



Matthew Ojong Achigbe

Institute of Education, University of Calabar, Calabar, Nigeria

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Abstract

The transformation of a developing economy is a function of interaction between education, business and agriculture. Using value judgment, the study buttresses prepositions with both domestic and foreign evidence. Education is thus the cornerstone of socioeconomic development of any nation, as it creates the human capital for increased productivity and efficiency of the economy. It cultivates critical thinking and business spirit that dares the challenges of the business world and courage to face the daunting problems and risks in agriculture. Business supports education and agriculture significantly. In the main, agriculture is the foundation of developing economies, generating high employment opportunities and contributing chiefly to the gross domestic product of the non industrial economy of developing nations. Agriculture is the precursor to industrialization and engine of development. It contributes to education in sustainable terms, curriculum development and environmental integrity. If the three sectors interact as a unit, developing nations will experience economic transformation. It is recommended that a public relations unit be attached to the three sectors of education, business and agriculture to share information, research reports and the dynamics of each sector.

Keywords: Education, Business, Agriculture, Integration, Economic breakthrough, Developing Nations

Introduction

The transformation of any developing economy is a function of interaction between massive and effective education, vibrant business development and a dynamic agricultural sector. This is true of Nigeria that many other approaches to economic growth and development have not been too plausible. From her experience as a nation, attainment of economic development through the money spinning oil economy has proven practically too expensive, troublesome and challenging (Bhardwaj, 2013). The resort to industrialization in the past which began in earnest in the first National Development Plan (1962-68) was also perceived as too capital intensive, expensive and heavily reliant on technological transfer. This approach to development was considered detrimental to the domestic economy and capable of killing local initiatives, creativity and innovation (Mba, 2015; Agba, & Odu, 2013). Unfortunately, the haste to reach economic independence has lured Nigeria to stick to the oil economy which has turn out today to become her albatross. It is for this reason that this paper hunches that an easier and more enduring approach in turning around the economy of developing nations is by building a synergy that allows the major forces of education, business development and agriculture to interact.

Table 1: Human Development Index and its components

		Human Development Index (HDI)	Life expectancy at birth	Expected years of schooling		Mean years of schooling	Gross national income (GNI) per capita	GNI per capita rank minus HDI rank	HDI rank
HDI rank	Country	Value	(years)	(years)		(years)	(2011 PPP \$)		
		2015	2015	2015	^a	2015	^a 2015	2015	2014
VERY HIGH HUMAN DEVELOPMENT									
1	Australia	0.939	82.5	20.4	^b	13.2	42,822	19	3
2	Switzerland	0.939	83.1	16.0		13.4	56,364	7	2
3	Germany	0.926	81.1	17.1		13.2	^c 45,000	13	4
4	Singapore	0.925	83.2	15.4	^d	11.6	78,162	^e -3	4
5	Canada	0.920	82.2	16.3		13.1	^f 42,582	12	9
6	United States	0.920	79.2	16.5		13.2	53,245	1	11
7	Japan	0.903	83.7	15.3		12.5	^g 37,268	10	17
8	Israel	0.899	82.6	16.0		12.8	31,215	16	19
9	France	0.897	82.4	16.3		11.6	38,085	4	22

LOW HUMAN DEVELOPMENT									
1	Swaziland	0.541	48.9	11.4		6.8	ⁿ 7,522	-33	149
2	Angola	0.533	52.7	11.4		5.0	^q 6,291	-27	150
3	Nigeriaqw	0.531	65.5	8.9		5.8	2,467	10	152
4	Tanzania (United Republic of)	0.527	53.1	10.0		6.0	^q 5,443	-23	151
5	Cameroon	0.518	56.0	10.4		6.1	^c 2,894	2	154
6	Rwanda	0.498	64.7	10.8		3.8	1,617	14	162
7	Uganda	0.493	59.2	10.0		5.7	^m 1,670	8	165

8	Chad	0.396	51.9	7.3	2.3	u	1,991	-19	186
9	Niger	0.353	61.9	5.4	1.7	f	889	1	187

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Source: United Nations Development Programme Report 2016

