

**INFORMATION AND COMMUNICATION TECHNOLOGY (ICT):  
A MEANS FOR ACHIEVING THE MILLENNIUM DEVELOPMENT  
GOALS (MDGs) IN NIGERIA**

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**Abstract.**

*The need to engage various bodies and Information agencies such as Information and Communication Technologies (ICT) as a means towards achieving Millennium Development Goals (MDGs) in Nigeria cannot be over emphasized. This paper discusses the vital role information and communication technology plays in the eradication of poverty and hunger, Universal Basic Education, improving maternal health and reducing child mortality rates, combating HIV/AIDs, malaria and other killer diseases, environmental sustainability, developing global partnership and promoting gender equality. The paper briefly explains the history of UN Declaration signed by World leaders on 6 – 8<sup>th</sup> Sept. 2000 to curb the suffering of mankind in the developing world.*

The paper highlights the role media practitioners have been playing in disseminating information about the Millennium Development Goals, through Radio and television broadcast and other resources such as newspapers, journals, magazines, books and others for such a project to achieve its maximum aim. The paper also suggests that other information sectors have to key in their roles in order to meet this target come 2015. The paper explains that Information and Communication Technology can play a pivotal role by helping in the achievement of Millennium Development Goals. The paper observes some of the challenges of the possibility of achieving the Millennium Development Goals, some of which include inadequate funding, shortage of manpower, inconsistency, corruption, poor maintenance and inadequate political will on the part of government.

The paper recommends improvement in funding, infrastructural development, constant power supply and installation of ICT facilities for the rural community toward achieving the goals.

**Introduction.**

Millennium Development Goals to most people seem to be an interesting contemporary issue, perhaps because it is concerned with human well-being. It is observed that even though the programme was launched and endorsed by the Nigerian government over a decade, its implementation and impact leaves much to be desired. The programme probably is uninformed to stakeholders, in order to key their roles in disseminating the information to the people. Another issue is that information agencies have not been fully engaged especially libraries and information and communication technology whose services and responsibilities include the provision of relevant information to the users when needed.

Aina (2003), observed that information is a generic term that encompasses any occupation that is involved in any aspect of information cycle, such as generation, processing, storage, dissemination and preservation of information. It is therefore not surprising that it is one of the largest profession in the world, covering such fields as journalism, broadcasting, librarianship, archives, records management, printing, publishing, book trade, Museum and Information and Communication Technologies (ICT), which is concerned with the technology used in handling, acquiring, processing, storing and disseminating information.

The use of computers and communication technologies in information handling and processing has arisen due to increased workload involved in coping with information explosion. In order to keep pace with handling these increasing number of information carriers, computers are utilized to handle information processing with greater speed and accuracy than manual processing. Access to information processed by computer is instant. It can also be accessible over long distances regardless of where the information is processed. This is possible through telecommunications technology. Also, computer – processed information enhances certain library services and functions such as the Selective Dissemination of Information (SDI) to a large number of users. A major vital of computerized information is through the possibility of networking as information (data) stored in one computer can be transmitted to another computer regardless of the distance. Through networking, many libraries can cooperate in the production of databases. ICT has also brought about electronic libraries,

virtual libraries e.t.c., as such, people can now access information from many points carriers in many libraries from one's desk in the office or study room. The convergence of computers and telecommunications in handling and processing information constitutes what is now known as information and communication technology. Examples are the major applications of ICT in libraries, such as on-line searching, CD-Rom technology and the Internet.

On-line searching provides for direct communication between a user and the computer system in an interactive mode. The user uses the computer terminal to directly search the databases of his interest, which may be available to him/her locally or in a remote computer several thousand miles away. This information can be on various national issues including those connected with the Millennium Development Goals. The concept of Information and Communication Technology has several definitions. Because of the usage and applications, ICT enable information to solve many problems affecting human beings. The use of Information and Communications Technology (ICT) has permeated all strata of human activities and is increasingly gaining prominence in the performance of different tasks. Thus, ICT now empowers people by giving meaning to their economic and intellectual life (Unagha, 2006).

Onu (2004), also asserted that the use of ICT has revolutionized the way people live, communicate, seek operational information and generally transact business. Edom (2007), posit that many scholars and authors have different definitions for ICT. To him, ICT is the use of electronic tools to process, store, preserve, access, retrieve and disseminate information with minimum delay. Ekoja (2007), sees ICT as kits or equipment for capturing, processing, storing, transmitting and accessing information which enhances teaching, learning and research for educational need of users. ICT involves the provision of information resources, accessed from the internet toward meeting the information need of the users. These available resources from the internet can help in decision – making to facilitate teaching and learning through its various services such as literature search, and selective dissemination of information. This would enable information publications, through creating public awareness, using posters, stickers, flyers, notice boards and library exhibition to reach the general public.

