



Utilization of Scarce Resources in a Downturn Economy for Effective School System in Nigeria

Samuel Nariochukwu Owhondah¹

Department of Educational Management, Faculty of Education
Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt.
samuel.owhondah@iaue.edu.ng

Abstract

The paper focused on the utilization of scarce resources in a down-turn economy for effective school system in Nigeria. It was considered that education as an instrument “par excellence” for effecting national development could formulate ideas to proffer solution to the perceived hardship resulting from contemporary economic downturn that is pervading the masses and sectors of the economy. Although, this worrisome issue is economic, it is hoped that rational scarce resources utilization approach in education could address the problem. It was concluded that management of scarce resources in education through rational utilization rather than cutting cost would minimize wastage of these resources in the school system. Through this approach, education resources would be adjusted to effect changes in school use, the length of time schools are used, teachers' workload, and class size.

Keywords: Utilization; Scarce Resources; Downturn Economy; Effective, School System.

Reference to this paper should be made as follows:

Owhonda, S. N. (2019). Utilization of Scarce Resources in a Downturn Economy for Effective School System in Nigeria. *International Journal of Scientific Research in Education*, 12(4), 524-533.

Copyright © 2019 IJSRE

INTRODUCTION

Ordinarily, everyone who believes in the very essence of the establishment of the education industry would agree that an effective school system is far from being a mirage than one in which the educational goals for which it was set up are attained through the employment of the educational resources into the system. The underlying assumption is that the appropriate application of education resources in their proper mix in the performance of school services would make for effectiveness of the school system. To that extent, all levels of the Nigerian school system require the rational utilization of varieties of resources to be productive in the educational enterprise. These resources no matter their type, whether human, physical and

financial among others are crucial to the operations and performance of the school system, when the cost-benefit analysis is measured to obtain the returns.

The Cost-Benefit Analysis (CBA) serves as a guide in calculating the costs of education, in the light of estimating the benefits from education and comparing the benefits with the costs of the resources to obtain the returns expected. To a large extent this assists in decision making as to the future pattern of resources allocation within the education sector to achieve an effective school system (Akinsolu, 2012).

In fact, the operations of the school system in Nigeria are fundamentally a function of resources that accrue from revenue generated by the various stakeholders which serve as the National income of the nation. Nigeria as a nation receives her income from money generated from oil and tax, and allocates part of this to finance education. The state governments add to the receipt from the federal government through their own internally generated revenue towards the sustainability of her education programmes. This relationship calls for the cost-benefit analysis of educational programmes resources investment in order to ensure that the utilization of these resources in a downturn economy is effective for Nigerian school system to attract a minimal wastage.

The rational combination of these resources makes education credible and relevant as an epitome of socio-economic agent of change and national development. However, from the economic standpoint, resources are scarce relative to their use at any point in time; therefore, the caution is that prudence must be exercised to rationally allocate these resources among competing ends within the limits imposed by economic down-turn to catch up with the demands of the school system.

No doubt, the demands of the various levels of education in the school system are enormous and critically challenging to the extent that decision of optimizing rationality may be fraught with error of choosing wrong alternatives at the expense of the other leading eventually to ignobly wasting the available resources. Beside the economic scarcity, is the fact that through wrong management approach the school system also suffer lack and under (inadequate) provision of these resources in its operations. It is indeed worrisome that the school system should suffer under-provision of resources leading to inadequacy, especially at a time when the country witnesses economic downturn.

Essentially, in economic downturn, with its vulnerability, the focus is usually more on cutting costs and reducing frivolities, expenses that do not bring wealth are usually discouraged no matter their worth. The doubt becomes how cutting cost could be the best practice to dwindling revenue. Opportunities for survival and growth of the school system ought to be explored at this time. In economic downturn, there is no doubt that the general capital income is usually low or down and the entire well-being of the school system is seriously under attack. Counter attack through rational utilization approach of the available resources is the best form of defense in this situation.

There is, therefore, the tendency for the operators of the school system to engage in the utilization of the available scarce resources to be effective or otherwise lose focus. It is in this light, that the question of utilization of scarce resources in economic downturn for effective Nigerian school system has become the problem of this paper. In a time when every sector of Nigeria's economy is required by circumstances compelled by economic downturn signals to be rational, the country's school system must strive at "cutting her coat according to her cloth" to be able to face the realities of school performance.