The Impact of Education on Agriculture

We cannot over emphasize the importance of education in the transformation of agriculture in the development of the Nigerian economy. Amadi & Blessing (2016) asserted that it is through massive and effective education that the rich agricultural potentials of the nation can be fully harnessed for increased productivity. This position reinforces UN Charter, Article 28 of 1989 on Children's right to Education which is founded on the fact that education is truly a human right because it leads to the creativity of the individual and increases his participation in economic, social and cultural life of the society thus contributing effectively to human development (Imam-Tamin, 2014). General education apart, there is need to provide agricultural education to the population. Agricultural Education is the teaching of agriculture, natural resources and land management to students and young practitioners through hands-on experience. It also involves the preparation of the individual to enter the world of work, and further education for advanced job and improved performance in agriculture and agricultural related fields. Education develops the nascent potentialities in the individual and harnesses them for the development of the individual and the society. Education is thus human capital development for improved productivity and efficiency (Omodia, 2009). World Bank in Adeyeye (2005) indicated that manpower alone accounts for about 65 percent of the wealth of about 192 Countries.

The contribution of human capital development is clearly seen when nations with very high Human Development Index (HDI) are compared with nations with low HDI as shown in Table 1 to justify the fact that education contributes significantly to economic development (UNDP, 2017). From table 1, Japan with HDI of 0.903 has life expectancy at birth of 83.7; expected years of schooling of 15.3 with a mean years of schooling of 12.5 and Gross national Income (GNI) of 37,268 (PPP\$ in 2011) with GNI per capita of 10 and ranked 17 among other nations while Nigeria with a low HDI of 0.527 has life expectancy at birth of only 53.1 ; expected years of schooling of 10 with a mean years of schooling of 6.00 and a GNI per capita of just 5,443 (PPP \$ in 2011) with a GNI per capita rank of -23 and ranked 151 in HDI. This means education, indeed, human capital development makes tremendous contribution to the Gross Domestic Product (GDP) and the general development index. According to W. E. Huffman in Girgin (2011) the transformation in the economy is because the technical and economic efficiencies of farmers and farm labour that is brought about by education increase agricultural productivity.

The Impact of Agriculture on Education

Agriculture is a critical sector of the Nigerian economy large enough to transform the nation. As a developing country, agriculture remains the backbone of the Nigerian economy and a precondition for industrialization (Noko, 2017; Odetda & Etumnu, 2013; Izuchukwu, 2011).

Interestingly, agriculture strengthens education to perform. According to a school support group in US, Farm-to-School, agriculture contributes to the development of education in many ways including food procurement for the school population, education activities in areas of food, health and nutrition; school gardening, in practical or hands-on experience and a healthy neighborhood on how food is grown and affects their health and wellness Generally, agriculture supports educational outcomes

It is also noteworthy that agriculture is a significant source of nourishment for citizens. Healthy food keeps all who are actively engaged in education fit and strong, promotes high academic performance, and provides a rich curriculum base and experiences in teaching and learning in the science, mathematics and language arts (Farm-to-School, 2016). The group further opines that in Environmental Education, agriculture supports environmentally sound, sustainable and socially just approaches to food production, processing and marketing. This kind of education also maintains ecological ethics that mitigate climate change (farm-to-school, (2016). Above all, agriculture generates high income required for the establishment and support of education. In Nigeria during the pre and post independence era, it was funds of the then cocoa board that was used to fund free education in the western region, palm produce board to established University of Nigeria, Nsukka, in the Eastern region and groundnut pyramid to build the edifice of Ahmadu Bello University, Zaria in the Northern region (Sanni, 2009; Eko, 2009). There is therefore no gainsaying that agriculture impacts positively on education, though the nation is still finding it difficult to feed itself (Akerele, (2015).

