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Mediating Youth Rural-Urban Migration Through Investment in Information and Communication Technologies in South-Eastern Nigeria

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Abstract

The control of rural-urban migration has been an important discourse in the government circles in the South East Nigeria over the years. The consequence of which has lead to a greater number of male pupil dropouts in some states of the South East Nigeria. Some of these young male pupils constitute the workforce for the development of the rural subsistent agricultural economy. The reason is quest for a greener pasture in urban and semi-urban areas thereby leaving the rural subsistent agricultural economy in the hand of the aged parents resulting to set back in the rural economy. This paper posits that with the advent of the information driven economy, it has become imperative to explore the potentials of Information and Communication Technologies in these rural communities so as to be able to transform these subsistent agricultural economy into information and knowledge driven economy. This is possible considering the fact that these young men migrating into the urban and semi-urban areas to serve their perceived 'masters' so as to enable them live better life, operate motorbikes and other seemingly fast making money business could be refocused into an information and knowledge conscious people, of which is the state of the modern economy. To achieve this objective, ICT use in every sector shall have to be accepted, integrated and accelerated in terms of information generation, utilization and applications. ICT is an enabler for fast economic growth and development. Rural areas in the South East Nigeria should be made to use ICT as the key-driving element for its socio-economic development.

Keywords: Young men, economic growth, socio-economic development.

Introduction

Migration as an economic survival strategy and rural-urban migration as the dominant economic migration pattern in developing countries are associated with push from rural restrictive poor economic environments and pulled to urban areas with economic opportunities. One of the factors associated with urban economy is the use and implementation of ICTs. Most operations are computerized and access and non access to ICTs have created what is called the digital divide and bridging this gap has become imperative as those shut out of the digital world are shut out of public discourses, left politically powerless, and shut out of jobs and are economically deprived.

Thus we are dealing with two divides: the rural-urban divide of economic deprivations and opportunities, and the digital divide of access to ICTs and economic opportunities and non-access to ICTs of economic and political deprivations. Against the backdrop of the foregoing and apart from several policy options advanced for rural development and migration control, this paper proposes the digital option not only to create economic opportunities for better life of rural areas, but also to retain the young and the geographical mobile as well as to attract back those who have already moved.

Conceptual Framework

Migration: A definition

Migration is the crossing of the boundary of a political or administrative unit for a certain minimum period of time. It includes the movement of refugees, displaced persons, uprooted people as well as economic migrants (UNESCO, 2003).

Digital Divide: A definition

The term "Digital Divide" refers to the gap in access to Information and Communication Technologies (ICTs). That technology is available does not mean it is accessible. The Divide is not simply a dichotomy between those who have the technology and those who do not. More importantly, it is the "ability to access, adapt and create knowledge via use of Information and Communication Technology" (Warschauer, 2001)

Understanding and Measuring the Digital Divide

The Digital Divide within cities is usually measured in terms of the number of Telephones, Computers and Internet users against non-users. Despite evidence of disparity within and between cities, overall, access to ICTs is growing in Nigeria. This is linked to exponential increase in ICT access in advanced cities and the increasing exclusion from jobs, participation in government processes and public discourse in poor areas. This shuts out those without access and renders them powerless both politically and economically. Cities and communities are identified as facing the threat of being left further behind if they do not address the growing digital divide (Peters, 2003).

Installing computers and connections in underdeveloped communities is only part of what is needed to put information and communications technology to use for socio-economic development. An understanding of grassroots realities, pooling of resources, and a favourable regulatory system are among the many elements necessary in an effective approach to bridging the digital divide (Peters, 2003). Therefore, Bridging the Digital Divide is basically centered on how various sectors with disparate cultures and different languages can collaborate using a new technology medium to solve old problems. In this pursuit, Internet is a natural tool for the needed collaboration and aggregation, but it is only effectively leveraged if the collaborators speak the same language or at least understand each other (Peizer, 2000).