CONCEPTUAL CLARIFICATIONS

Economic downturn

Economic downturn is a period of recession, hard times or a period of financial hard up. It is a period of short-term descent in economic activity during which trade and industrial activities are reduced, usually defined by a drop in GDP in two successive quarters. Economic downturn is synonymous with economic decline, recession, depression, slump, slowdown, trough, credit crunch, or credit squeeze. Economic downturn and scarcity are usually brought about by poor savings habit, no ploughing back; lack of commitment to national development and growth, over-reliance on a criminal economy (Adebayo, 2017).

An economy that is sustained by corruption; imagine all the revenue generating sources not remitting the money they made. This creates a semblance of lack of progress in economic activity; where corrupt money translates to more champagne, more cars, more parties, houses, donations, inferring that, corruption is flourishing. Sometimes, economic downturn arises when all the leakages in the economy are blocked giving rise to no free money to throw around. There is preference for foreign goods, capital flight, over dependence on government for salary, employment and infrastructure. The low income oil price has reduced the capacity of government to finance all programmes and projects - only one source of income; laziness, in ability to take risk, insensitivity to productive ventures – people concentrate more on entertainment, parties, senseless journey; lack of interest in agriculture, insensitivity on the part of government to security of lives and properties especially for farmers and other entrepreneurs. Government keeps on promoting agriculture but fails to secure the lives of farmers (Central Bank of Nigeria, 2012; Adebayo, 2017).

All economy is affected by economy-wide fluctuations, usually referred to as business cycle in production, trade and widespread economic activities over medium-to-long-term in a free market structure. Free market economy exists where there is no government intervention in economic activities; rather demand and supply interrelate to correct anomalies in the market. The business cycle rises and falls in movements of all levels of gross domestic product (GDP), and this refers to the period of growths and reductions in all levels of economic activities around its long-term growth tendency. These rise and fall involve changes over time between periods of comparatively rapid economic growth and periods of relative stagnation or decline (Central Bank of Nigeria, 2012).

Downturn is a business cycle reduction, and also a complete slowdown in economic activity for two successive quarters. In a downturn economy, certain macroeconomic indicators usually decline with the concomitant increase in the rate of unemployment. The macroeconomic indicators are GDP, employment, investment spending, capacity utilization, household income, business income, and inflation. Technically, an economy can be in downturn or recession if such economy has recorded two successive quarters of negative growth in actual GDP, which is the market value of all legitimately identified final goods and services produced in the country in a certain period of time, usually one year. In this period, economic activities slow considerably. An economy is said to be in a slump (depression); a prolonged recession, when economic activities reach the lower part. Most macroeconomic indicators remained negative for a long time, usually more than two years (Adebayo, 2017).

Education Resources and Nigerian School System

In the economic parlance, three major categories of resources exist for use in the production process and they are utilized for the satisfaction of human wants. Similarly, in education, resources are things that satisfy the productive efforts in schools for the satisfaction of school wants (Okpe, 2010). These resources are physical, human and financial in nature and are inputs into the production processes in the school system, and are interrelated in their contributions to the making of schools' outputs. For instance, effective physical resources depend on efficient human capital (manpower or human resource) to produce financial benefits on which forms the standard measurement for economic growth (Ebong, 2006).

Considerably, the term education resources has gained currency among educators and instructional designers, popularizing the idea that digital materials can be designed to make way for easy recycle in a wide range of teaching and learning situations (Hylén, 2007). The argument is that various sectional interests tend to perceive education resources in a restricted sense. In this case, an audio visual enthusiast might think of resources as audio-visual equipment and complementary staff; educational technologists in terms of individual learning materials; a school librarian as non-books used to extend his traditional role of supply of information (Okpe, 2010).