The Impact of Education on Business

For a sustainable economic breakthrough, education should not only be directed towards agriculture but business development as well. This lends credence and relevance to the statement by Porter (2015) that education is one of the growth engines in business success, because at the level of individual business, products and services will be created, productivity will increase and wealth will arise for the comfort of society. This arises from their belief that education is the main contributor to economic development through the level of training given to the human factor and measured by the Gross Domestic Product (GDP) per capita (Mba, Ogbuabor & Ikpegbu, 2013). GDP is the total value of goods and services produced per unit of population of a country in a year (Amadeo, 2018), that is, the productivity of the nation per person. All these point to the fact that education creates

employment opportunities in the business world and accordingly generates the economy through efficiency and productivity. The generation of economic growth and development is from the point of view that manpower training which education improves the individuals' critical thinking capacity, his technical efficiency as against the unskilled and untrained, and of course, the productive capacity generally as a combined impact of training on the individual. When this occurs the manpower pool is increased. Thus, education nourishes business and makes the development of the economy more tangible and worthwhile.

The Impact of Business on Education

From the preceding argument, it goes without gainsaying that the contribution of business to education is as old as history. Business is a major ancillary service to education; it's growth and development. According to Gherghina and Doca (2013), without business there will be no economic and human progress. The teacher in the classroom is too preoccupied with pedagogy of teaching and learning to find enough time to invent and mass produce the resources of education for the entire education system, except to improvise for his immediate need. The provision of education requires the services of the building and construction industry to provide the physical infrastructure; the press for books, stationery and publications; the library, laboratories; and the industry for farming tools that can be used for gardening; textiles for uniform and clothings; and industrial setting for field and industrial experience, etc. All these call for the intervention of the business sector. In supporting this fact, Mahtadi (2015) revealed that the 2014 Foundation Strategy Group (FSG) report states in categorical terms that business brings many benefits to education particularly in providing the dire needs of education. He further reveals that companies can also encourage organic transfer of skills through the release of their staff to lead the establishment of code clubs and talks in schools.

This aside, business can overcome workforce constraints in education that will bring greater benefit back to the companies. In all, business bridges the gap between theory and practice in education through hands on experience. Breen (2014) in Great Business Debate, made it abundantly clear that business, despite the fact that the unemployed youth in UK can fill Wembley Stadium eight times, contribute to education in many ways. The conference of British industry (CBI) report indicates that about 77 per cent of the people agree that business provide work experience to learners, 67 per cent agree that they provide career talks, 32 per cent say they act as governors to colleges and schools, and 15 per cent say most academies which includes research are sponsored by companies.

In a global environment where 250 million school aged children cannot read and write, business need to play a new role of aligning profit with purpose in order to overcome global education and unemployment crises (Porter, 2015). Companies need to essentially partner with schools, civil

societies and governments to increase their productivity, strengthen their cluster collaboration and expand their markets. With this, companies can create power to scale solution to overcome the challenges confronting education beyond what philanthropy alone can do.

The Impact of Business on Agriculture

The business sector makes the agricultural sector vibrant in turning around the economy by being responsive. Though for now, business development in the agricultural sector is slow and unattractive in Nigeria because of lack of encouragement and incentives by government, absence of basic entrepreneurial skills and appropriate training on entrepreneurship and organization of Small and Medium-scaled Enterprises (SMEs). There is need to cultivate the right entrepreneurial spirit to face the daunting agricultural sector and develop the ability to absorb the risks that it carries. Entrepreneurship is the ability of the individual to change ideas into action (Wikipedia). It is the creative, innovative, risk taking ability to plan and manage business in order to achieve set objectives. Entrepreneurship is, practically speaking, starting something new i.e. possessing the courage to start in an unfamiliar way, some-kind-of innovation, that is away from business as usual; way out or thinking outside the box to achieve something (Ayush & Richa, 2012).

This is the business spirit that must be cultivated, nurtured and planted in the agricultural sector to transform the developing Nigerian economy; (Awasthi, 2015). This is what we need to give breath and life to agriculture in the economy. Nigeria, like many other developing economies, needs smart, sustainable and inclusive entrepreneurship that can address the challenges of the agricultural sector to place it on the path of steady growth and development. This kind of entrepreneurship can be promoted in many critical ways including the encouragement of more entrepreneurs to create more companies particularly Small and Medium-scale Enterprises (SMEs) to grow the agro-economy and create more jobs and products, open up new markets for both agro inputs and produce; and nurture new skills and capabilities (European Commission (2016). The entrepreneurship should provide entrepreneurial education and skills training; create an environment for entrepreneurs to grow and flourish ; and provide role models and reach out to target groups such as the women, youth and Internally Displaced Persons (IDPs) (Neube, 2013).

