

**MATHEMATICS EDUCATION: A UNIVERSAL REMEDY FOR PEACE AND CONFLICT  
PREVENTION IN NIGERIAN CONTEMPORARY SOCIETY**

**AKOGWU, JOY N.**  
**Department of Science Education**  
**University of Nigeria,**  
**Nsukka. Enugu State**  
**Email: lolanyi@yahoo.co.uk**

**Abstract**

*Education in general is an instrument for national development and social change. Development occurs in a society only when there is peace and absence of conflict among individuals. Nigeria has experienced a lot of conflicts among the people of different ethnic groups, states, communities and so on. And as a nation filled with minerals and natural resources, the main causes of these conflicts have been the issues of management and distribution/allocation of these natural resources. Mathematics has great impact potentials in every society. As soon as mathematics is applied in our Nigerian contemporary society, the issue of allocation will be handled appropriately and thereby promoting peace and preventing conflicts in the country. This paper discusses Mathematics Education as a universal remedy for peace and conflict prevention in Nigerian Contemporary Society. To achieve this, it has sub-themes like the concepts of peace and conflict, mathematics as a pillar of peace in Nigeria and Mathematics education for conflict prevention in Nigeria. Finally some recommendations are made for improvements in the teaching and learning of mathematics in Nigerian schools and this objective when realized will increase the number of agents of peace and conflict prevention in the country.*

**Keywords:** *Mathematics, Mathematics Education, Peace, Conflict, Nigeria.*

**Introduction**

Mathematics is a compulsory subject in both western-type and Islamic education in Nigeria. This is based on the fact that mathematics is essential for human existence. Mathematics is important to every individual irrespective of culture, religion, tribe, social status, and gender. Azuka, (2015) identified the fundamental reasons for Mathematics education which include: “contributing to the technological and socio – economic development of a society; contributing to its political ideology, cultural maintenance and development; and providing individuals with prerequisites which may help them to cope with life in the various spheres of education, occupation, private life, social life, and life as a citizen”

Mathematics plays a very crucial role in this contemporary society. Without mathematics, there will be no modern world (technology) and without modern technology, there is no development. The production of technicians and technologists in any society depends on the level of the study of mathematics in the society (Azuka, 2015). He asserted that the gap in the level of development between the advanced countries and the developing countries is as a result of the gap in the level of mathematics.

Nigeria has suffered over the years due to conflicts, violence and social injustice in terms of loss of human lives, loss of infrastructure, loss of huge finances and increased mistrust among citizens (Ebesine, 2013). These contemporary issues in Nigeria can be possibly handled through effective mathematics education. Mathematics education inculcates in learners the ability to reason rationally (logic) and to develop problem solving skills that are necessary to solve daily problems. It is obvious to note that every average Nigerian needs to embrace mathematics. It guarantees the development of a critical and analytic mind of every individual (Ebesine, 2013). In this regard, individuals’ mind will be free from conflict, make useful contributions to the society and above all, help in promoting peace and prevention of all kinds of conflict in the society.

### **Concepts of Peace and Conflict**

Peace is thought to be a general situation where there is calm and order in a particular environment, mind or body. When there is peace, it means that there is no conflict of any kind which will hinder development in the society. Peace is a concept that is created to give a general condition when there is absence of harsh conditions (*National Open University of Nigeria*, 2006). Onwukwe & Agommuoh (2016) defined peace as living without war or violence. They believed that ignorance, lack of survival skills of individuals and poor remunerations for good efforts and imposing labour threaten peace. Onyeagbani, (2017) argued that peace is not merely an absence of war, but a condition characterized by nonviolent cooperative and harmonious conduct of internal and external relations with a view to secure all round sustainable development of the people and prevent conflict.

Conflict refers to a struggle involving two or more opposing forces. Conflict could be over resources, ideas, values, wishes, or inherent needs. Conflict as a social phenomenon becomes negative only when it is violent and disrupts peace among people (George, 2013).

