Act (2004) basic education is free but

compulsory and a fine of two thousand naira or 1 month jail term is stipulated against any householder that refuses to send their 6-14 year-old child to school. However, female children are traditionally seen as future mothers and mastering the domestic roles at an early age is tantamount to their becoming ideal home makers. Nevertheless, education is their fundamental right. Therefore a midway approach is the best way to reconcile both without denying the female child her right to education or destroying the traditional home structure. It is against this background that the paper proposed “Stick” and “Carrot” Framework to balance female household roles and education access to reduce out-of-school children in the study area. Jigawa Central Senatorial District is one of the three senatorial constituencies in Jigawa state. The zone is composed of seven local government areas including Birnin Kudu, Buji, Dutse, Gwaram, Jahun, Kiyawa and Miga.

Statement of the Problem

The problem of out-of-school children (OOSC) remains critical in Nigeria. According to UNICEF (2024) Nigeria has approximately 18.3 million OOSC, comprising 10.2 million of primary school age and 8.1 million of secondary school age. Recent government data further indicates that 20 million children drop out between primary and JSS (Federal Ministry of Education, 2025). The situation is worse in Northern Nigeria where 16% of primary OOSC are concentrated in Kano, Jigawa and Katsina states (UNICEF, 2025). Save the Children (2026) also reported that 28 million Nigerian children and adolescents currently lack access to formal schooling or digital learning opportunities. This crisis undermines the objectives of Universal Basic Education Act 2004 which mandates free and compulsory basic education. However, close of observation shows that

thousands of children in Jigawa central senatorial district remain out of school due to poverty and other cultural practices, necessitating prompt action to address the situation. It is against this background that the study proposed Stick and Carrot Approach to balance incentive and sanction to propel children’s access to basic education to reduce OOSC in Nigeria

Objectives of the Study

The following are the objectives upon which the study is set:

- 1) To find out the causes of out-of-school children in Jigawa Central
- 2) To find out the respondents’ awareness and reactions on the legality of “Free and Compulsory” basic education law in Nigeria.
- 3) To propose a framework for balancing incentive and sanction to reduce out-of-school children in Jigawa Central.

Research Questions

The following are the research questions for the study:

1. What are the causes of out-of-school children in Jigawa Central?
2. What are the respondents’ awareness and reactions on the legality of “Free and Compulsory” basic education law in Nigeria?
3. How can a framework be proposed to balance incentive and sanction in order to reduce out-of-school children in Jigawa Central?

LITERATURE REVIEW

The Concept of Out-of-school Children

Out-of-school children (OOSC) are children within the official primary or secondary school age who are not enrolled in formal education. The official age is 6-11 years for

primary school, 12-14 years for upper basic and 15-17 for senior secondary school (UBEC, 2023).

Out-of-school-children are about enrollment not attendance. A child enrolled in school but absent 80% of the time is still officially in school. But a child in Islamiyya or Tsangaya only with no formal subjects are counted as out-of-school children (UBEC, 2023)

Types of Out-of-school Children

According to a survey carried out by Universal Basic Education Commission (UBEC) (2023), there are three major categories of out-of-school children in Nigeria:

1. Never attended: the child that is between 6-17 years but has never entered a formal classroom. About 60% of OOSC in Jigawa state fall under this category.
2. Dropped out: these are children enrolled into formal education at some point but left before completing basic education 6-14 years.
3. Over age: these are children who are either above 17 years old and still in school or a ten-year old child who is yet to start school.

Theoretical Framework

The paper rotates around Reciprocal Duty Theory of Compulsory Education as contained in the Compulsory, Free Universal Education Act, 2004. The Act established a legal contract with two reciprocal obligations: the duty of the state to provide free education and the duty of the parents to send their children to school.

State Duty: The Carrot – Section 2 (1) & 3 (1) UBE Act, 2004

Section 2 (1) of the Act mandated that “Every Government in Nigeria shall provide free, compulsory universal basic education for every child of primary and junior secondary school age.” This is reinforced by section 3 (1) which stated that “The services provided in public primary and junior secondary schools shall be free of charge.” Theoretically, this creates an “entitlement” for every child and obligation on government to remove cost barriers. In this study, the “Carrot” component is the duty of the government through: 1) Removal of all kinds of fees, 2) provision of starter kit (uniform and writing materials), 3) free breakfast meal, free transport and conditional cash transfer to facilitate enrollment and retention and 4) establishment of bridge classes for over age learners. The assumption is that demand for education will increase once cost is removed and incentive is added.