ICTs offer enormous opportunities to narrow social and economic inequalities and support sustainable local wealth creation, and thus help to achieve the broader development goals that are needed in the rural communities. ICT cannot of course act as a panacea for all development problems, but by dramatically improving communication and exchange of information, they can create powerful social and economic networks, which in turn provide the basis for major advances in development. By enabling these new networks to collect and share local knowledge and information, ICT can provide new and more efficient methods of production, bring previously unattainable markets within the reach of local producers, improve the delivery of government services, and increase access to basic social goods and services, can help ignite a virtuous circle of sustainable development. The digital divide is a complex problem, presenting both practical and policy challenges. It is also apparent that solutions that work in some cities cannot simply be transplanted to rural areas: solutions must be based on an understanding of local needs and conditions (Peters, 2003).

Providing Digital Opportunities

When the Digital Divide is bridged, digital opportunities are created, and where there are digital opportunities, there exists little or no Digital Divide. The digital opportunity initiatives include attracting foreign investment in IT sector, pragmatic and market-driven regulatory framework, creation of virtual University, bringing up new technology-based infrastructure, promotion of IT education through International Certification programs, Telemedicine, Voice Over Internet Protocol, Fax Over Internet Protocol and so on. It is equally worthy of mention that the closing of the digital divide, so as create digital opportunities is not a task government alone will undertake, there is high need for Private, NGOs, and Foundations participations.

Digital Opportunity Initiatives

The Digital Opportunity Initiatives aims to help mobilize, focus and coordinate action by developing a strategic approach to harnessing the benefits of ICT for sustainable Economic and Social development. (Yousaf, 2002). Digital Opportunity Initiative focus on lessons learned to date about the value of ICT for achieving development goals, and will offer an analytical framework that how rural communities in South East Nigeria can use as a guide for designing and implementing a more strategic approach to the use of ICT for development.

Potentials of ICT in Transforming Rural Economies

A. Telecenters and Content

The situation in South East Nigeria of nearly complete digital exclusion reflects situations existing widely in developing countries. These include the potential for using ICTs in rural development and poverty alleviation (infoDev ICT Proposal, 2002 CHINA). In June 2002 the United Nations General Assembly held a 2-day meeting in New York climaxing a series of major international forums during the past five years focusing on the need to make information and communication technologies (ICTs) available for all nations, especially for development and alleviation of poverty. Then Secretary General Kofi Annan remarked:

> *A wide consensus has emerged on the potential of information and communications technologies to promote economic growth, combat poverty, and facilitate the integration of developing countries into the global economy. Seizing the opportunities of the digital revolution is one of the most pressing challenges we face.*

The enthusiasm for ICT initiatives is based on the twin assumptions that *quality* information made available widely and inexpensively contributes to development, and ICTs expand the reach and impact of that information (infoDev ICT Proposal, 2002 CHINA).

Among the many challenges to turning these assumptions into reality is providing communities with convenient access to ICTs and insuring that the information and communication services are relevant, localized, understandable, affordable, and *demand-driven*. In many cities the answer has been partly provided through a variety of public ICT facilities. Among them are multi-purpose telecenters, cybercafés, and information access points – all of which make the access possible because of the more affordable cost associated with *sharing* as compared to individual home ownership of ICTs and individual network use fees (infoDev ICT Proposal, 2002 CHINA).

If we are serious about the use of ICTs as an empowerment tool – so poor people can shape decisions that affect their lives, so they can grasp economic and social opportunities, and so they can deal with misfortunes and disasters, then this foreign content must be matched by the expression and communication of local knowledge that is relevant to local situations. To a large extent, this means that ICTs need to be conveyors of locally relevant messages and information. Local content, the report says, faces intense competition because big content initiatives tend to push their external content onto local communities. Content, says IICD, needs owners or originators *with the motivation to create, adapt or exchange it.* (Excerpts from infoDev ICT Proposal, 2002 CHINA)

B. Education

The education sector is arguably one major area that ICTs are playing remarkable a role. These technologies help in facilitating learning (eLearning) and exchange of educational materials. ICTs are helping library professionals store and manage academic information. Libraries have migrated from the traditional Dewey cataloguing system to an on-line system, which is a web-based cataloguing and search application. The online learning system is another web-based application that is revolutionalising the learning platform of education. This system compliments the traditional face-to face teaching and learning format. In the on-line system, students can access class notes, submit assignment and also join a discussion group with other learners (NetTel@Afrika, 2004).