ICT is an agent of information recommend that it's have roles

toward providing developmental information for the attainment of Millennium Development Goals in Nigeria. Scientifically, information is referred to as processed data. It can be loosely defined as an abstract and it could be bought or sold. In whatever form it takes, information is capable of changing one's opinion (Coe Waterville and Gilbert, 2000). Information and Communication Technology (ICT) is used in handling, acquiring, processing, storing, and disseminating information available for easy access. It provides information for decision-making, policy formulation and policy implementation. It is in view of this that this paper attempts to explain the role of Information and Communication Technology in providing information services towards achieving the Millennium Development Goals in Nigeria.

### **Millennium Development Goals (MDGS).**

The Millennium Development Goals came from Millennium Declaration signed by one hundred and eighty nine (189) countries, including one hundred and forty nine (149) heads of state and Government made in New York, U.S.A, endorsed for the programme in September, 2000 and from further agreement by member states at the 2005 world summit (Resolution was therefore ratified by the General Assembly). The goals and targets are interrelated and are considered as a whole, they represent a partnership between these developed countries and the developing countries with a view to creating an enabling environment both at the national and international levels respectively. The programme which was aimed at improving the lives of the people of their countries is designed to be achieved by the year 2015. The goals cover the following:

- Eradication of extreme poverty
- Achieve universal primary education
- Promote gender equality
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDs, malaria and other diseases
- Ensure environmental sustainability
- Development of global partnership for development.

### **Eradication of extreme poverty and hunger:**

The target is to improve the living condition of people who live with less

than one dollar per day and those in hunger between 1990 – 2015 to abruptly put an end to poverty and provide for the needs of the citizenry

**Achieving Universal Primary Education:**

The goal specified Education for all, education as a corner stone or backbone of development, it is clear that any society which is under development do not invest or care for education. This has become necessary that by 2015, all children with emphasis on girls, children in difficult circumstances and ethnic minorities have access to 9 years of school age, and would complete free and compulsory full primary education.

**Promote gender equality:**

Females constitute more than half of the world's population. An estimated 50% of Nigerian population is females both women and girls. This goal is to give women equal opportunity to job, political participation and access to education without discrimination. This culminated in government's effort of implementation of National curriculum on sexuality education at secondary level.

**Reduce child mortality:**

That by 2015 children death rate will be reduced by two third through preventive measures such as immunization against measles. In order to achieve the goal, the Nigerian government established the National Health Care Policy (NHP) which was officially launched in October, 1988 by the government initiative through the National Council on Health. The policy states that:

1. All states should plan a strategic action for reproductive health and integrated child survival programme in line with national plan and ensure its implementation.
2. All states should ensure access for women and children free health care routine, immunization, nutrition growth monitoring, feeding, control of malaria, diarrhoea, acute respiratory tract infection etc.
3. All states and local governments should ensure employment of skilled personnel in material and family health services.

**Improve maternal health:**

To improve three quarter live birth rate, establish maternal health services to provide efficient and effective services through health skill personnel and to reduce  $\frac{3}{4}$  maternity mortality ratios by 2015.

**Combat HIV/AIDs, malaria and other diseases:**

Nigerian government's response in tackling the epidemic was the establishment of Presidential Commission on Aids (PCA) involving the Minister of Health and other stakeholders in 2000. The National Action Committee on Aids (NACA) was formed to foster a multi-sectional approach to combating AIDS through proper awareness of the disease and the provision of condom and antiviral therapy to support the victims.

**Ensure environmental sustainability through provision of sanitation facilities:**

This is aimed at encouraging environmental sustainable practices while mitigating risks of human health. The campaign for tree planting in recent times can be achieved through giving quality information to the public and also appreciate the importance of the exercise and exhibit environmental friendly attitudes.

**Development of global partnership for development:**

ICT information services could help in the promotion of global partnership development by providing information on available organizations that are ready for partnership. For example, Nigeria now benefits from many of these partnership e.g WHO for years is working in the Nigeria sector to reduce the pace of HIV/AIDs transmission. After the launching of these golden goals, the hopes of Nigerian citizenry were raised that by 2015, they will be free from the burden of poverty, hunger, security, health hazards to mention but a few. But what are the present living conditions of Nigerians?

