Technological Innovation for Rural – Urban Drift Control in Nigeria

¹Alli, J. O. A., ²Yussuff, O. N. and ³Alli, O. O. ¹BTStruct & Partners (Civil & Structural Engineers), Bodija, Ibadan, Nigeria. ²Department of Mechanical Engineering, The Polytechnic Ibadan, Nigeria. ³Department of Civil Engineering, The Polytechnic Ibadan, Nigeria.

Abstract - This Paper demonstrates the pressing need to bridge the gap between the urban and rural areas in Nigeria by proffering technological approach to the control of rural urban drift. It has been interpreted as transfer of labour from a traditionally land-intensive technology to a human capitalintensive technology with an endless potential for growth. Unfortunately, it is costing the population of our dear motherland a lot in terms of self-reliance, economic growth, food security and agricultural development. The reasons for rural - urban drift are showcased. This Paper shows that there is drastic decline in the production of food and agricultural products in Nigeria between 1970 when we depend on our own farm produce to feed the citizens and 2013 when most of the foods we serve ourselves are exported. Patterns and problems associated with rural-urban migration are also discussed. Some of the most obvious consequences of rural - urban migration in this country include food shortage, income-denial in agricultural earnings and a death knell for our traditional agric-economic base. In this paper, technological innovations that would ultimately control rural - urban drift were the main target of a collaborative system involving well-meaning individuals, corporate organisations and governments from the three tiers.

Keywords: technological control, rural area, urban centre, rural – urban drift

1.0 INTRODUCTION

Two UN Conferences tagged: Habitat I and Habitat II, were held in 1976 and 1996 respectively. Habitat I brought over 2,000 delegates to consider world living conditions and to discuss continued acceleration of the growth of the world's population, huddled in urban areas. The challenge was to provide housing, adequate means of economic support and the whole range of facilities needed in ordinary modern life to between three and four billion individuals, increasingly bunched in urban areas. Again, millions of others would (be expected to) migrate to the urban regions from rural areas, and provisions must be made to replace existing urban infrastructures as they become not only obsolete, but over-stretched because the consuming population continue to skyrocket as rural - urban drift continues to hold sway.

The seriousness of the situation led to the establishment of UN Habitat in 1978 as an agency, although it was not to get

its full autonomy until January 1 2002 when the agency's man date was strengthened and its status elevated to that of

a fully-fledged programme of the UN system via the UN General Assembly Resolution A/56/206.

Habitat II was held in Istanbul, Turkey between June 3 and14, 1996, twenty years after Habitat I, to address two themes of equal global importance: "Adequate Shelter for All" and "Sustainable Human Settlement Development in an Urbanising World". Human beings are at the centre of concerns for healthy and productive life in harmony with nature.

It must again be emphasised that much of these concerns at all the Habitat Conferences are focused in the unindustrialised countries, Nigeria inclusive. In a nutshell, the purpose behind UN's action was to accelerate urbanisation. For developing countries, this is a feat that is not possible in a day. In the face of reality, we must devise a technique that should bring rural - urban under control, unless we want to be going in the reverse direction in a fast-forwarding world.

In the developing countries, countless people from the country side move into the cities to take up habitation there. This is called rural-urban migration. Pandee (2013) defines rural-urban migration as movement of people from rural (meaning: villages) areas of the country into cities; or movement from the countryside to the city or town; or remote areas to the city or town. It is common knowledge that the origins of the modern economic world evolved as a transition from a traditional agricultural economy to a society of sustained growth in opportunities of human and physical capital accumulation. In the industrialised countries, the transition can be said to be complete. Lucas (2004) reveals that Britain's population living in rural areas had already fallen to 50 per cent by 1850 and reached 11 per cent by 1998. The workforce in agriculture declined from 21 per cent in 1851 to 7 per cent by 1911 to 2 per cent in 1995. In the United States, the fraction of the labour force in agriculture fell from 79 per cent in 1820 to 40 per cent in 1900, to 23 per cent in 1930, and then to 3.4 per cent in 1980, and it is definitely less now. The share of agriculture in production and employment is declining everywhere. Therefore, it is not news that there is fear of food insecurity worldwide. In the developing countries, many people leave low-wage jobs in the rural economy to go to the city, where they find no job waiting for them. Sometimes, they get jobs that are better paid but the monies get is consumed by the high standard of living in the urban centres, and the migrant is back to where he started: living from hand to mouth, barely able to make ends meet; and

end up being wage slaves. Luckily for the citizens, the systems take care of all infrastructures, and welfare packages are in place for the helpless and unemployed. In the wealthy countries, technological change has proceeded more rapidly in agriculture than elsewhere. They have systems that have been formulated to take care of both foreseen and unforeseen obstacles. All births and deaths are duly registered and each developed nation produces enough to feed their nationals rising to meet variations in their population. Their founding fathers have planned that their unborn generations to come would not go hungry; they would rather not export agricultural produce. Unlike our greed here in Nigeria, farmers would rather export cassava to China to earn foreign exchange than sell same to fellow countrymen at affordable prices to feed the Nigerian people.

