

## **DESIGNING CURRICULUM TO MEET PSYCHOSOCIAL NEEDS OF NIGERIAN NOMADS: IMPLICATIONS FOR ENVIRONMENTAL AND HEALTH EDUCATION**

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### **ABSTRACT**

Government's effort in commissioning nomadic education in Nigeria has not yielded much success especially in meeting nomads' intellectual, physical, economic and psychosocial concerns. With the existing curricular contents of the NERDC literacy rate is still low. To a large extent, the low rate of literacy can be traced to obvious challenges of curricular flaws. The paper, therefore, examined many of the flaws in evidence-based psychosocial challenges including among others unsuitable curriculum, flood-ridden schools, poor medium of instruction, psychophysiological, socio-cultural, and marginalization and deprivation. While recognising the relevance of the existing NERDC curriculum for the diverse needs of the domicile Nigerian learners, and the need to respond to the SDGs global call for universal literacy and poverty eradication of all citizenry, the paper advanced a platform in the form of a curriculum which will not only cover some of those needs but incorporate the broader and complex psychosocial issues of the SDGs that bear on Nigerian nomads in five chronological steps.

**Keywords:** Nomads, curriculum, psychosocial, needs

### **INTRODUCTION**

The curriculum developed and revised by the Nigerian Educational Research and Development Council (NERDC) for the basic school learners in 2006 and 2012 respectively emphasised the foregone Millennium Development Goal (MDG) 2 underscoring the need for every child, including nomads, to have access to universal education. The curriculum was, therefore, to be modified to meet special educational needs of nomads including the nomadic pastoralist, the migrant fishermen and farmers through indepth, appropriate and interrelated curricular contents. In providing for nomads' educational needs, the lack of fixed domicile which characterise their lifestyle was one impediment to the delivery of quality education to them.

Far back in 1989, the Federal Government of Nigeria had launched the National Commission for Nomadic Education (NCNE) to partly cope with the migratory and dispersed nature of nomads in Nigeria (Federal Republic of Nigeria, 2004 cited in Lawani, 2016). The commission was saddled with the responsibilities of providing nomads with important and worthwhile formal education covering the learning experiences and skills that would promote their survival and productivity.

Despite government's effort in commissioning nomadic education in Nigeria much success stories, especially in meeting nomads' intellectual, physical, economic and psychosocial concerns with the existing curricular contents of the NERDC, have not been recorded. On intellectual standing, the Federal Ministry of Education in 2005 noted a low literacy rate of 28% and 20% respectively for pastoral nomads and migrant fishermen out of the 9.3million nomads that live in Nigeria (Aderinoye, Ojokheta & Olojede, 2007).

To a large extent, the low rate of literacy can be traced to obvious challenges of curricular flaws. This is because the curriculum may not have fully recognised the peculiar cultural orientation following nomadic activities including a continual and improved livestock and productivity that runs from parents to children. Hence, it has also been documented that the curriculum has yielded poor and inadequate education services and resources ranging from what Lawani (2016) qualified as poor quality in delivery of primary education services, and inadequacy of available infrastructural facilities, teaching and learning materials and qualified teachers. Evidences have also recognised the school curriculum as irrelevant skewing towards the domicile learner, leaking roofs, muddy terrains, lack of technicality in operating Information Communication Technology (ICT) devices (Iro, 2006, Kankwise, 2008 in Lawani, 2016; Lawani, 2016).

Nomadic activities are never devoid of economic and psychosocial challenges. Problems covering child labour, land tenure system, conflicts and security issues, alienation of pastoral rights, poor and inadequate provision of basic facilities to increase income generation, physical isolation, and constant movements in search of water and pasture abound (Iro, 2006; Kamkwise, 2008 in Lawani, 2016). Many of nomads' socio-economic and psychosocial burdens are the bedrocks of physical ill conditions.