Collectively, education resources consist of all materials available to any school or educational institution, which are meant to enhance teaching and learning (Camilleri, Ehlers & Pawlowski, 2014). These resources take the form of classrooms, libraries, hostels, staff rooms, and instructional materials, which are the hob on which teaching and learning revolve. They are visible (open) items in physical forms (Bozkurt et al., 2015). Hence, schools and its offices should be equipped and furnished with resources. This gives the tendency to think that educational resources mainly consist of physical things. In a more restricted sense, education resources, can be used to refer to items or facilities either added to existing provision or obtained by reorganizing an existing situation. Resources therefore, can be used to facilitate teaching and learning because they are the essential tools with which activities and operations of the school system are carried on; hence, they cannot be ignored in development planning in education (Okpe, 2010). This suggests that an academic environment that is lacking in resource provisions and availability may not appeal or motivate the teachers and the students in the teaching-learning process in the school system. In fact, any committed teacher or student will definitely not want to be in such a school, especially in this era when games and sports attract a very high premium in the world.

Hence, these resources act as stimulants on both the students and teachers. It is for this reason that school plant planners have continued to emphasize the proper planning and acquisition of resources especially before and after the establishment of a school. This will ensure that the educational objectives for which a school is established are attained. Education resources therefore, should be designed to support, stimulate and strengthen teaching and learning. Schools that possess these resources can use them for immediate production or alternatively for the production of further resources, especially in reaching decisions during resources allocation (Akomolafe & Adesua, 2016).

Moreover, there is the tendency that, children learn better when they can actively explore and dominate their environment that is rich in resources which gives them the responsibility to make meaningful choices about what is to be learned, when and how to interact with their teachers and with one another. This creates a strong influence of school resources on educational

achievement of the school child. Thus, school resources are teachers' tools that essentially aid teaching and learning process in the school system. These resources must be of a good quality, adequate and available all the time (Centre for Educational Research and Innovation, 2007).

Consequently, a school that lacks the essential resources cannot reasonably expect the achievement of its main objectives. Appropriate school authorities must give credence to resources as part of the most essential tools designed to facilitate and stimulate programmes in the school system. The right type of atmosphere required for effective learning consists of better school buildings, and more and good teaching resources (Johnstone, 2005). Fundamentally, students are in school for learning in order to derive mental, intellectual, physical, social and moral development which the use of resources could aid.

The above scenario emphasizes that the provision of instructional materials needed to educate the child is not the ultimate since the student cannot acquire the desired training without the teacher. Dike in Obaje (2003) stressed that a school may purchase the best resource such as the audio-visual equipment in the world, but without the trained personnel to direct their usage, such equipment will end up being objects of classroom decoration. In this instance, it means that the condition of a school resource does not only influence students' achievement, but also impacts the work and effectiveness of the teacher. There is, therefore, the need to rationally utilize the teaching personnel through retention and provision of standard resources in which they operate.

Scarce Resources in Education

Scarcity of education resources is the state of education inputs being in short supply, shortage, and insufficiency. Synonymously, scarcity means shortage, dearth, lack, want, undersupply, insufficiency, paucity, meagerness, sparseness, scantiness, poverty (Adebayo, 2017). The economic resources in the form of land, labour, capital and the entrepreneurial skill, which are often referred to as factors of production or the production inputs and are naturally endowed are not abundantly available at all times in the right quality and quantity and this makes them scarce. In education, the scarcity implies that the available land, labour, capital and the entrepreneurial skills are limited to satisfy educational goals. (Mildner, Richter & Lauster, 2011).

These productive resources in education are limited in supply (scarce) and have alternative uses (can be put into more than one use). It implies that educational administrators and students must choose between satisfying some of their wants and going without others. It suggests that the problem of choice logically arises from resource scarcity. Choice is the selection from a group of alternatives and rational choice is an act of prioritization among competing ends on a valued scale of preference (Akomolafe & Adesua, 2016).

Indeed, education is considered as a commodity or resource and it is scarce and not free. In order to obtain a level of education something of value, usually, another scarce commodity has to be given up. Scarcity of education, gives rise to price. This economic concept of education scarcity must not be confused with the physical fact that resources such as labour, land, capital, even minerals and the beauties of nature are in limited supply. Education as a scarce resource in almost all economies is bought and sold at a price. In this case, the price mechanism is viewed as an efficient way of allocating scarce resources among alternative possible uses. Under certain conditions the price mechanism and the use of correct prices for resources, which properly reflect their economic scarcity to society, is a very effective way of ensuring that education resource is used to the maximum social advantage. There are

two essential characteristics, which a price mechanism must possess if it is to function correctly in society's educational interest. First, the relative price of the final product of education should reflect the relative benefit derived from the consumption of the final product by the society. Secondly, the prices of education commodity should reflect its relative scarcity (Todaro, 1982; Okeke, 1988).