C. Agriculture

At the micro level, ICTs applications can be used to impart information directly to farmers and the farming community. There are expert system designed to handle agricultural issues such as water utilisation and management, pest control, harvest management and so forth (NetTel@Afrika, 2004).

D. Sharing Knowledge and Improving Access to Information

This has been one of the most recognised uses of the ICTs. Various communication technologies, ranging from broadcasting to telecommunications and to the Internet are playing effective roles in the acquisition and sharing of information. The concepts of the 'information revolution' and 'information society' are driven by enormous advancements in ICTs and their application. The Internet for example, has provided platforms for sharing information in applications such as the E-Mail and The World Wide Web (NetTel@Afrika, 2004).

South East Nigeria and Migration

Southeast Nigeria is one of the most densely inhabited regions in the Nigeria, supporting about 25 per cent of its population on 8.5 per cent of its total area. Close to 70 per cent of the population live in rural areas. Urban settlements were virtually absent in the region until the advent of colonial rule during the second half of the 19th century, when a number of urban nodes were developed along the evolving rail and road-river networks. Linkages and interactions between rural and urban areas, in the form of movements of people, goods, information and money, are an increasingly important component of livelihoods in the region, as in most parts of the world (Okali, Olawole and Okpara, 2002).

Migration Trends

Migration has long been an important element of livelihoods in the region. Population density and the resulting scarcity of farmland is a significant reason for movement. There is also a prevailing perception of urban centers as places providing economic opportunities and better physical and social infrastructure. Views on migration are determined by both economic and socio-cultural factors (Okali, Olawole and Okpara, 2002).

Economic and Social Success

Migration from the rural settlements to the urban centers is considered essential to achieving economic and social success. Young men who do not migrate are seen as ‘lazy’ (Okali, Olawole and Okpara, 2002). Destinations for rural-urban movement include local centers. Migrants engaging in menial occupations or in activities carrying social stigma, such as prostitution, often prefer distant destinations since this will decrease the possibility of their situation being known in their home village (Okali, Olawole and Okpara, 2002).

Latent inter-ethnic conflict in Nigeria influences movement direction – for example, recent clashes between Hausa and Igbo people in Northern Nigeria – has been associated with waves of return migration of Igbos to the Southeast (Okali, Olawole and Okpara, 2002).

Return migration from the urban centers to the rural settlements is high. Most migrants tend to return to their home villages upon retirement, often leaving behind their grown-up children who will support them through remittances. However, the average age of returnee migrants is becoming lower, especially in those rural and peri-urban settlements, which offer non-farm employment opportunities. Another reason for return migration is the increasing competition in

the urban labour markets (Okali, Olawole and Okpara, 2002). Migration between rural settlements is primarily related to farming activities and therefore includes seasonal as well as long-term movement. Because migrants have restricted access to land ownership, kinship ties are a major regulator of rural to rural movement (Okali, Olawole and Okpara, 2002).

Social Networks and Associations

The role of civil society an important distinction is made throughout Nigeria between 'indigenes', who trace their ancestry to a specific settlement, and 'strangers', who include migrants and their descendants, including those born in the settlement. By exacerbating ethnic differences, the Nigerian Civil War has also reinforced Igbo support networks. The ties between indigenes and home villages are underpinned by social networks and associations which often play an important role in assisting migrants and in channelling resources for local development (Okali, Olawole and Okpara, 2002).

Apprenticeships are commonly the first form of employment of new migrants. Young migrants usually become apprentices to a relative or acquaintance from the home settlement, through formal or informal arrangements. The 'master' is responsible not only for training the apprentice, but also for his/her welfare and behaviour. Support may also include facilitating access to urban trade associations and assistance in starting the apprentice's own business (Okali, Olawole and Okpara, 2002).

Town Development Unions, home-based social clubs and Age Grades serve a dual purpose. Among migrants, they provide a financial and emotional safety net, facilitate access to local resources such as housing and employment and ensure that a sense of cultural identity is maintained through celebrations and other traditional activities. They also act as a highly organised method of channelling resources to home settlements by raising funds for, and organising the construction of public facilities such as schools, town halls and water points. In several cases, the contribution of migrant associations to infrastructural development in rural settlements has outstripped public investment. Their significant role as civil society actors should be better supported by the public sector **(**Excerpt from Okali, Olawoye and Okpara, 2002, www.iied.org).

