

# GLOBAL SYSTEMS MOBILE TELECOMMUNICATIONS (GSM) AS AN INSTRUMENT FOR SUSTAINABLE LIVELIHOOD OF URBAN ELDERLY

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(Received 31 July 2006; Revision Accepted 18 September 2006)

## ABSTRACT

The increasing growth of the elderly and cities in developing countries in recent years has given rise to widespread and alarming urban insecurity. This is attributed to the economies, external environment and governance that are hobbled by weak management and plunder. Most cities of developing world particularly Nigeria work partially well for those who are healthy solvent and able bodied, whereas the livelihood of those who lack any of these characteristics are faced with multitude of barriers (physical, institutional and systemic) that hinder their sustainable livelihoods in urban life.

The advent of GSM in recent past has had a significant effect on the livelihoods of people world wide. This paper therefore examines the possibility of the GSM to positively transform the livelihood of people particularly the elderly (age 55 years within an African city Ibadan, Nigeria). The results reveal that, there is a significant impact of the GSM on the livelihoods of the elderly. Based on the findings however, it is recommended that the effective provision of affordable communication service will greatly enhance and liberate the elderly from the shackle of environmental, institutional and systemic barriers.

**KEYWORDS:** Elderly, Telecommunications, livelihood, barriers, urban, good governance.

## 1.0 INTRODUCTION

With the increasing life expectancy in most parts of the world, the population of the elderly is increasing at an unprecedented rate. On average, 1 million persons per month cross the threshold of age 60, while the total number of those aged 60 and over grew from 200 million in 1950 to 400 million in 1982 and the number is projected to grow to 1.2 billion by 2025 (UNCHS, 1993). Meanwhile at that time, over 70 percent of them will live in developing countries (UNCHS, 1993). In other words, between 1980 and 2025, the population aged 75 and over will increase by 434 percent in Eastern Africa, 385% in Middle Africa, 427% in Northern Africa and 526% in Western Africa. Invariably, Nigeria will be among the countries in Africa that will experience large increase of this age group (Apt, 2000).

According to chambers and Conway (1992) cited in IFPRI 2002, livelihoods comprises the abilities, assets (stores, resources claims and access) and activities required for a means of living. In actual fact a livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets and provide sustainable livelihood opportunities to the next generation and contribute net benefits to other livelihood at the local and global levels in the long and short term (Phansalkar, 2003). The African continent is overwhelmingly the least urbanized region of the world (United Nations, 2004). Surprisingly, one of the major demographic problems in the region is the rapid rate of urbanization and the inability of the urban areas to play a sufficiently and expected dynamic role in the process of economic development at individual and global levels. This fact and a host of others are responsible for a chain of circumstances that affects the livelihoods of the elderly in most Nigerian cities. It is obvious that, elderly; who are economically well off, have a lower standard of livelihoods and faces arrays of abuses (physical, psychological and financial). This stem on the fact that they are unable to participate equally in the opportunities the city offers due to they physical, social and systemic barriers. Though some barriers can be over come through extra expenditure, they are still faced with others such as inhospitable design of buildings, poor mobility arrangements and unfriendly living environment.

It is against this backdrop that this paper takes the challenge to examine the potentiality of the GSM in transforming the livelihoods of the elderly. The main thrust of the paper is to identify areas or urban activities that the GSM can effectively be utilize by the elderly to achieve sustainable livelihoods using Ibadan metropolis as a case study. Some policy recommendations are also highlighted in the paper.

## 2.0 GSM AND AGEING POPULATION: A GLOBAL PERSPECTIVE

Telecommunications can best be described as the gateway to a world of seemingly inexhaustible resources. In other words it is a super-highway of unlimited opportunities. The development of the GSM as a source of information and a noble channel of communication in recent past has reshaped the concept of livelihoods in most developing countries. It should be noted that, mobile phones are the most common tool used by large number of people for communication. Accordingly to Talvitie (2003 and ASSA, 2004) GSM is viewed as an important part of modern information and communication technology (ICT). It is internationally defined as "global system for mobile communications". The GSM is an open, non-proprietary system that is constantly evolving (Barnard, 2005). In less than ten years since the first network was commercially launched, it has become the world's leading and fastest growing mobile standard spanning over 200 countries around the world. It is interesting to note that, the term GSM is called by different names in different countries; for instance, in French it is called "le portable" or le G; in German - "the handy"; Finns - "kanny"; Spanish - "el movil"; Greek - "Keeneeto"; Americans - "cell phone"; Japan - "Keitai denwa"; China - "Shoji" and in Nigeria - "handset or mobile phone" (Jenkins, 2004).