Parental Duty: The Stick– Section 2 (2) & 2 (3) UBE Act, 2004

Section 2 (2) places a reciprocal duty on the parents: “Every parent shall ensure that his child or ward attends and completes his (a) primary education and (b) junior secondary school education.” Non-compliance is a criminal act according to section 2 (3) with penalties of 2,000 naira fine or 1 month jail term and on subsequent conviction a fine of 5,000 or 2 month jail term. Theoretically, this provides legal basis for enforcement and accountability. The stick component is carried out through: 1) UBEC compliance notice served by SBMC and local traditional and religious institutions, 2) Soft warning by SBMC/local authorities then escalation to Magistrate Courts for persistent defaulters, 3) 2,000 naira fine or 1 month jail term or, 5,000 naira fine or 2 month jail term.

Apart from the legal grounding in the UBE Act 2004, the “stick” and “carrot” framework is theoretically supported by two complementary theories:

- i. Human Capital Theory which posited that education is an investment that increases individual productivity and national economic growth (Becker, 1993). The Carrot component aligned with this by removing education cost through free tuition, uniform, writing materials and feeding, thereby increasing the perceived return on investment for parents.
- ii. Behavioural Economics Theory by (Kahneman & Tversky, 1979) of “loss aversion” explained that individuals are more motivated to avoid loss than to acquire an equivalent gain. This theory supported the “Stick” components by aligning with section 2 (3) of the UBE Act 2004 which prescribed fines and imprisonment for non-compliant parent. The credible penalty threat compliments the incentives of free education creating balance policy mix between the “stick” and the “carrot”.
- iii. Stick and Carrot Framework proposed that returning OOSC requires balancing incentive and sanctions. The “Carrot” increases demand by raising benefits while the “Stick” increases compliance by raising cost of non-compliance.

METHODOLOGY

The study adopted qualitative exploratory research design to validate the framework components. The study was carried out in Jigawa Central Senatorial District covering Birnin kudu, Buji, Dutse, Gwaram, Jahun, Kiyawa and Miga local governments. A

sample of forty-two (42) respondents comprising seven (7) SUBEB officials, seven (7) head teachers, fourteen (14) OOSC, and fourteen (14) parents participated in the study. The sample was drawn using purposive sampling technique. The data was collected using semi-structured interview and the result was analyzed qualitatively using thematic analysis framework by Braun & Clarke (2006).

Key Findings of the Study

1. Causes Out-of-School Children in Jigawa Central

Financial Contribution to their family: from the in-depth interview with the respondents 62% reported female children contribute financially to most low income households by engaging in full time street hawking or on the farm for paid labour especially during harvesting season. Poverty is the main reason why female children stay out of school.

“If I send all my children to school what will I get? But if they go to the farm and work we can get four thousand or five thousand naira sometimes up to ten thousand naira a day... you see ” – mother, 39, Buji L.G.

“I help my mother with the sale of koko in the morning and rice and beans in the afternoon. We make up to six thousand naira profit a day. We use the money to eat and save some for my marriage...” OOSC, 15, Kiyawa L.G

“Education is costly today because you buy uniforms for the child, shoes, books, give them transport money, breakfast money, and then pay for registration fees, PTA levies, Club and society dues, exam fee, report card fee and more... you see if you don’t have money, you rather send your children to learn one trade or another. The world has

changed money is all that matters now... ”

Father, 47, Jahun L.G

- i) **Household chores:** 23% of the respondents reported that most of the girls are out of school because they help their mothers with domestic duties in the house all day.

“I was never enrolled in school. I stay at home helping my mother with household chores like fetching water from the well or borehole and I run errands for her. My elder sister washes the plates and pots and then cook. I play with my little twins while our mother works on her sewing machine. Later in the evening we go to Islamiyya. Tomorrow, next tomorrow and every day the same thing. I wanted to be in school but we help our parents in the house all day.” Out-of-school girl, 13, Miga L.G

- ii) **Distance to the School:** 4% of the participants reported that distance is no longer an obstacle to female children attending formal school in Jigawa central.