As a result of their constant movements, many nomads and their households are confronted with harsh physical weather conditions. Sometimes, they are fall ill and hardly access a health facility, hardly find a means to healthcare or the healthcare centre is remotely located. Lawani (2016) re-emphasised that nomads face a lot of challenges which include health problems as a result of hostile environment, inadequate shelter, bites from insects and snakes, water borne diseases, diseases transmitted from animals to humans and animal health problem. No wonder (Agbo, 2015) indicated that nomadic children experience emotional, intellectual, social, security, health care services and social amenities deprivations.

The poor living and nomadic conditions, low rate of literacy and the concerns expressed by stakeholders regarding the curriculum are indications that the MDGs were not fully realised and hence the birth of the Sustainable Development Goals (SDGs) of the United Nations in 2015. To fully achieve the unmet MDGs, the vision of the SDGs is anchored on poverty eradication as well as universal literacy that promises equal access to quality education, health care and social protection including the mental, social and physical well-being of all people regardless of sex, age, race, ethnicity and characteristics of persons including nomadism. Therefore, different countries, including Nigeria, were urged to plan processes, policies and strategies sufficient to achieve the goals come 2030. National policies must cover improvements in capacities, productivity, financial empowerment, sustainable pastoralist and fisheries capacities, and infrastructural and transport systems.

While recognising the relevance of the existing NERDC curriculum for the diverse needs of the domicile Nigerian learners, and the need to respond to the SDGs global call for universal literacy and poverty eradication of all citizenry, there is a need to develop a separate curriculum that will not only cover some of those needs but incorporate the broader and complex psychosocial issues of the SDGs that bear on Nigerian nomads. Hence, the relevance of designing curriculum contents which would largely meet the psychosocial needs of nomads in Nigeria. Therefore, the context of the paper covers:

- i. Nomadic Education in Nigeria
- ii. Evidenced-Based psychosocial challenges of Nigerian nomads
- iii. Designing a curriculum to meet the psychosocial needs of Nigerian nomads
- iv. Implications of the designed curriculum for Environmental and Health Education

## **Nomadic Education in Nigeria**

In 1989, the NCNE was given the responsibility of operating nomadic education for nomads in Nigeria. The commission was to realise a number of objectives including the provision of funds to erect classrooms, procure equipment and teaching and learning resources, for effective Monitoring and Evaluation of nomadic activities, and managing and maintaining the primary schools (National Commission for Nomadic Education Act, 1989). It was required to cooperate with other participating agencies and Ministries including Health, Culture and Tourism, ascertain the standards of skills to be achieved in nomadic schools and review the standards always.

In 1990, the NCNE began operating with 206 schools out of which 97 had permanent buildings, 1500 students and 499 teachers (Iro, 2006). The remaining 109 schools used temporary structures or under trees. Furniture was available in some of the schools, but mats were used in others. The schools used the NERDC curriculum but modified it to reflect arithmetic, social studies and primary science. The schools operated in such a way that pupils go to either morning or after sessions of learning to make time for their herding or fishing.

Nomadic education is operated in a multiple approach to achieve appropriate level of literacy in nomads and their children or wards. Thus, the following are the multi-faceted approach to nomad education required to meet permanent literacy and numeracy of nomads: (1) regular schools (2) mobile schools (3) mobile teachers (3) On-site schools (4) Adult Education Programme (5) e-learning including radio or distance education programmes with ICT, radio cassettes or compact disk and radio education programme, or television telecast (7) Shift System Schools (Aderinoye, Ojokheta & Olojede, 2007; Shagari, Bello & Umar, 2013).

With the approach adopted for nomadic education programme, attainment of encouraging level of literacy is still far from reach. Despite the efforts of Nigerian Government to support nomadic education programme, educational attainment among the Fulani remains low, and the quality of education among them is mediocre at best because nomadic education in Nigeria is affected by defective policy, inadequate finance, faulty school placement, continual migration of pupils, unreliable and obsolete data, and cultural and religious taboos [Universal Basic Education (UBE), 2006; Aderinoye, Ojokheta & Olojede, 2007].