Education as an economic service is scarce when there are less of resources than people would like to have if it were free. The amount of education is scarce relative to people's desire for them because the economy's resources used in their production are themselves scarce. Scarcity of education gives rise to the need for efficient utilization of its resources among alternative competing uses through the free market mechanism in capitalist economies or through a centralized command system in planned economies (Todaro, 1982; Okeke, 1988). Remarkably, education as a field of study, education as a form of service, and as productive agents of education, is a scarce resource in any given economy to satisfy school needs at any time. Caution must be trade with the use of resources to achieve educational goals in a downturn economy.

Rational Utilization of Scarce Resources in Education

Rational utilization of resources is premised on the manner in which the physical, financial and human inputs into the production process are used, resulting in the minimization of wastage in an organization. It is a measure to curb excessive and avoidable spending of resources if education at all levels must be effective in achieving its goals.

The plain objective of resource utilization is to optimize yield from a particular resource by applying control on the resource process. The control may result in development or realization of the maximum use of a potential resource. The essence of resource utilization should be to minimize the impact of economic development upon people and in the school system. Since the economy provides the resources, the school system in the teaching-learning process must rationally utilize the resources to ensure increasing productivity. Moreover, development of one resource must not be inimical or contradictory to the utilization of others which share the same or identical utility in the school system (Adeofun & Bada, n.d; Akinsolu, 2012). Therefore, utilization concept could be viewed as a fundamental integrating process designed to achieve organized purposeful educational results. Thus, utilization his become a process, discipline, as a people and as a career by which managers create, direct, maintain and operate purposeful organization through coordinated cooperative human efforts (Adeofun & Bada, n.d; Akinsolu, 2012).

The rationale for utilization of scarce resources is founded on the justification that in educational institutions, the availability of human, provision of physical and financial resources is one thing; another thing is to put these resources in their optimum performance for the achievement of education goals. The logic behind this is aimed at avoiding the wastage of available resources in order to attract maximum benefit from rational utilization. One would agree that in many parts of Nigeria, there are many structures or halls without the basic equipment and materials for learning; and equipment and materials, which cannot be used because there are no rooms, workshops and laboratories where they can be put into effective use. For these resources to be optimally utilized, structures must be created to house and protect them (Adeofun & Bada, n.d; Akinsolu, 2012).

In fact, to have equipment and materials without physical structures to house it for maximum protection poses serious threat to their utility. For maximum utilization of education

resources, its provision must take into account the present total enrolment in the school as well as the future enrolment projections. There may arise also the problem of under-estimation and/or over estimation leading to wastage. Over the years, there is the observation that school resources have not kept pace with the trend in school enrolment. The teachers' common rooms or staff rooms have remained in the same ramshackle state even in the face of challenging innovations in the school programme and methodology and classrooms have remained the same. These classrooms initially built for thirty pupils or students now accommodate forty-five or more (Okeke & Uwazurike, 1997). Looking at the Universal Basic Education (UBE) programme in Nigeria, one of the problems that must be tackled for the successful implementation of the programme has to do with the effective utilization of available resources, which exists in form of classrooms, furniture and buildings, trained supportive staff (clerks, typists, secretaries etc.), qualified teachers and equipment. Their inadequacies constitute frustration and disillusionment among students and teachers alike.

Essentially, inadequate provision of school resources leads to over-utilization of the available few. An ideal classroom design is determined by the average space a student occupies in the class. This takes care of the volume of air a student will have access to per second or per minute. Any aberration will lead to adverse health challenge on students and teachers. For instance, if a classroom contains more than its capacity, the volume of fresh air per child will reduce. This means inadequate ventilation could make students get tired easily. This is applicable to resources like hostels, libraries, laboratories, furniture, recreational facilities among others in the Nigerian school system.