More importantly, more than one billion people-almost one in six of the world's population- are now using GSM. The situation in Africa and specifically Nigeria is not different from the rest of the world. This is confirmed by the Nigeria Communication Commission (NCC) (2003), that the proactive approach taken by the government to the telecom sector has made it possible for over 2.5 million Nigerians to clutch GSM phones (MTN, GLO, VMOBILE) today. The point of note is

that, whatever it is called and wherever it is used, this simple accessible technology has changed the way in which individuals conduct their everyday lives (Jenkins, 2004 and Odufuwa, 2005). One of the most profound impacts of the GSM is the ability to reduce the power of physical distance as a barrier to communication, collaboration and commerce. In actual fact, this new telecom system have the opportunity to overcome distance as a barrier to interaction with individuals, organizations and communities that have been most disadvantaged by locations, design of public facilities, age, etc. Based on the potentiality of the GSM to remove the physical boundaries of today's static office and residential structure, enhance communicating and business activities without restriction, it is therefore not surprising that policy makers and economic development experts are touting the new

telecommunications system (GSM) as a powerful tool for improving the social, economical stability and all round likelihood developments in the society.

It is therefore importantly to note that, there exist individual differences in coping with the present environmental or societal burdens. Apart from the gender perspective, a notable angle that demands more proven impact on livelihoods concerns the ageing. Therefore, the sustainable livelihood of the elderly or aged depends on a vast array of societal and other factors. In other words, the numerical growth of the elderly persons around the world (see table 1) calls for improved societal management. For instance, African region's population has 40 million person aged 60 years and over in 2000 and this was projected to 205 million (five folds increase) by 2050 (UNPD, 2002; cited in Ferreria, 2004).

Table 1: Percentage of Total Population of Older Age Groups: 1988-2020

Regions	Year	55 yrs & Over	65yrs & Over	75yrs & Over
Africa	1988	7.0	2.9	0.7
	2005	7.2	3.1	0.8
	2020	8.2	3.6	1.0
Asia	1988	10.4	4.5	1.3
	2005	12.8	6.1	2.0
	2020	17.5	8.3	2.7
Latin America	1988	9.4	4.4	1.4
	2005	11.4	5.5	2.0
	2020	15.8	7.5	2.7
Caribbean	1988	11.7	6.1	2.2
	2005	13.7	6.8	2.6
	2020	18.7	9.0	2.3

Source: U.S Bureau of the Census, Centre for International Research, International Database on Ageing 1988.

It is worth mentioning that, the aged or elderly refers to individuals who are aged 60 years and above (United Nations, 2001; Mba 2005, 2004a; 2004b cited in Mba, 2006). Also UNCHS, 1993; define the elderly as those adults who may or may not be working, but a group that require special policy consideration because of needs associated with their age. More disheartening and specifically in Nigerian cities, they are among those who experience the greatest difficulties in their daily life; most of them have low incomes, are excluded from the labour pool, market places and social networks of the city. They therefore suffer multiple deprivations as a result of their inability to traverse the city. As most settlements in Africa and specifically Nigeria, were planned and managed without taking into consideration the needs and concern of the elderly, there is a total absence of elderly friendly environment and physical infrastructure (Odufuwa, 2006). It should be noted that, as pattern of population ageing differs suffers world wide; so also the capacity to meet the challenges of this group of people.

Based on this fact and the notion that, urban planning is a vital tool for eliminating barriers and for inclusive practices in the societal development, the present study therefore examines the impact of the GSM in the pressing needs (Housing, public spaces, transport, incomes, safety or security and recreation) and livelihoods of the elderly with a view to contributing to knowledge and further raising awareness about the plight of the elderly in Nigeria and other parts of Africa.

### 3.0 METHODOLOGY

The paper examines the novelties that the GSM has introduced into the livelihoods of the elderly. The primary data for this study was through a comprehensive survey of the livelihoods of the elderly in relation to the use of GSM in Ibadan, Nigeria. The cross-sectional study covers a representative sample of 394 elderly regardless of gender; a preceding author's MS.C dissertation on GSM and work trips

in Ibadan, Nigeria in 2005. The study was conducted in one of the ten administrative and capital cities of Nigeria, (Ibadan) using stratified and systematic random sampling technique to select the respondents. The city was stratified into three residential density areas (High, Medium and Low density) based on existing work on the Ibadan metropolis (Olatubara, 1994). A total of 41 neighborhoods were selected from these residential areas, while 394 questionnaires were distributed among the residential areas and neighborhoods in proportion of the respective and projected 1996 population given by the National Population Commission (NPC). The reliability of the instrument was conducted using test-retest method and this resulted in reliability coefficient of  $r = 0.82$ .