### **Mathematics as a pillar of Peace and Conflict prevention in Nigeria**

Peace is the true desire of every responsible person in the society. The Peace here is not simply the absence of war but the abolition of all aspects of injustice, absence of intolerance and violence, and the presence of social justice; just and equal relationships, as well as human and environmental well-being such that the root causes of conflicts are diminished ( Ekwueme, Charles-Ogan, & Uwaezuoke, 2014). Mathematics as a compulsory subject in Nigeria is an appropriate platform for building of peace in Nigeria. Conflict prevention is a means of trying to ensure that peaceful situations exist. Mathematics education is a more stable approach to fostering peace and ensuring that even if conflicts do arise, the society can be cured of the devastation of war.

Nigeria is subdivided into thirty-six (36) states and one federal capital territory, which are further subdivided into seven hundred and seventy four (774) local government areas (Uwaezuoke, 2014). The appropriate application of mathematical ideas in sharing the available resources in Nigeria will bring about peace in the nation. People live peacefully when there is no corruption and when there is sustainable development. The necessary requirement for a peaceful life in this contemporary society is the art of economical living. Mathematics as a subject is suitable for inculcating the habit of economy among people. Mathematics deals with economy in time, money, speech and thought and is bound to develop the corresponding attitude in the individual (Odili, 2006).

Nigeria's economy is highly dependent on earnings from the sale of crude oil which accounts for 77% of government revenue and 95% of the country's foreign exchange earnings (Ebisine, 2013). Crude oil production is estimated in millions of barrels/day and is worth billions. The growth rate of real income per capital averaged uses percentages for calculation. The Gross Domestic Product (GDP), a primary indicator of the economic health of a country, is obtained by dividing the total naira value of all goods and services produced over a specific period of time. Decision making, budgetary allocations, financial policies and planning, and the equitable distribution of goods and services in different zones in Nigeria are dependent on mathematics (statistical parameters and inferences).

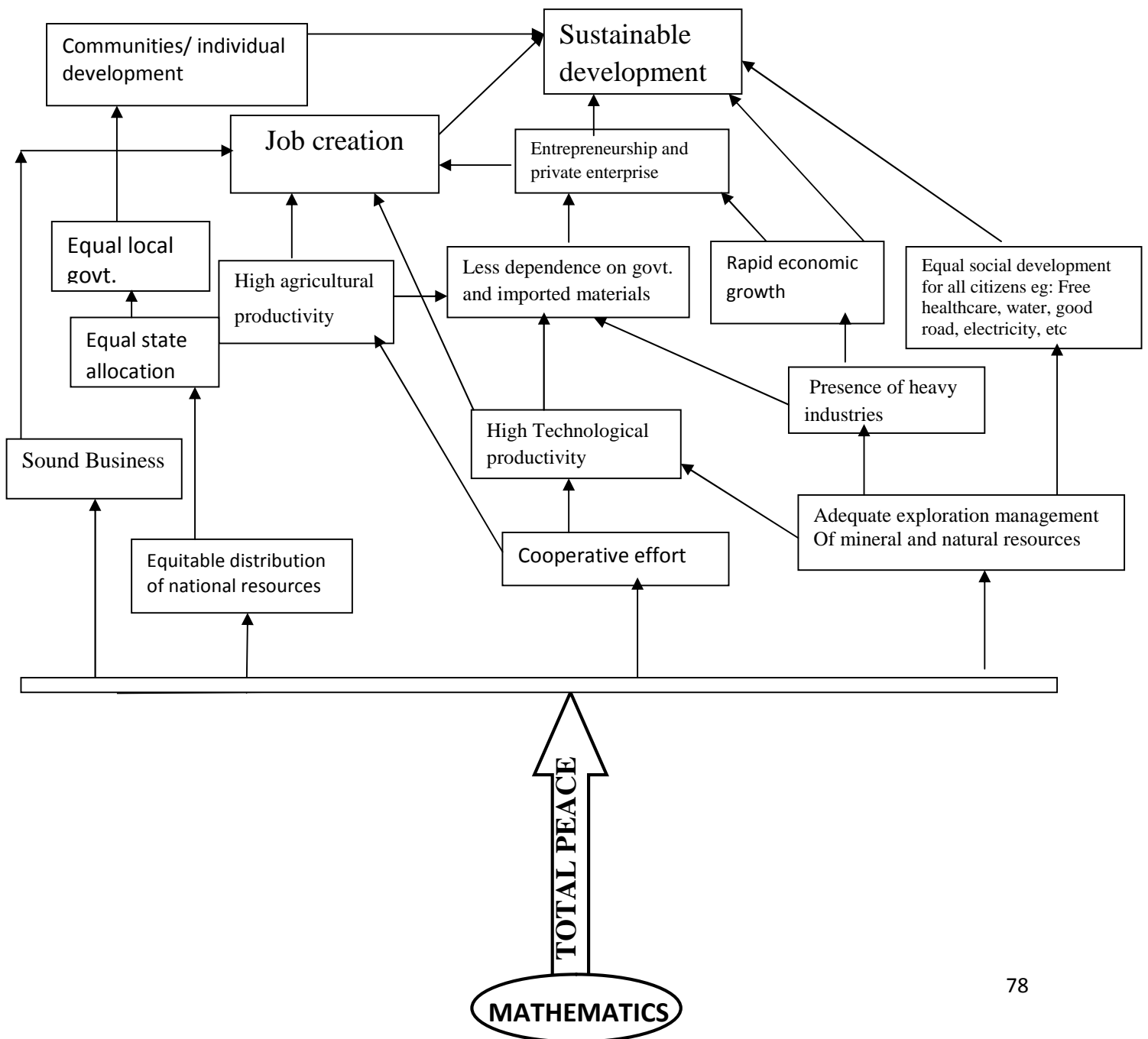
Four main mathematics methods according to Odili (2006) are scientific, intuitive, deductive and inventive (creative); these methods are applicable in investigation, interpretation, and decision making. They will help us to raise a generation of people who can think for themselves, respect the view and feeling of others, they also show how mathematics contributes to the understanding of natural phenomenon (*National Policy on Education* (NPE, 2013). Mathematics methods help in understanding the value of discussion, the value of cooperation, the fact that many people working together can achieve result that none could have done the working alone (Odili, 2006).