**The Downturn of Nigerian Economy.**

Information and power, as well as money are what distinguish the developed from the developing world. The western world has much of these while Africa has little of any of them. Thus approximately, 70% of people in sub-Saharan Africa are poor. Sacks (2005) said that more than

300 million people live in extreme poverty, barely subsisting on less than one dollar per day and 200 million people live on between one dollar and two dollars per day with life expectancy of only 47 years. The same source also found that millions of children die of different child killer diseases early due partly to the social problems that are budging majority of the developing nations. Although Nigeria is endowed with natural and mineral resources, ranked the 6<sup>th</sup> producer of oil in the world, and a population of over 14million, the annual Gross Domestic Production (GDP) growth rate is just 2.9%. And the issue of unemployment is very high. Daily Trust (2011), reported that 42% of youths are jobless and women participation in politics from 1979 – 2011 is still not commiserating with the population of women. In 2011, Nigerian women asked the government for 35% affirmative action, however, only 33% has been given to women in political office (WARDC's computation INEC database, 2011). The above reports show therefore, that gender disparity is still very high.

HIV/AIDS cases are still significant as 2011. Cases of HIV/AIDS are high in other states with Nigeria experiencing deaths of about 220,000. CIA World Fact Book, 2011 reported that only a few people are aware of the scourge of HIV/AIDS (UNICEF, 2010). Pupil primary school enrolment remains 61% as at 2005 – 2009 and there is gender disparity of male 65% and 60% female enrollment. There also seems to be high rate of maternal mortality rate in Nigeria. Going by the information sources above, indeeds it is vital to ask for the possibility of actualizing the MDGs in Nigeria by 2015. The paper therefore posits that ICT and other sectors of information could contribute adequately towards achieving the Millennium Development Goals (MDGs).

#### **Information and Communication Technology and the Actualization of Millennium Development Goals (MDGs) in Nigeria**

For Nigeria to achieve the (MDGs) like other countries of the world, there must be a strategic policy to adopt in order to actualize the (MDGs). According to the MDGs report (2004), it was at the September, 2000 UN summit that the world leaders placed development at the heart of the global agenda by adopting the MDGs. It is a known fact that by virtue of its position in the digital world, ICT serves society in a way no other industry or sector does. It is fast growing as a result of promoting employment generation and wealth creation. It also

enhances social economic activities including educational development (Chibomba 2008). It is the premise of progress in every individual, family as well as the society at large (World Bank, 2008).

ICT has become paramount in promoting all key sectors of the Nigerian economy, with the President of Nigeria, Goodluck Jonathan emphasising on Information and Communication Technology in facilitating education and other sectors of the economy as part of his transformation agenda. The recent creation of the ministry of Information and Communication Technology in June, 2011 by his administration is a step towards the right direction. Other series of economic reforms designed to address the structural and institutional weakness of the Nigerian economy and reduce poverty at least by 50 per cent include acceleration of privatization, deregulation and liberalization of key sectors of the economy, fiscal and monetary reforms, infrastructural development, greater transpiring and accountability, and anti-corruption measures which are key elements to economic growth.

In March, 2004, the policies were embraced through programmes such as National Economic Empowerment and Development Strategy (NEEDS), then Local Economic Empowerment Development Strategy, National Poverty Eradication Programme, in which there are vocational skills to make one to be self-reliant through computer training schools; and universal basic education. The National Policy on Education integrated ICT in the curriculum, from primary to tertiary institution. In the National Health Insurance Scheme (NHIS), all hospitals are computerized, the sourcing information about recent diseases or virus by using websites to get information, the role back malaria programme and provision of treated malaria net. The strengthening of the National Agency for Drugs Administration and Control (NAFDAC) for the above mentioned ways without taking the cognizance of Information and Communication Technology (ICT) as one of the strategies toward actualizing the MDGs in Nigeria will not yield a good result. Information professionals opined that information is indispensable for policy formulation, policy evaluation and policy implementation because it keeps people informed about government policies.

According to Chibomba (2008), ICT brings about effectiveness in information management and distribution of information

management. Distribution of information will boost users' access to current information electronically via computing network in various information centers and libraries. This supports library to maintain current awareness, literature search e.t.c on the websites. ICT resources facilitate learning to make man a right thinker to make national decisions. It is only education that makes it possible for man to receive information from outside his world. It helps in planning, record keeping development and operation of all sectors and has improved efficiently in productivity and management of economy sectors. The tandem growth of globalization and technological change process over the last twenty years has brought the emergence of what is known today as "global economy" powered by technology, fueled by information and driven by knowledge" (United States Department of Labour – USDL, 1999).

#### **The Impact of Information and Communication Technology as a Sustainable Tool for Rural Development.**

Information and Communication Technology is all aimed at providing the latest information to its users across the globe, including the rural sector. Information therefore, means many things to many people depending on the context. The rural dwellers can also benefit from the ICT resources, using modem-modulator/demodulator (Modem). The device is commonly used in national and international networks. It allows a computer to communicate with another over a standard telephone line by converting the digital data from computer into analogue signals and vice-versa. It is a piece of hardware that is plugged into computer and telephone. Most computers usually have a modem. However, for computers to communicate with one another via a modem, they must be compatible in terms of speed at which the signal is transmitted (Capron, 2000).