Relevant information on socio-economic variables, (Income, Educational, Occupation, Age, etc) were recorded. More importantly, access and acceptability of GSM was determined; while the use of the system for several societal sectors (Transport, safety and security, Housing, Income support, employment) was also examined. Nevertheless, information was obtained on the difficulties faced by the elderly in the search for sustainable livelihoods.

Data collected were analyzed using simple proportions and percentages, while key variables were cross-tabulated, and the strength of association between some variables was evaluated using the Pearson product moment correlation. Differences were taken to be significant at  $P < 0.05$ . Above all, simple cross tabulations and proportions are used to ascertain levels and patterns as well as elucidate differentials with respect to key background characteristics and indicators of the general livelihood of the elderly with reference to the use of GSM in Ibadan metropolis.

### 4.0 FINDINGS AND DISCUSSION

The socio-economic characteristics of the respondents are presented in table 2. The results shows that the study is not gender bias, over 40% of the respondents

were female while more than 50% were male. The ages of the respondents were grouped into four categories as shown in table 2. About (33.76%) of the respondents are between 60-69 years old, while a little over 30% and 20% were between 50 – 59 and 70 – 79 years respectively. The point of note is that, about 65% of the respondents have access to personal GSM, while less than 40% make use of the nearest call centers.

Less than 25% of the respondents have no formal education, while only 49% have either primary or secondary education. Also, about 8% and 20% have NCE or OND and higher education respectively. It is striking to note that, the level of education affects the acceptability and the kind of

information to be sent and recover through the GSM. While about 35% are self-employed, more than 20% and less than 3% are government employee and non-government employee respectively. It is worth mentioning that, close to 40% of the elderly are retirees. The obvious implication of this is that; a sufficient proportion of the elderly depends on others for an all round support and care. Though the nature of the family (extended) gives room for providing adequate care for the elderly in a typical African traditional setting. This has however been strangled by the modernization, urbanization and the harsh economic situation that have forced most family members to struggle for life sustenance, thus living elderly family members on their own.

Table 2: Percentage Distribution of Socio-economic Background

Socio-Economic Characteristics	Percentage
<b>Gender:</b>	
Male	55.08
Female	44.92
<b>Age:</b>	
50-59	32.23
60-69	33.76
70-79	23.60
80 Above	10.41
<b>Education:</b>	
No Formal Education	22.59
Primary / Secondary	49.75
NCE / OND	7.87
Higher Education	19.79
<b>Access to GSM:</b>	
Yes	65.23
No	34.77
<b>Employment Status:</b>	
Government Employee	24.87
Non-Government Employee	2.79
Self Employed	35.28
Retired	37.06

Source: Author's Field Survey 2005 -2006.

As earlier mentioned, most cities in African countries; specifically Nigeria, work partially well for those who are healthy, able-bodied and solvent. In other words, urban elderly faces the risk of having a standard of life lower than that of young and agile counterparts. Before the advent of GSM, the overall livelihoods of the elderly were in a poor state regardless of the age group. It is therefore worth noting that, livelihoods in African cities goes beyond wage earning jobs in the formal or government parastatal sectors of the economy (IFPRI, 2000). In fact, livelihoods as used in this study corroborate the view of (Carney, 1998 cited Kanji et al, 1999); that a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for means of living. It can therefore be argued that livelihoods are pursued within vulnerability contexts and structural processes that influence livelihoods outcomes (Chambers, 1992 and Carney 1998). It is clear that, apart from the frustrating urban

conditions faced by the elderly, the cost of living in urban areas is extremely very high. With reference to the advent of GSM however, their access to personal or use in business GSM gives them the opportunity to public goods and services. It therefore implies that, the GSM system is an asset to the elderly. More importantly, as abilities go beyond sheer physical labour, but encompass knowledge, training and special skills, thus, their ability to utilize the GSM have gone a long way to transform positively the livelihoods of the elderly in urban settings. This is important because of the economy of the country that is not in a position to automatically generate livelihoods for those who seek it. In actual fact, the elderly make use of the GSM for different purpose. As revealed in table 3, the GSM allows the elderly the opportunity to traverse city difficulties, it helps them to retain family ties, participate in public meetings, maintain business and medical relationships and allow them to communicate or calls for help in case of emergencies within and outside home or personal resident

Table 3: Percentage Distribution of the use of GSM by Purpose

Purpose(s)	Percentage (%)
Personal Communication	26.26
Medical Contact	23.61
Employment / Business	6.60
Relation / Game(s)	3.55
Reduced Housing Difficulties	14.97
Reduced Mobility Difficulties	24.11
Others	0.9
Total	100