Mathematics prepares individuals for peaceful life and character building through active involvement, personal success, working with others and opportunity for stimulating curiosity, self-expression and self-reliance. A saying goes "idle mind is a devil's workshop". Mathematics makes people to work hard; in our country today hard working citizens are needed to avoid violence and all kinds of conflict situation. This will motivate people with a desire for accomplishment and personal advancement;

live in unity and harmony as one indivisible, indissoluble, democratic and sovereign nation founded on the principles of freedom, equality and justice (NPE, 2013).

Chinwoke, (2014) pointed out that mathematics is an essential part of human culture, which the educational system is designed to transmit. Mathematics is the best way to teach youngsters how to think and behave. The volume and quality of mathematics offered in the school system determines the prosperity of any country (Chinwoke, 2014). Onwukwe and Agonmmou, (2016) pointed out that mathematics through careful and logical thinking can be used to solve human problems in all spheres of life. Mathematics through reasoning can give insight into the power of human mind. All these attributes of mathematics are highly essentials in the recovery of peace and preventing conflict in Nigeria contemporary society.

Below is a conceptual framework of mathematics as a pillar of peace

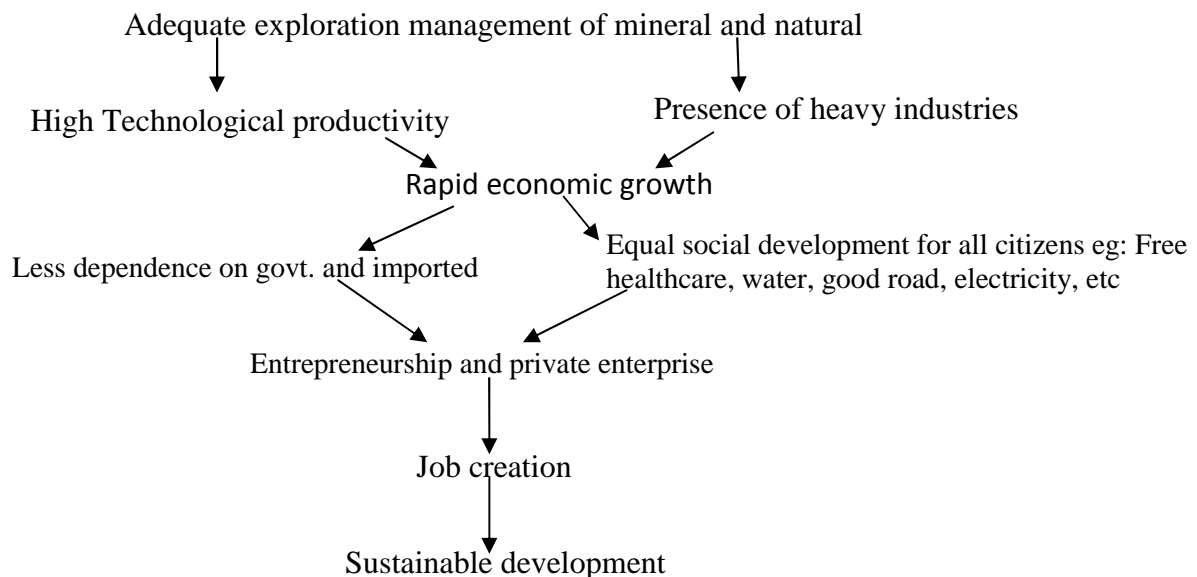


**A Conceptual Framework**

A close look at the framework above will observe the link between one developmental stage and the others and as all lead to sustainable development which is the evidence and result of peace in the society. Mathematics assists in marking sound business through transaction accounting, calculating percentage (%) profit and loss, calculating % discount, data collection and analysis, stock taking and so on. With these, business will be enlarged and more people will be needed to handle the business, thereby creating job which is one of the aspect of sustainable development in Nigeria. The application of mathematics in the distribution of national resources leads to: proper state allocation, local governments’ allocation, communities and individual welfare. This could be done easily by the use of simple percentage and ratio, multiplication and division. For example if Enugu as a state gets its allocation, knowing that there are 17 local governments in the state and in each local government, there are un-equal communities, using the concept of percentage/ratio and division, the resources will be distributed based on the population of people, and in so doing individual needs will be sustained.