In this regard, the rural dwellers can have access to information, by using modem, in the rural areas. We have the police, health workers, teachers, and tutors and agricultural extension workers, who can make use of information and disseminate to the rural people to be aware of government policies and programmes.

In a nutshell, one however wonders how poverty can be eradicated in the Nigerian context using information and communication technology going by the level of failed government

policies and corruption which can best be described as “pandemic”. The ultimate eradication of poverty remains one of the most urgent and compelling goals for the world community. Consequently for Nigerian government, raising the standard of living of world’s most improvised people is paramount priority, and it is no mere coincidence that the first goal among the UN’s Millennium Development Goals (MDGs) is stated as “eradication of extreme poverty and hunger”. Information and Communication Technology can play a pivotal role by helping to fill the gaps in cycle of poverty. Suleiman, 2010; Ubanu, 2009 stated that over 10, 000 people are directly employed in semi-urbanized Nigerian by GSM operations while 1, 000, 000 indirect employments have been created through the operation of GSM. ICT has opened up business opportunities and become a veritable revenue generating source of living for most disadvantaged folks of Nigeria. Most people in semi-urbanized areas use the mobile phone to conduct business as a payphone to make money by charging customers for the use of phone, thus generating income. Information and Communication Technology holds a lot of potentials for economic growth, poverty reduction, women empowerment and health emancipation in rural and urban Nigeria. The circulation of information updates the knowledge of the populace and by implication exposes them to development opportunities that are tantamount to actualization of MDGs.

#### **The Vital Role Of Radio And Television In The Provision And Dissemination Of Information In Achieving (MDGs) In Nigeria.**

##### **Radio:**

Radio is effective and beneficial to the entire nation due to its potentials to reach out every part of the society. The government therefore finds it easier to communicate its policies and programmes especially through the radio to disseminate information on (MDGs) programmes, to the general public. Radio makes far reaching impacts on the educational information and entertainment development of the society. However, for a successful broadcast, government must strike the balance in its programming to ensure that public interest is protected by carrying every listener along (Sherman, 1980). This can help in the realization of MDGs in Nigeria.

**Television:**

Sherman (1980) sees television as a source of information as well as education, enlightenment and entertainment. In other words, it is a means of communication, communication being the way and manner people interact with each other. Government uses television as communication channel in achieving the MDGs programmes. Most of the information is disseminated through the television. This is because in as much as you can listen to what is being said you can as well see it dramatically in picture form how it is in reality. The quest for national growth and development has been an ongoing issue in Nigeria. These involve various social contributions in the realization of this goal. As the economic, political, social, educational, health and religious institutions each have roles to perform in the attainment of achieving MDGs in Nigeria.

**Libraries:**

Libraries and ICT can key in the realization of MDGs through the information resources. According to Akintunde (2008), libraries are globally known as information centers where information is well organized and arranged for users to access for different purposes. This could help to achieve all the eight goals specified by UN declaration in 2000 (United Nations Department of Public information, 2002). Libraries could help in engaging in the campaign for the attainment of achieving the MDGs programmes providing useful information through selective dissemination of information services, and creating awareness services (CAS) through posters, films, pamphlets, to mention but a few.

**Challenges of Information and Communication Technology.**

The role expected of information and communication technology in achieving millennium goals is not adequately played as the information and communication ICT are faced with a lot of challenges which among include inadequate funding of the sector, inadequate communication infrastructure and high cost of telecommunication facilities and general shortage of skilled resources in the sector. The problem of inconsistency, corruption, poor maintenance habit among many others are some of these challenges.

**Conclusion**

On the whole, Information and Communication Technology is central to the development agenda co-opted in Nigeria and by inference is seen as a strategic tool in facilitating the achievement of the Millennium Development Goals (MDGs). Globally too, this can be achieved if all sectors of endeavour embraces and are ready to explore the opportunities presented by the ICT in the fast globalizing world.

**Recommendations.**

- There should be increased funding of the Library, Information and Communication Technology.
- The government, private proprietors and all stakeholders should encourage proper training and retraining of workers to update their knowledge so as to provide their services adequately and professionally.
- The government should put in place the needed infrastructure and the desired atmosphere for the ICT sector to prosper.
- The government should be focused on policy formulation and implementation regarding the ICT sector.
- There should be steady power supply so as to allow the system to perform well.
- The installation of ICT facilities for the rural community would further enhance poverty alleviation at that level.
- Radio and Television should be given due attention to ensure their full operation so as to disseminate information on government programmes and policies towards the realization of MDGs by 2015.

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