South East Nigeria: The Case Study

> *"People lack many things: jobs, shelter, food, health care and drinkable water. Today, being cut of from basic telecommunications services is a hardship almost as acute as these other deprivations, and may indeed reduce the chances of finding remedies of them" (Kofi Annan, 1999, quoted in Okali and Okpara 2002).*

The quotation above suggests that South East Nigeria have been migrating from rural-urban areas due to economic hardship experienced in the rural areas as a result of lack of jobs, good shelter, quality food, good health care facilities and telecommunication services, which could be summarized as total depravity of quality information capable of transforming their lives out there. Obviously there is near digital exclusion in the area, which informs the reason, why people first engage in apprenticeship with their 'masters' as a means of learning new trade so as to survive

the economic hardship. This is one the reasons why trading is the major source of living, not in the modern ways, but in the traditional system of buying and selling to the local markets only, remarking total digital exclusion.

In lieu to the aforementioned, it is imperative to bridge the divide, so as to offer the people of the South East Nigeria digital opportunities. The Digital Opportunity Initiatives (DOI), which will include foreign investment in Information Technology sector; of pragmatic and market-driven regulatory framework, establishing venture capital funds, creation of Telecenters, bringing up new technology-based infrastructure, promotion of IT education through International Certification Programs, Telemedicine, Voice Over Internet Protocol initiatives.

ICT for Capacity Building

Following the above discussion on the potentials of ICT in transforming rural economy, it is imperative to note that, the people of South East Nigeria, as a result of their near total digital exclusion, ICT capacity building project should be developed. Policy that will aim at impacting IT skills on the citizens so as to be able to develop a domestic ICT sector and technical capabilities.

Because of the portable nature of the underlying technologies driving the development of the information society and economy, rural communities like in the South East Nigeria, are equally placed to take advantage of them to facilitate her socio-economic development process. It can be argued that in the new emerging economic order, the fundamental basis for poverty reduction, wealth creation and national prosperity is in information and knowledge and rural communities cannot afford to be without either of these.

Information and communications technologies can be a key factor for achieving progress in economic and social development in rural communities. There is no doubt that the information and knowledge economy will generate opportunities across all sectors within the South East Nigerian economy. It will be a new source for the creation of quality jobs, wealth generation and redistribution, rapid economic development and prosperity as well as a source for facilitating global competitiveness of the rural communities.

However, if the South East Nigeria is to achieve rapid and radical social and economic transformation in the new information age to be dominated by information and knowledge-based economies, she will need to put in place and implement comprehensive ICT-led socio-economic development policies, strategies and plans. The premise is that: the emerging information and communications technologies underlying the information revolution are offering even rural communities a window of opportunity to leap-frog the subsistence agricultural economic stage and transform their economies into high value-added information economies that can compete with the advanced economies on the global market.

The basic argument is that it will be possible for: rural communities with predominately subsistence agriculture based economies to transform her economy and society into a predominately information and knowledge economy without first being fully industrialized. This policy will focus on:

- Human Resource Development
- Software Industry Development
- Hardware Industry Development

Human Resource Development

There is no gainsaying that Human Resource Development is central for every developmental process and policy achievement. In employing the potentials of ICTs in a bid to transforming the rural economy from subsistence agricultural based economy to Knowledge Based economy, it is imperative to develop strategies that will enhance the development of human resources available within the rural areas that will carry on the implementation of the policies of transformation. For this demand for skilled manpower in ICT, there is need to bring up from the communities a large number of ICT professionals. Sequel to this therefore, attention should be focused on

- Widespread introduction of ICT education in public and private educational institutions. This is a prerequisite for producing skilled ICT manpower.
- Universities, Polytechnics and Colleges of Educations, both in the public and private sectors, shall be strengthened to produce ICT graduates, which in turn be sent to strengthen the rural community ICT projects.
- Establishment of Centers of Excellency in rural South East areas.
- Establishment of multimedia institutes so as to enable skilled human resources to exploit the opportunity offered by the growing multimedia-market.
- Virtual ICT training should be deployed wherever possible. CD's and web based courseware development and use shall be encouraged to promote computer-aided education at all level of education.
- Qualified and skilled teachers should be brought in from abroad in the fields where local teachers are not available.
- Syllabus and Course Curricula for all levels of Computer Science training will be updated continuously (BCC, 2002).