## **Evidenced-Based Psychosocial challenges of Nomads in Nigeria**

Nigerian pastoralists and itinerant fishermen make major contributions to economic developments. They contribute the more needed meat, fish, meat or fish oil, cheese, hides and skin to humanity and society. Major nutrient requirements of protein, carbohydrate and fats come from Nigerian herdsmen, migrant fisher and food gatherers. However their socio-cultural and economic lives, tradition, means of livelihood, and productivity are sometimes bedevilled by psychosocial problems. In addition to the physical confrontations many nomads experience, literature has noted few of their psychosocial issues to include what Agbo (2015) qualified as the emotional, intellectual, security, healthcare service and social amenities deprivations which nomadic children suffer. Deprivations of these natures have impacts on nomads' social interactions with their surrounding environments, as well as their physical, mental and emotional world. Therefore evidence-based psychosocial challenges of nomads in Nigeria include, but are not limited, to the following:

- 1) **Marginalization and deprivation:** many nomads do not have access to adequate food, clothes, shelter and social amenities such as electricity, sanitation, toilets, clean water, good roads, economic empowerment, political opportunities, and healthcare services as less than 3% of the two years old to benefit from maximum immunization service. Some nomads suffer isolation from malaria, onchocerciasis and guinea worm control jingles

(Nzeagwu & Odey, n. d.; Dao & Brieger, 1995; Brieger, Oke, Otusanya, Adesope, Tijani, & Banjoko, 1997; Omar, 1999; Brieger, Otusanya, Oke, Oshiname & Adeniyi, 2002; Aderinoye, Ojokheta & Olojede, 2007; Akogun, 2008; Allous, 2010; Agbo, 2015). Hence, Abiodun (2010) asserted that nomads poorly utilise maternal and child health services when compared with urban dwellers;

- 2) Most nomads do not have access to basic education, nursery and primary schools are not enough and majority of the schools do not have laboratories and/or computer centres for fear of vandalization (Nzeagwu & Odey, n. d.; Aderinoye, Ojokheta & Olojede, 2007; Agbo, 2015;);
- 3) Many do not possess basic literacy and suffer intellectual deprivation including low academic achievement, drop outs as a result of kidnapping, cattle rustling or rape, and lack of interest in education (Ani, 2007; Aderinoye, Ojokheta & Olojede, 2007; Agbo, 2015). Only less than 10% male and less than 2% female Fulani pastoralists possess some elements of numeracy and literacy (Iro, 2015);
- 4) Poor temporary and sometimes flood-ridden school structures (Nzeagwu & Odey, n. d.)
- 5) Unsuitable school curriculum: The same national curriculum of upland domicile populace is used for nomadic pastoralists and fishermen folk, and fishing is not taught. Carving, music, dancing, swimming skills are absent (Nzeagwu & Odey, n. d.; Iro, 2006; Kamkwise, 2008 in Lawani, 2016). Irrelevant subjects such as cockroach breeding, basketball playing, and mountain climbing are taught in the curriculum (Iro, 2006). Nzeagwu and Odey (n. d.) added that faulty top-down curriculum sometimes prevent the migrant fishermen from policy formulation and implementation of nomadic education;
- 6) Poor and insufficient fund to purchase mobile phones, television set and other ICT devices, inadequate teaching and learning materials leaving many uninformed and unexposed (Nzeagwu & Odey, n. d.; Agbo, 2015; Lawani, 2016);
- 7) Shortage of qualified teachers and the volunteer or aide teachers sometimes find it difficult to migrate with their learners owing to harsh weather conditions, marriage, or poor incentives for services rendered (Nzeagwu & Odey, n. d.; Iro, 2006);
- 8) Poor medium of instruction: The Fulani child at the elementary school level hardly understands their own language needless of English Language and Hausa (Iro, 2006);
- 9) Inadequate attention from government: Nomadic children do not benefit fully from educational plan and many migrant fishermen suffer oil pollution that affects fishes and source of drinking water lack access to loans and modern fishing gear, and are bitten by tse-tse flies, blackfly, warps, snakes, and mosquitoes; hence, many herdsman are carriers of glossina, trypanosomiasis, and mersitans and suffer febrile fever, measles and other pastoral linked diseases (Nzeagwu & Odey, n. d.; Lar, 1989; Agbo, 2015);
- 10) Isolation and violence: Migrant fishermen folk are often isolated from one community to the other as a result of the long distance between them. Sometimes clashes broke out between sedentary communities especially those of militants (Nzeagwu & Odey, n. d.; Kamkwise, 2008 in Lawani, 2016). Nomadic pastoralists suffer from cattle rustling, kidnapping and rape as they are devoid of maximum security from the police and army (Agbo, 2015). Agbo added that the act of rustling and kidnapping stripe them of their wealth, prestige and status in society;
- 11) Socio-cultural consideration: the Fulani herdsman fear that when their children graduate from formal school, they will neglect their traditional pastoral practices (Aderinoye, Ojokheta & Olojede, 2007). The Muslim Fulani rejects nomadic schools with the fear