One of the objectives of mathematics education in Nigeria is the inculcation of national consciousness and national unity and one of the qualities of mathematics instruction in Nigeria is inculcating the spirit of sharing responsibilities for common good of the society (NPE, 2013). The next in the frame work which is cooperative effort is established under the above avowal. Once there is peace, there will be cooperation and it’s followed by high agricultural productivity, high technological productivity, less dependent on government and imported materials, Entrepreneurship and private enterprise, job creation and sustainable development.

The adequate exploration and management of natural resources in Nigeria depend solely on mathematics. Mathematics helps to make efficient use of human and natural resources to achieve rapid economic growth; Mathematics is required to produce scientists and technologists to create machines that will convert enormous natural resources into useful products. Indeed, mathematics plays a significant social and economic responsibility as a product of its universal relevance in all areas of technology, science, industry and commerce. Nigeria as a developing country depends merely on the natural recourses. These resources when explored and managed adequately through mathematics education, the result will follow by:



### **Recommendations**

In order to teach mathematics for peaceful life in Nigeria, the following actions are recommended:

1. Mathematics curriculum should be reformed to enable students to acquire a better understanding of the application of mathematics to societal needs. Nigeria needs a mathematics curriculum that addresses the needs of its society in order to sustain peace.
2. There is need for the immense in-service training of mathematics teachers through workshops and seminars so that teachers will have a better knowledge of mathematics and its application in the development of the economy, science, technology and society in general.
3. Nigeria must work towards the immense development of mathematics education through adequate funding and the provision of better and reader friendly textbooks to teachers and students.
4. Mathematics teachers should also improve students' interest in mathematics through more effective strategy. Teachers should encourage students to work in groups and encourage practical activities that will develop leadership, manipulative, communicative and problem solving skills for peaceful life in the society.

### **Conclusion**

It should be natural for us, as Nigeria citizens to give some thought to the role of mathematics education in achieving a better social order and more dignifying quality of life where peace will reign. If we can understand the implications of mathematical research, its contents and the pedagogical methodologies in the achievement of peace in its several dimensions: military peace, environmental peace, social peace and inner (individual) peace. This is essential for building up a civilization which rejects inequity, arrogance and prejudice, which are essentially violations of peace in its various dimensions.

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