“No, most of the schools are within reach, distance is not an issue” SUBEB official 51, Dutse L.G

“No, the schools are not far from our homes...we are just not enrolled” OOSC, 11, Jahun L.G

- iii) **Early Marriage:** 11% of the respondents reported that early marriage is what keeps some girls out of formal school system.

“Here in the village we marry them off early because if you delay you don’t know what will happen. The children of today are hard to control you know. Even in the cities like Dutse some people marry off their children early for the same reason. ” father, 54, Sakwaya town, Dutse L.G

2. Respondents awareness and reaction to Free Education (The Carrot)

- i) **Free Education (Free services, Uniforms and Writing materials).**

From the data collected, 54% of the participants reported that free education is mainly in theory not practice.

“Education is free or not, I don’t know but I know parents buy school uniform, writing materials and sanitation items; not free. Education is not entirely free of charge but partially.” Mother, 48, Gwaram L.G

“Free education is incomplete. The government provides building and sitting materials and teachers but school uniform and writing materials are not free” Father, 54, Kiyawa L.G

“Free and compulsory Basic Education is a law but not fully implemented because still parents pay some dues in school such as PTA, Club and society dues, examination and report card fees in addition to school uniform and books. The little overhead schools receive cannot cover all the school services.” Head teacher, 46, Dutse L.G

- ii) **Free Breakfast meal daily:** 99% of the participants said no free meal in school and no learning take place when the learner is hungry.

“Feeding is no longer happening in schools and some children go to school on an empty stomach while many stay off school as parents cannot pay for everything” SUBEB/LEA official, 47, Birnin Kudu

- iii) **Conditional Cash Transfer:** 100% of the participants denied the existence of monetary incentives in schools.

“If they give us money, I will let her go to school but if the amount is not significant enough she goes to hawking some other days” Mother, 33, Jahun L.G

“We will collect the money and let them go to school but you know things are costly these days if the amount is too small

schooling stops in the long run” Father, 41, Miga L.G

3. Respondents Awareness and Reaction on the Legality of Compulsory Basic Education in Nigeria (The Stick)

1. **Five Thousand Naira (5,000) Fine:** from the data collected, 46% of the participants are not aware of the fine for non-compliance with the law.

“I have never heard of this fine and I have never seen anyone pay it but I can pay a fine of five thousand if that is what the government want and let my children work for me on the farm...” father, 54, Miga L.G

“I and my children make more than five thousand naira a day from hawking, I can pay the fine...” mother, 38, Kiyawa L.G

“The law is not well enforced so it doesn’t work here. Many people are not even aware of this law” SUBEB official, 39, Jahun L.G

2. **Two Months Jail term:** from the data collected, 96% of the participants are indifferent about the 2 month imprisonment for keeping their children out of school.

“Who has the audacity to jail me for not sending my children to “boko” school? I had rather send them to Almajiri School instead...” father, 58, Buji L.G

“If I don’t send them to school the government will put me in prison, why? They go to Islamiyya, is that not a school?” mother, 40, Dutse

“Our people are not aware of this punishment. The education law is not popular and the people never cared...” SUBEB official, 42, Kiyawa L.G

DISCUSSION OF FINDINGS

The study discovered that the major factors that keep female children out of school are financial contribution to their families, household chores and early marriage. However distance was no longer a barrier to

girls attending school in the study location. This finding is in agreement with that of (UBEC, 2023) which revealed that household labour, early marriage and income generation are the leading factors that make parents keep their female children out of school.

The study also revealed that most of the OOSC are in rural areas from poor families. This revelation also agreed with that of (UBEC, 2023) but disagreed with the findings of (UNICEF, 2023) which revealed that middle class income earners and some households in the slum areas in towns like Dutse, Hadejia, Gumel, Kazaure and Ringim also have children out of school for security and other reasons. This study also discovered that basic education is not 100% free as parents buy school uniform, books, pay for exam fee, report sheet fee, PTA levies etc. This finding contradicted section 2 (1) of the UBE Act 2004 which says basic education shall be free. Furthermore, the study discovered that majority of parents are not aware of the law that compelled them to send their children to school or the punishment awaiting them for disobedience which indirectly denied the existence of section 2 (2) and section 2 (3) of the UBE Act 2004. Thus Stick and Carrot framework seemed a midway position to fill in the gap which government shortcoming to provide 100% free basic education and parent’s failure for keeping their children out of school have created.