that their children will be Christianised (Iro, 2006). The Muslim Fulani also worry that in hiring staff and contracting duties under the NCNE, members show favouritism and tribalism (Iro, 2006). The unmarried female nomads lack the freedom to intermarry with anyone of their choice (Aderinoye, Ojokheta & Olojede, 2007);

- 12) Lack of interest in using ICT devices, shortage of lorries, disruption of school activities and ineffective monitoring and evaluation (Lawani, 2016);
- 13) Emotional challenge: As a result of poor parenting and loneliness, nomads' children suffer emotional deprivation and is the bedrock of adjustment difficulties (including withdrawal, uncooperativeness, isolation, disruptiveness); Absent Father Syndrome, depression, unresolved grief and traumatic experiences resulting in anger, stress, anxiety, esteem problems, lack of interest; loss of belonging, recognition or connection; and hypertension (Children's Mental Health Network, 2014; Agbo, 2015). Suicidal attempts are common with psychological imbalance (Kuruvila & Jacob, 2007);
- 14) Psychophysiological ill-health: Agbo (2015) noted that emotional health problem resulting from intellectual deprivation is one of the causes of timidity, fear, sadness, susceptibility to hostility, and aggression. A complex chain of prolong sadness and depression can result to loss of appetite, poor immunity, malnutrition, poor sleep pattern, anhedonia, stomach discomfort and anxious state as a child who is depressed may experience suicidal feelings (Ofuebe, 2015; Agbo, 2015);
- 15) Poor interaction between nomads and societal standard: The migratory manner of nomads limits them from having lasting relationships with the cultural taboos, and values of others; they hardly leave up to societal norms, and acceptable social patterns of others including adults, peers, and religious faithful in the mass media, internet or in their homes, school, church or mosque (Ugbor, 2012 cited in Agbo, 2015; Agbo, 2015);

### **Designing a curriculum to meet the psychosocial needs of Nigerian nomads**

It is an obvious fact the psychosocial challenges which confront many nomads in Nigeria is a leverage to understand what many of their psychosocial needs are. The concept of 'need', on the one hand, is often difficult to delineate as a consensus is far from reach on it. However the British Medical Association (BMA, 2011) defined the concept of need, as the ability of individuals to meet the requirements of specific care group or authority through the achievement, maintenance or restoration of normative level of social independence or quality of life. The term 'psychosocial', on the other hand, is the combined interaction of individuals' psychological and social traits on their social environment, thoughts and feelings. Therefore, psychosocial needs of nomads are their abilities not only to attain a normative state of psychological and social independence, but also their physical nomadic potentials through the use of logical thoughts and desirable feelings. A curriculum is required to be designed for nomads in terms of their psychosocial needs.