Implications

Generally, it is when education, business and agriculture interact that the nation can reach economic development. This can come first through massive investment in Education. The exposure of the whole population of Nigerians to education formally, informally and non formally will help them to appreciate the value that education adds to life. The implication is that government, educators and educationists must not stop only at campaign for Education for all but should also strengthen educational institutions including agriculture related schools and colleges to perform. This calls for curriculum review and a robust teacher development programme that will produce adequate teachers

in number and quality.

In business, focus should be directed towards re-engineering the sector to cultivate through training the development of aggressive entrepreneurial spirit and vibrant development of Small and Medium-scale Enterprises (SMEs) that can dare the daunting challenges of the agricultural sector of the economy. More training and incentives should be mounted *pro bono* for young entrepreneurs. This will make them come out intellectually, technically and financially equipped to conquer the challenge of the agricultural sector for efficient and improved productivity. Besides, the entrepreneurs should not only be protected against multinationals but given reasonable gestation period or holidays to thrive.

In agriculture, there should be a total overhaul of the sector. The orientation must change from the primordial and subsistence level to development or transformational agriculture. Agriculture should be focused on not only producing for domestic consumption but for international markets as well. It also means paying attention to the value chain which should be expanded to add value to the produce and absorb the teeming unemployed population. It should be taught in school not as a residual subject but as a major content area that sustains livelihood in and after college.

The only chance open for national economic development to occur is for the sectors to absorb public relations practitioners to promote communication or interaction between the sectors for their mutual benefits and development.

The public relations practitioner presents a bright future for agriculture and hope before the entrepreneurs and other related publics, and reassures the farmers and others in the value chain of mutual support and benefits in the sector.

Conclusion

There are many ways to turn around the economy of nations and there exist no rule of thumb because of environmental peculiarities. However, for a developing country like Nigeria that has tried many approaches and is yet to find succor anywhere, it is only proper to guide the major forces of the economy to interact for income generation, capital accumulation, creation of employment opportunities and poverty reduction in order to achieve economic development. The major forces of the economies of developing nations are education, business and agriculture. It is for this reason that educational institutions need to be strengthened to perform, a vibrant entrepreneurship in business need to be created and the agricultural sector need to be transformed for the economy to thrive. This could be reinforced by allowing public relations to build strong ligaments round the three sectors for the synergy that can turn the economy around.

References

- Adeyeye, T,C (2015). Manpower development and economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 6(9), 26-34. ISSN 22 22 – 1700 (paper) ISSN 2222-2855 (online).
- Agba, A. M. O., & Odu, E. (2013). Globalization and the Challenges of Industrialization in Developing Nations: The Nigerian experience. *IOSR Journal of Humanities and Social Science*, 12(4), 41-47.
- Akerele, D. (2015). Household food expenditure patterns, food nutrient consumption and nutritional vulnerability in Nigeria: implication for policy. *Journal of Food and Nutrition*. 54(5), 546-571
- Amadeo, K. (2018). GDP per capita with its formula and country comparisons why the world's largest economies aren't the richest. The Balance. Retrieved from <https://www.thebalance.com>gdp-per-ca...>
- Amadi, N. S. & Blessing, S. (2016). Role of agricultural education in nation building. *Journal of Agriculture, Socioeconomics and Environment (JASSE)*, 4(1), 11-16.
- Awasthi (2015). Awashi Bath for DBT Agro-summit 2015 Indian Cooperative.
- Ayush, A. M., & Richa (2012). Significance of Entrepreneur in Economic Development. Side share. Retrieved from <https://www.sideshare.net>.
- Bhardwaj, A. (2013). Challenges and Solutions in the upstream and Downstream Oil and Gas Operations: Think oil. Houston: Global Energy. Retrieved from <https://www.globalenergy.pr.com> (18-04-17).
- Breen, G. (Sept. 1). What is the role of business to education? The Great Business Debate (CBI Campaign), United Kingdom, 2014.
- Chuckwudiebube, K. F. (2015). The effect of human capital on agricultural production in Nigeria. Retrieved from <https://www.academia.edu>.
- Eko, J.N. (2009, July 29). Agriculture in Nigeria. Sahara Reporters. Retrieved from <https://www.saharareporters.com>2009/07/19>agric...>
- Escapde Nigeria (2015). The Importance of Agriculture towards the Development of Nigeria Economy. Retrieved from <https://www.escape.blogspot.com>.
- European Commission (2016) European Economic Growth; Spring 2016 Forest Brussels: European Union
- Farm-to-School (2016). The benefits of farms to school www.farmtoschool.org.
- FMARD (2010). The Agriculture Promotion Policy (2016 - 2020): Building on the Success of ATA, Closy Gaps.
- Foundation Strategy Group (FSG) Report (2014). New business initiative. The new role of business in global education. Boston: FSG, Inc. Retrieved from <https://www.shareedvalue.org>new-role-...>
- Gherghina, R., & Duca, I. (2013). The Contribution of Education to the Economic Development Process of the States. *Journal of Knowledge Management, Economics and Information on Technology*, 1, 1-13. Science Papers to show the Interdependence of the three components. Retrieved from <https://www.sciencpapers.org>.