Close to four decades since Habitat I, and seventeen years after Habitat II, whither Nigeria? We have violated every possible law under the heavens to lose the gains of both UN Conferences. Our policies too have conspired to keep up the failure in being toothless bulldogs: pieces of written documents that could on their own achieve nothing without enforcers. Today, it seems obvious, and the paper stands to be corrected, that there is a conspiracy between those in governance that everything that works everywhere else fails in Nigeria. This may sound bitter, but it is really saddening that there is absolutely no trace of the groundnut pyramids of Kano in the not-too-recent past and the blooming hides and skin business from the north; the cocoa production of Oyo, Osun and Ondo axis of the South-West that has brought us a lot in foreign exchange; and rubber and palm oil of old South-South and South-East which have brought glory and wealth to Nigeria. Those were the good old days: when trains (called: Oko Idogo) ply the railways with fresh vegetables and other farm produces every morning and consumers await the coaches eagerly each day to buy wholesomely rich health-giving food items. Today, what agricultural produce is rated above petroleum in Nigeria? And, can we eat crude oil or money for that matter? The Honourables in governance seem only bent on lining their own pockets and those of their coteries of hangers-on with ill-gotten wealth at the expense of the rest of us than lay lasting solid foundations for food security in our dear motherland. For food security and to ensure that Nigeria goes back to counting billions in agricultural earnings, the rural economy must be preserved by ascertaining that human resources in the rural setting are not dwindled through stemming rural-urban drift.

2.0 MAJOR PATTERN OF RURAL-URBAN DRIFT IN NIGERIA

Migration is not a new human threat, although it has not always been like this, particularly in the Nigerian setting. Those moving from rural to urban areas constitute certain classes, categories and strata of the society that are basically plagued with certain social and economic problems in which poverty ranks highest and most fundamental according to Isah (2012). Microsoft Encarta (2009) declares that migration was stimulated by the desire of the migrant to improve his or her economic situation.

People had to leave the places where they had been born in to search for virgin uninhabited lands to farm and make their own lives when the economy was largely dependent on agriculture, although some louts seek menial jobs in coal, gold and diamond mines. In spite of public policies attempting to tackle issues on settlements in Nigeria, solutions to the problems have continued to remain elusive. It takes time and careful planning in the industrialised world to migrate from one point to another so that the balance would not be tilted. During the colonial era, economic policies were enforced to stimulate regional labour migration from one place to another. Eventually transportation improvement in rail and road networks and provision of other infrastructural facilities as well as the growth of cities such as Lagos, Kano, Ibadan, Port Harcourt, Kaduna and Enugu elicited major rural - urban migration of not only farm workers but also skilled and unskilled workers, traders and students in search of means of livelihood, qualitative and higher education, modern healthcare and to raise their standards of living.

It usually begins with a young man wanting to go into the city with the sole aim of ending poverty in his lineage. He goes there to be educated formally or vocationally. After he has "made it" and begins to send money home, his family sends him another family member to come to the city to tow the same line into wealth. One by one, able-bodied young men who should boost the rural economy are sent out to the city from where they never return.

3.0 MAJOR PROBLEMS CAUSED BY RURAL-URBAN DRIFT

In leaving the rural setting for the urban setting, the muchneeded manpower to work the farm lands are drastically reduced resulting in low productivity and food insecurity. It also leads to congestion in the urban centres with attendant high unemployment levels, poor housing situations (or slum or ghetto formation) and upsurge in crime levels.

Aromolaran (2012) reported that in most rural areas in Nigeria, the potential labour force that could have contributed to the improvement of the rural economy has moved into the cities and nearby towns around them in search of better standards of living and benefits they presumed could only exist in urban centres. The result of this is the excessive drain of human resources and decline of rural economy. The movement of these people from rural to urban centres poses problems to both rural and urban dwellers, but migrants are usually more concerned about the immediate gains they could derive from the process, thus sacrificing rural economy leading to chronic poverty and food insecurity. The United Nation's Food and Agriculture Organization estimated that between 1957 and 2007, 800 million people worldwide moved from rural areas into cities according to Fraser (2013). In Nigeria, with a population growth rate of 2.553%, the urban population is about half the entire population (CIA World Fact Book, 2013), and more and more people would still continue to move from the rural areas into the urban centres to add to the population and put more pressure on the existing infrastructure in the guise of getting higher

academic qualifications, seeking better and gainful employment, and access to modern healthcare facilities. In some cases, migrants never get to their destination because of unforeseen circumstances such as accidents, communal clashes, tribalism and religious bigotry. This decimates the work-force of the country in this way.