Software Industry Development

Software is a relatively low-investment, environmentally friendly, high-growth global Industry. But it has also become the most critical and expensive element of the government and business systems that every nation must build for itself. As Stanford Professor Edward Feigenbaum put it while serving as Chief Scientist for the US Air Force, we now live in a "software-first world" (Clark et al., 1998, as quoted in BCC, 2002). The increase in global demand that makes software exports a growth industry is driven by the continued consumption of software by other countries and business enterprises. Software (and its continued maintenance) has become the dominant cost of business and government information systems around the world (Gartner, 2001 as quoted in BCC, 2002), and a significant cost factor in a range of manufactured goods from consumer electronics to automobiles (VDC, 2002, as quoted in BCC, 2002). Good strategic planning about government automation projects and investment incentives to domestic business can have a positive impact on the growth of a Country's software exports compared to relying on market forces alone (BCC, 2002).

Every software-exporting country has evolved a unique industry, shaped by its own resources and situation and by the particular global opportunities presented at the time. Rural areas ICT driven economic policies should aim at:

- Developing and encouraging the local software industry, which will incorporate its local need as well possessing export quality for profit making.
- Price preference may be given to locally developed software in all public and private sector procurement as a means of encouraging local economy.
- In order to assist fast development of local Software Industries, Government should set up an ICT Incubator. The government should extend start-up financial support to the local software industry.
- Local Software association companies and developers should set up and be encouraged to exchange ideas, experience and organize collective operations such as seminars, training, etc. and take part in trade delegations and trade shows for acquaintance with the international market, trends and establishment of business contacts.
- Joint ventures between local and foreign entrepreneurs in the ICT sector will be vigorously promoted.

Hardware Industry Development

Hardware industry often requires a huge capital investment. In the case of South East Nigeria local ICT entrepreneurs should be encouraged to establish production facilities for components, peripherals and accessories with joint venture cooperation and technology transfer agreements. Foreign owned and multinational companies, who will establish such production facilities in the South East that will employ local workforce, shall be offered special incentives (BCC, 2002). All the same local efforts as regards this should be geared towards developing Computer Electronics Laboratories and Resource Centers in the South East Universities and other concerned institutions will be set up to develop skilled manpower required to establish and run hardware industry.

Since the local market is still small, the hardware industry may target the export market. Dependence on foreign materials should be reduced where possible by giving incentives to local companies and protecting them from unfavorable competition. Local institutions and R&D organizations shall also be encouraged for research, design, and manufacturing of specialized informatics equipment.

Conclusion

South East Nigeria is an area in Nigeria that has been highly marginalized in the event of Nigerian resources sharing and dissemination of government presence in industrialization and economic resource. These have been traced to the aftermath of Nigerian-Biafra war of 1967-1970. This economic depravity led the people of the South East Nigeria to seek for greener pastures in all nook and crannies of Nigeria and Diaspora. Many who settled around some rail and commercial centers culminated to the urban and semi-urban areas in the South East Nigeria today. The major cause being the ability of the people to engage in meaningful trading activities. These have resulted to greater move of the youths from the rural to urban and semi-urban areas due to the seemingly better economy at the urban and semi-urban areas. It is obvious that their

migrating motives are economic. This does not suggest that some of its professionals are not migrating for higher academic pursuit or for sale of professional skills abroad, but greater percentage of its youths migrants are economically motivated.

The argument is that if the potentials of ICTs are employed in rural areas, such level of migrants will definitely be reduced because ICT potentials have the capability of transforming rural subsistent agricultural based economy into knowledge and Information based economy. This type of economy has enormous potentials for the youths as Computer knowledge gives one a sense of belonging in this modern time of information based society. Moreso, the world is getting smaller and becoming rapidly a global village. The South East Nigeria deserves a place in this global village, so as to afford them global digital opportunities.

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