- Girgin, A. (2011). The role of agricultural productivity: The case of village institutions in Turkey, 1940-1966. Lund University. Masters Programme in Economic Growth, Innovation and Spatial Dynamics.
- Huffman, W. E. (2000). Human Capital Education and Agriculture. Iowa State University Digital Repository. Retrieved from <https://www.lib.dr.iastate.edu> 341.
- Izuchukwu, O. (2011). Analysis of the Contribution of Agriculture on the Nigerian Economic Development. *World Review of Business Development*, 1(1), 191-200.
- Mahtadi, C. (2016, August 4). The Role That Business Can Play in Education. Huffpost Tech. United Kingdom, 2016.06/08/2015. Retrieved from <https://www.huffington.co.uk>
- Mba, E. (2015). Problems and Prospects of Industrialization in Nigeria. Information Guide in Nigeria. Retrieved from <https://www.infoguidenigeria.com>.
- Mba, I. C., Mba, E. I., Ogbuabor, J. E., & Ikpegbu, C. I. (2013). Human capital development and economic growth in Nigeria: An empirical analysis. *Journal of Economic and Sustainable Development*, 4 (18). Retrieved from <https://www.iiste.org/JEDS/article/viewfile>
- Nigeria Bureau of Statistics (2010, April). Labour Force Statistics, 2010
- Ncube, M. (2013). Five ways to promote entrepreneurship in Africa. *World Economic Forum*. Retrieved from <https://www.weforum.org/2013/05/fi...>
- Noko, E. (2017). Impact of Agricultural Sector on Nigeria economic Growth Education Project Materials. Retrieved from <https://www.educinto.com>.
- Odetola, T., & Etumnu, C. (2013). Contribution of agriculture to Economic Growth in Nigeria. The 18th Conference of the African Econometric Society (AES) Accra Ghana, at 22-23 July, 2013.
- Omodia, S.M. (2009). Manpower development in Nigeria: conceptual and methodological perceptive. *Journal of Social Science*, 19(2), 113-117
- Porter, M. E. (2015). The new role of business in global education: How companies can create share value by improving education while driving stakeholders returns share value initiative. Share value Initiative. Retrieved from <https://www.sharevalue.org/new/role...>
- Sanni, M. R. (2009). The conversion of federal Polytechnics into Universities: the funding aspect. *African Research Review*, 3(4), 507-522. Retrieved from <https://www.ajol-info.org/article/download>.
- Imam-Tamin, M. K. (2014). Children's Rights to Education in Nigeria: Challenges and Solutions. *Journal of Public Law and Constitutional Practice*, 6, 114-117.
- UNDP (2017). Human Capital and Economic Development. UNDP. *Human Development Report 2002*.
- Wikipedia <https://en.wikipedia.org/wiki/Agric>.
- Wikipedia. [En.m.wikipedia.org](https://en.m.wikipedia.org)
- World Meters (2017). Nigeria Population 2017. www.worldmeters.info.