4.0 TECHNOLOGICAL INNOVATIONS FOR CONTROL OF RURAL-URBAN DRIFT IN NIGERIA

Rural dwellers have limited access to basic social services such as safe water, good road network, electricity and public telephone services. Poverty is generally identified with rural farmers whose produce are majorly subsistent in nature and whose principal implements are archaic and back-breaking. Women are not left out in the struggle because they must contribute their share to economically support their families in addition to their domestic chores. Women are responsible for a sizable percentage of agricultural production in Nigeria. The future of the young ones in the rural area is uncertain. They do not have access to what their counterparts at urban towns and cities have easy access to: quality education, internet facilities, employment opportunities, better health care and opportunities for improvement. In other words, rural infrastructure is non-existent. In a country where all the major roads are in various states of disrepair, how much more the roads in the rural areas.

All the above factors combine with the desire for economic emancipation to make the able-bodied youth desert the rural setting for the relatively improved urban setting. In view of this fact, the following appropriate technological collaborative solutions involving well-meaning individuals, corporate organisations and the three tiers of government are proffered:

- 1. Provision of electricity to every nook and cranny of the rural area to be undertaken by the government and independent power generating agencies; Nigeria signed an MOU with Russia in 2011 to generate electricity for Nigeria from Nuclear Power. Such plants should be cited in the rural area where there is less risk of sabotage;
- 2. With the collaboration of governments and private investors, network of good roads that would link major agricultural production areas with principal towns where there are airports and seaports for exportation should be developed. In addition, express ways should pass through villages to aid development;
- 3. Basic modern infrastructure such as modern and improved primary healthcare services, telephone services, internet access facilities, television, radio, recreation centres and so on should be put in place in the rural areas to stem rural-urban drift;
- 4. Electric trains can be established to ply ruralurban routes laden with fresh farm produce and other agricultural products for sale from station to station along its route to the urban centres as we used to have in *Oko Idogo* in the golden days;
- 5. Modern schools and tertiary institutions should be cited in the rural areas to develop the villages around them; for example, University of Ibadan developed Agbowo; The Polytechnic Ibadan upgraded Apete from a

village into a fledgling town; Federal University of Technology Minna raised Bosso from a students' village into a blooming town; Ahmadu Bello University turned Samaru to an urban centre, and so on..

- 6. Corporate organisations such as banks and insurance companies and individuals can come as a team to pool resources together to develop transportation systems involving lorries, buses, trucks and vans to run specific/certain routes linking rural areas and major urban centres;
- 7. Free Trade Zones and Export Processing Zones, EPZ, can be established in the rural area with attendant modern facilities to develop the rural area. It was the establishment of EPZ in Taiwan that raised the status of that place into a city in 1964;
- 8. Agriculture in the rural areas should be mechanised and all the attractions of the city i e well equipped habitat provided either by individual or governmental agency to ensure the stay of young graduate;
- 9. Agricultural Development Centres and Colleges of Agriculture should be cited in the rural areas so that the land mass required for agricultural practice would be readily available and we would be on our way to achieving not only food security, but also earn foreign exchange in agricultural earnings;

REFERENCES

- Aromolaran, A. K. (2013), "Assessment of Benefits Associated with Rural-Urban Migration among Non-Migrants in Odeda Area, Ogun State, Nigeria", International Journal of Pure and Applied Sciences and Technology, Vol. 4 No.2, pp. 31-38
- and Technology, Vol. 4 No.2, pp. 31-38
 CIA World Facts (2013) "Nigeria Demographics Profile 2013" retrieved at 14.19 hours on October 21, 2013 from:
- 3. http://www.indexmundi.com/nigeria/demographics_profile.html
- Fraser, S. (2013), "The Effect of Rural Migration on Land Resources"
 - retrieved at 12.19 hours on October 21, 2013 from:
- http://www.ehow.com/about_6498317_effect-rural-migration-land-resources.html#
- Isah M. A. (2012), "Trends of Rural-Urban Migration in Nigeria", European Scientific Journal February Edition Vol. 8, No.3 ISSN: 1857 – 7881
- Lucas, R. E. (2004), "Life Earnings and Rural-Urban Migration" Journal of Political Economy, University of Chicago, Vol. 112, No. 1, Part 2.
- Microsoft ® Encarta ® 2009. © 1993-2008 Microsoft Corporation. All rights reserved.
- Pandee, S. (2013), "What are the effects of rural to urban migration?" retrieved at 20.09 hours on September 5, 2013 from: http://www.answers.com/T/Essays/
- Reimers, D. M. and Dinnerstein, L. (2009), "Immigration." Microsoft® Encarta® 2009 [DVD]. Redmond, WA: Microsoft Corporation, 2008.
- Todaro, P. M. and Smith, S. C. (2010), "Urbanization and Rural-Urban Migration: Theory and Policy" in *Economic Development*, Eighth Edition, Pearson Addison Wesley Education Publishing retrieved at 17.15 hours on September 7, 2013 from: http://wps.aw.com/aw_todarosmith_econdevelp_8/4/1111/284 582.cw/index.html
- Yaro, J. A. (2009), "Migration in West Africa: Patterns, Issues and Challenges." Paper Presentation at the Centre for Migration Studies, University of Ghana, Legon on September 11, 2009