A curriculum is the totality of planned experiences; that which is taught in schools, a set of subjects, performance objectives, or materials; a content, programme of studies, sequence of courses, or course of study to which the student is exposed formally or informally, during the course of formal education (Pillai, n. d.; Owie, 2005). Pillai added that a curriculum is a planned and unplanned concept, skills, attitudes, work habits, means of assessment and instructional strategies taught in the classroom and the different school activities in and out of class that influence present and future academic social, emotional and physical growth of learners. In all therefore, a curriculum is the planned or unplanned minimum standard for realising instructional objectives that meet the psychosocial needs of learners through well structured, organised and presented instructional resources, methods and contents. The

concept of curriculum is broad, and so for the purpose of the paper emphasis will be on achieving behavioural objectives through instructional contents.

In designing curriculum contents to meet the psychosocial needs of Nigerian nomads, the following five chronological steps are imperative to consider: (1) assessment of the psychosocial needs of nomads; (2) representing the needs in general standards; (3) splitting the general standards into instructional objectives; (4) putting the instructional objectives into contents/subjects and (5) stating functional behavioural objectives for the contents/subjects. The next section is an overview of the steps.

### ***Assessment of the psychosocial needs of nomads***

A careful overview of the foregoing evidence-based psychosocial challenges of nomads in Nigeria reveals the following categories as some of their psychosocial needs to be met: (1) literacy and numeracy; (2) psychological health; (3) social health; (4) physical health; (5) socio-cultural harmonisation and (6) socio-economic support.

### ***Representing the needs in general standards***

Contextually, general standards reflect the broad and overall objectives met to be achieved per established psychosocial need of nomads in Nigeria. Thus, the following are suggested to obtain, that the nomadic basic and senior secondary school curriculum in Nigeria be able to offer quality education that guarantees literacy and numeracy; imparts modern nomadic skills that improves skills in schooling, nomadic operation and economic welfare; provides information regarding urgent accessibility to improved quality healthcare services; and offers strategies for the enjoyment of social protection through equitable distribution of appropriate educational, agricultural, economic and healthcare resources to all potential nomadic camps that are not only safe, resilient and sustainable but assures the physical, social and mental wellbeing of nomadic learners.

### ***Splitting the general standards into instructional objectives***

Irrespective of age, sex, ethnicity, disability or susceptibility of nomads, the aforementioned general standards should be delineated into specific standards for simplicity. Thus, the assessed categories of the psychosocial needs for nomads should be represented in the behavioural standards in the curriculum for the learners to achieve.

#### ***Literacy and numeracy***

The nomadic basic and senior secondary school curriculum is expected to:

- (1) Develop nomads' interest in reading, writing and counting in numerals;
- (2) Provide communication skills in English, Fulfude, Hausa, and Ijaw languages to nomadic learners;
- (3) Aid nomadic learners to acquire and apply basic literary knowledge and numerical skills in their daily schooling, fishing, herding, food gathering activities, and other future demands as well as harmonise their roles in nomadism and schooling; and
- (4) Provide idea of the relevance for nomadic children and their parents to attend PTA gatherings, curriculum planning sessions, other social functions, or contest social positions in society.

#### ***Psychological health***

For nomads' psychological wellbeing, the curriculum is expected to: (1) provide nomad pupils and students with an understanding of their selves (self-concept); (2) provide nomadic learners with correct skills relating to appropriate feelings and positive self-concept; (3) assist

nomadic learners to acquire knowledge of numerous life changes and provide them with the appropriate strategies to deal with them; (4) help nomads recognize and manage joy-sadness, love-hate, like-dislike, trust-mistrust continuum; (5) aid nomads to identify and share inappropriate feelings of anger, and depression and consider finding help to address them; (6) foster nomads with moral logic and critical thinking; (7) develop in nomads and their parents or wards the knowledge and skills relating to appropriate feelings, proper parenting and positive self-concept; and (8) assist nomads on methods of applying basic adjustment or coping skills to meet the demands of school and nomadic life.