The issue of rational utilization of resources is now very relevant as the Nigerian school population is growing very fast while the available resources to meet the nation's education need is decreasing at increasing rate. The technologically advanced nations continue to search for new means of improving the utilization of their resources; while, the less technological nations strive to reach levels of economic wellbeing which advanced nations have achieved. This is why Nigeria must bear the primary responsibility for the conservation and rational development of her own resources in education and ensure that they are utilized in such a way that the continued and perpetual derivation of benefits from them are guaranteed.

Approaches to Utilization of Scarce Resources for Effective School System

In the opinion of Enaohwo in Okpe (2010), the utilization of scarce resources for effective school system implicitly must identify changes in school use, the length of time schools are used, teachers' work load, and class size.

School use: It is clearly economical to make use of the existing school resources. The investment and running costs involved can yield greater benefits if school buildings are used for more than one purpose. Thus, school buildings can also be used for community activities and can shelter functional literacy groups, extension work, and health service activities. Other government activities can also use school facilities. School workshops, playing fields and libraries can be used for community purposes in addition to their normal use. Good planning for example can also produce economic advantages. If teaching instruction is built to incorporate day release work, the equipment of the industry might then be used for part of the training, thereby saving a good deal of capital investment and possibly, saving teachers' time as well.

Operation of double sessions: The most common solution is to increase the use of the school buildings to operate double sessions. Where investment in school building is restricted,

schools can be scheduled for two different groups of students, one in the morning and the other in the afternoon session. This requires the extension of the school day, but it doubles the utility of the building since twice as many children can be accommodated. If the teaching staff can be used for both sessions, there is a considerable saving in the teacher number. In this instance, while the shifting system may be acceptable, the use of same teachers for two shifts or sessions is opposed. Teachers in Nigeria and in fact, in most developing countries are the least paid workers and less recognized in the society. If such categories of workers will be made to work, it will amount to exploitation and appropriation of their labour surplus at the expense of their convenience and comfort, a duty that would be far more than a sacrifice. The shifting system can lead to quality education, when a school lacks facilities and the class size almost doubles the government approved class size.

Division of labour: Teachers could work more periods in a week. At present, the number of class periods which teachers are expected to work in a school week varies substantially. In Franco-Phone countries of Africa, it is as low as 18 periods, whereas in developed countries, it is frequently above 35 periods. Effectiveness can be improved by making the teachers' work more with only about four weeks holiday per year. This means, during school vacations, teachers would be attending in-service course, preparing for the next term, or working on a curriculum development. All these are aimed at maximum teacher utilization for quality education.

Class size: The national policy on education stated a pupil-teacher ratio of 1:10 for Creche, 1:25 for pre-primary, 1:35 for primary, 1:40 for post basic and 1:20 for practical works (Federal Republic of Nigeria, 2014). There is a strong of this relationship between class size and achievement, which suggests that with this standard of this pupils/or students per teacher, class teaching is expected to ensure desired level of performance. When the number of students becomes too high, the pattern of instruction must again change. However, the class size in developing countries, particularly in the primary and secondary institutions are fast growing far above what they should be relative to the prescribed international standard of 35. This phenomena calls for educational planners' attention in order to ensure prudent utilization of the available resources (Okpe, 2010).

On the whole, new legislations can be promulgated where the existing ones are obsolete and inappropriate to check issues relating to changes in school use, the length of time schools are used, teachers' work load, and class size. Of course, it is one thing to enact rules and regulation and another thing to implement them accordingly to achieve results. Any form of abuse in the approaches must be interpreted within the confines of the law to direct focus on rational utilization of scarce resources for eventual attainment of the goals of education especially in a downturn economic situation.

CONCLUSION

This paper has very succinctly deciphered the concepts of economic downturn, education resources in school system, scarcity of education resources, and rationale for utilization of scarce education resources, and scarce education resources utilization for effective school system. The way forward is that the hard time imposed by the economic downturn, is not advisable to be addressed by cutting costs, but through the rational utilization of economic scarce resources. There should adjustments in changes in school use, the length of time of schools use, teachers' work load, and class size in order to minimize wastage of resources.

Suggestions

In order to normalize the downturn situation, the following lines of action are suggested:

- Re-adoption the Rolling (Plan) Budgeting as effective management system that will remove or normalise some of the factors that are responsible for the present economic downturn.
- There is need for diversification of Nigeria's revenue sources through improvement in the sectors of agriculture, solid mineral, tourism to boost the economy for effective school system.
- Teachers should be more innovative by relying on improvisation of instructional materials.
- Execution and financing of education and school projects should be handled through direct labour in order to reduce cost.
- Government should be made to ensure that educational personnel (teaching and non-teaching staff) of the educational system be regularly paid their salaries and allowances.