The Stick and Carrot Framework for Balancing Incentives and Sanctions to Reduce Out-of-school Children in Jigawa Central

It is evidently clear that application of the “carrot” alone or “stick” alone would not work but reconciling the two seemed a very workable idea. It is understood that parents are not being wicked to their children. They

keep them out of school because the “carrot” is not sufficient to pull them and the “stick” is too weak to push them. That is to say keeping them at home give parents immediate benefit than sending them to school without expecting any immediate tangible benefit or certainty of getting job immediately after completion. Therefore the idea here is to change the statuesque: make sending them to school more beneficial and keeping them out of school more costly. Introduce carrot first then stick later.

The “Carrot” (Incentives)

1. Free education: (free uniform, school bag, books, and no fee of any kind).
2. Free breakfast meal daily
3. 10,000 naira conditional cash transfer to each learner for 80% attendance per term

The “Stick” (Sanctions)

1. Soft warning by Hakimi, Village and Ward Heads
2. 2,000 naira fine or 1 month jail term for household that refuse to send their child to school or 5000 naira fine or 2 month jail term for persistent defaulters.
3. Escalation to Magistrate Courts for legal action against persistent OOSC parents

Implementation Road Map

The implementation of the framework should bring all education stakeholders together to achieve maximum effectiveness. The stakeholders are School heads, SUBEB/LEA officials, SBMC/PTA members, traditional rulers, religious leaders, police or Civil Defense personnel and NGOs etc.

However, not all out-of-school children will return to school in 1 day no matter the “carrot” or the “stick” but the program can be flipped in one term (12 weeks). The carrot shall be announced publically before

school resumes by village and ward heads as well as Imams during Friday prayer sermons. Implementation begins on the first day school resumes.

Implementation Sequence for One School Term (12 Weeks)

Week 1-4: Carrot Only

On the first day school resumes, head teacher announces removal of all school fees. School provides free uniforms and writing materials to all learners. School provides daily breakfast meal from Day one. Head teacher announces 10,000 Naira cash token for each student with 80% attendance at end of term. Two weeks later, ward heads hold meetings with community elders and youths to discuss government efforts toward girl-child education, benefits for compliance, and penalties for non-compliance.

Week 5-8: Carrot + Soft Stick

All incentives continue. Imams explain benefits of female education in Islam during 5 daily prayers and Jumaat khutbah. School organizes meeting with SBMC, PTA, SUBEB, LEA officials, and police to discuss possible arrest of non-compliant parents. Ward heads and village heads submit list of non-compliant households to police.

Week 9-12 Carrot + Hard Stick

All incentives continue. Local government council excludes non-compliant households from fertilizer vouchers and any government empowerment programs. Parents of out-of-school children are summoned to the district head palace and warned to enroll their children within 7 days or face 20,000 Naira fine and imprisonment. Sanctions waived if children are enrolled within 7 days.

Note: SUBEB/LEA officials shall visit the school and take % of OOSC who collects

starter kits in week 1 and do the same on week 12 to determine return and retention rates respectively.

If enrollment jumps but 12 week retention is less than 70% the carrots are weak. If retention is above 70% but new enrollment is low, the stick is ineffective. If new enrollment and retention up to week 12 are high, stick and carrot are in balance.

CONCLUSION

Neither punishment nor incentive alone will reduce out-of-school children because parents in Jigawa central are not trying to alienate the education right of their children when they keep them out of school but they are trying to make rational decisions and choices; however, when the cost of education is obviously lower than the cost of keeping the girls out of school, the equation will change.

RECOMMENDATION

Based on the major findings of the study, the following recommendations are offered:

1. All education stakeholders must put hearts, heads and hands together to implement the framework sincerely.
2. Jigawa SUBEB shall pilot test the framework in three wards to have empirical evidence of its workability.
3. Traditional rulers and religious leaders shall engage in public sensitization to promote the campaign for girl-child education as a religious mandate upon all Muslim.

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