#### *Social health*

The curriculum is needed to: (1) help nomads acquire knowledge and social skills enough to develop worthwhile and lasting relationships with family, colleagues, school personnel, and friends; (2) aid nomads to maintain established relationships with others; (3) develop in nomads mutual trust, sensitivity, respect and relate these to others; (4) assist nomads to relate with school community for lifelong learning, new ideas and world views about schooling and modern nomadism; and (5) provide nomads with knowledge and skills to be safety and security conscious especially in avoiding and escaping from kidnapping, rape and cattle rustling.

#### *Physical health*

The curriculum is expected to: (1) provide nomads with information to avoid unnecessary fatigue and take enough rest after school or nomadic work; (2) assist nomads to imbibe healthful practices relating to eating nutritious diets, take adequate amount of physical activity each week, and having safe sexual intercourse; (3) inculcate in nomads to go for regular medical checks and treatment in the event of ill health; and (4) help them to avoid harmful practices that negate level of health and environmental sustainability including sanitation, proper toilet habits, substance use and abuse.

#### *Socio-cultural harmonisation*

The curriculum is intended to: (1) provide information for nomads to understand the existence of diverse cultural values in society; (2) assist nomads to place appreciation on a wide range of diverse cultures; (3) provide nomads with information that, where possible, it is necessary to imbibe other cultural experiences such as traditional or religious practices through the exchange of marital vows for the understanding of the world around; and (4) provide information on modern and appropriate nomadic skills in herding, fishing, canoe carving, canoe paddling, and swimming.

#### *Socio-economic support*

The curriculum is needed to: (1) provide nomadic schools with sufficient and varieties of infrastructural and instructional resources such as mobile schools with ICT devices, radio and television sets, laboratory, motor able roads, delivery vans, water purification facilities and techniques, monitoring and evaluation vehicles for the realisation of the general standards of education; (2) provide nomads with ideas to make savings from their nomadic activities; (3) assist nomads to manage, maintain and/or improvise where necessary, all educational, environmental and nomadic activities judiciously; (4) provide nomadic learners and their parents information for economic empowerment especially to access loan and purchase modern nomadic facilities and agricultural implements especially for meat and fish processing; (5) train nomads in vocational skills needed for financial empowerment including fashion design, arts and crafts (basket and broom making), tapping of palm wine, meat and fish processing and preservation, wood carving, textile and design (tie and dye), and

carpentry; (6) regularly supply qualified teachers, train and retrain teachers and volunteer aides; and (7) yearly revise the existing nomadic curriculum.

### ***Putting the instructional objectives into contents/subjects***

From the foregoing, the following contents/subjects are important considerations:

#### *Nomadic Basic School*

i. English Language, ii. Language and Cultural Orientation, iii. Mathematics, iv. Elementary Mental Health, v. Social and Vices Studies, vi. Physical and Environmental Health, vii. Nomadic Studies, viii. Vocational Studies

#### *Nomadic Senior Secondary School*

i. English Language, ii. Literature in English, iii. Mathematics, iv. High School Mental Health, v. Social and Vices Studies, vi. Physical and Environmental Health, vii. Nomadic Studies, viii. Vocational Studies

### ***Stating functional behavioural objectives for the contents/subjects***

To state the behavioural objectives for each of the contents/subjects identified, the expertise of stakeholders in science, social science and other humanities including educationists, sociologists, psychologists, environmentalists are required. Their collaboration will foster the development of functional objectives which nomadic learners can optimally benefit from. Their competencies are significant in this regard.

### **Implications of the designed curriculum for Environmental and Health Education**

Education is not only agent of social change, but also of psychological transformation. Hence, a well-designed curriculum that greatly caters for the psychosocial needs of nomads in Nigeria may:

1. Produce literate, numerate and well-adjusted nomadic school learners with sound mental health that cope with virtually all spheres of human activities;
2. Fit nomads into any sphere of societal relevance without negative emotional feelings;
3. Guarantee the acquisition of healthful habits and the rejection of harmful ones that fits nomads well in the scheme of sound physical health; and
4. Produce nomads that assures safe, resilient and sustainable environment through their knowledge of the value of sanitation and healthful practices.



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