Source: Author's field survey, 2005-2006

Invariably, the GSM is changing the livelihoods of the elderly by keeping them in contact with the needed individuals 24 hours a day and removing the physical boundaries of today's static office structure, residential apartments, institutional and systemic barriers. This was justified in table 4, as more than 80% have a positive transformed livelihood with the advent of GSM. It is however dishearten that, about 12%

and close to 4% of the respondents have a stagnant and poor livelihood respectively. Based on personal discussions, it was made known that, the use of the GSM is responsible for isolation (reduction of direct human relations), loss of personal autonomy as a result of open discussion and the economy barriers (price require for the service).

Table 4: Percentage Distribution of Perceived Livelihood of Elderly after GSM

Age Group	Perceived Overall Livelihood			Total
	Much Better Same	About the Same	Much Worse	
50-59	22.58	7.87	1.78	32.23
60-69	30.46	2.28	1.02	33.76
70-79	22.34	0.50	0.76	23.60
80 Above	9.14	1.02	0.25	10.41
Total	84.52	11.67	3.81	100

Source: Author's Field Survey, 2005-2006

It is a common knowledge that progressive loss of adaptability with the passage of time so that individuals are less and less able to react adequately to challenges from external and internal environment while ageing is an inevitable and irreversible biological process and reflects the success in the history of public health policies and social economic development (Bujari, 2004). Based on this fact, it is clear that the elderly should not be regarded as separate group, but as a natural generational extension of the ordinary population of able-bodied people. Research has shown that the elderly in

the present generation are vulnerable groups that are always isolated, abuse and deprived of life sustaining factors (UNCHS, 1993; Apt, 1996; Ferreira, 2004; Miba, 2006 and Odufuwa, 2006). It is obvious from table 5; that the GSM have a significant relationship with the livelihoods of the urban elderly. For instance, the use of GSM for medical attention (tele-medicine or e-health) has been able to provide access to medical information and professional care by overcoming distance friction or boundaries separating the users.

Table 5: Correlation, Coefficient Analysis on the Relationship between Livelihood of the Elderly and Their Access and use of GSM.

Variables	R	P	Decision
Health Care	-0.12	0.03	Significant
Contribution to decision making	0.15	0.01	Significant
Mobility	0.02	0	Significant
Security	0.19	0	Not significant
Recreation	0.01	0.79	Significant
Family Links	0.13	0.02	Significant
Isolation	0.23	0.15	Significant
Education	0.32	0.18	Significant
Income	0.17	0.12	Significant

Tested at 0.05 level of significance

Source: Field Survey, 2005/ 2006.

To corroborate this fact, Drummond et al (1988); cited in Owotade, et al (2005), observed that diminished mobility of patient, travel difficulties, inaccessibility to clinics; contribute to the low demand for dental services by the elderly. In short the use of GSM has allowed the elderly to surpass expensive, difficulties, unfriendly design and timing, polluted and unsecured travel environment. Frankling speaking, the GSM has granted an unprecedented flexibility and alternate sustainable livelihood for the elderly.

## 5.0 CONCLUSION AND RECOMMENDATIONS

This paper sought to address fundamental facts and future scenarios regarding the use of GSM to achieve sustainable livelihoods for the urban elderly. The elderly persons are regarded as the bastion and repository of wisdom that occupy a high and enviable position in the society. They are also viewed as vulnerable groups that demand a more proven life sustaining factors; but who are often faced with physical, institutional and systematic barriers in the process of attaining daily livelihoods.

The use of GSM is viewed as a strategy to obtain a sustainable livelihood by the elderly. Its acceptance, access and useability has profoundly enhanced the activities of this group. In actual fact, the mobile telecommunication has

greatly changed the lives of older people in the urban setting. The GSM as enabled them to maintain family links, business relationships, community or society discourse, medical interaction or information and escape from unfriendly environmental design and activities. As the proportion of the elderly in urban areas increases side by side with the alarming economic hardship in the country; and the acceptability of the GSM to traverse the city; there is need for stakeholders most importantly the government to intervene through the integration of telecommunication into all sectors of the society.

Also, there is need for subsidizing mobile telecommunication prices for older people and a global introduction of the GSM into all sectors. Above all, the planning of improvements to basic telecommunication services should not be a top-down affair, but rather an inclusive or bottoms-up approach with the aim of achieving most acceptable, affordable and convenient services that will liberate the elderly in particular and the people at large from environmental, institutional and systemic barriers.

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