REFERENCES

- Adebayo, M. B. (2017). Financial intelligence in hard times, wisdom to live above scarcity. In Nigerian Baptist Convention, *International General Workers' Conference*, 63rd edition, 41-45.
- Adefun, C. O., & Bada, B. S. (n.d.). EMT 301: Principles of natural resources management. *Lecture Note*.
- Akinsolu, A. O. (2012). Resource utilization and internal efficiency in Nigerian secondary schools: Implications for socio problems of education. *Internal Journal of Sociology and Anthropology*, 4(1), 23-30.
- Akomolafe, C. O., & Adesua, V. O. (2016). The impact of physical facilities on students' level of motivation and academic performance in senior secondary schools in South West Nigeria. *Journal of Education and Practice*, 7(4), 38-42.
- Bozkurt, A., Akgun-Ozbek, E., Onrat-Yilmazer, S., Erdogan, E., Ucar, H., Guler, E., Sezgin, S., Karadeniz, A., Sen, N., Goksel-Canbek, N., Dincer, G. D., Ari, S., & Aydin, C. H. (2015). Trends in distance education research: A content analysis of journals 2009-2013. *International Review of Research in Open and Distributed Learning*, 16(1), 330-363. https://www.academia.edu/11056576/Trends_in_Distance_Education_Research_A_Content_Analysis_of_Journals_2009-2013
- Camilleri, A. F., Ehlers, U., & Pawlowski, J. (2014). *State of the art review of quality issues related to open educational resources (OER)*, Luxembourg: Publications Office of the European Union, p. 54
- Central Bank of Nigeria (2012). *Understanding monetary policy series no. 14 economic recession*. Abuja: 33 Tafawa Balewa Way, p.1-7.
- Center for Educational Research and Innovation (2007). Giving knowledge for free: The emergence of open educational resources (PDF). *Executive Summary (Policy implications and recommendations): Organization for Economic Co-Operation and Development (OECD)*. p. 15.

- Ebong, J.M. (2006). *Understanding economics of education*. Port Harcourt: Eagle Lithography Press.
- Enaohwo, J. O., & Eferakeya, O. A. (1989). *Educational administration*. Ibadan: Paperback Publishers Ltd.
- Federal Republic of Nigeria (2014). *National policy on education*. Nigeria: Nigeria Educational Research and Development Council (NERDC) Press.
- Guidi-Bruscoli, F. (2012). John Cabot and his Italian financiers. *Historical Research*, 85(229), 372–393.
- Hylén, J. (2007). *Giving knowledge for free: The emergence of open educational resources*. Paris, France: OECD Publishing. Doi:10.1787/9789264032125-en.
- Johnstone, S. M. (2005). Open educational resources serve the world. *Educause Quarterly* 28 (3). Retrieved 2010-11-01.
- Mildner, S. A., Richter, S., & Lauster, R. (2011). Resource scarcity-A global security threat? *SWP Research Paper*. German Institute for International and Security Affairs, p.5.
- Obaje, R. I. (2003). *Resource utilization for quality delivery of secondary education Kogi State*. Unpublished M.Ed. Thesis, Port Harcourt: University of Port Harcourt.
- Okeke, B. S., & Uwazuruke, C. N. (eds.) (1997). *Introduction to educational administration*. Owerri: Klet Ken Publishers.
- Okeke, C. S. S. (1988). *Senior secondary school economics*. Nigeria: Jet Publishers.
- Okpe, N. F. (2010). *Resource provision and utilization for quality public and private secondary education in Rivers State*. Unpublished M.Ed. Thesis. Port Harcourt: National Open University Port Harcourt Centre.
- Todaro, M.F. (1982). *Economics of a developing world*. London: Longman.

 © JSRE

ⁱ **Dr. Samuel Nariochukwu Owhondah** is the current Head of Department of Educational Management, Faculty of Education, Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Nigeria. He can be reached via email at samuel.owhondah@iaue.edu.ng.