



Productivity measurement and growth in Nigeria: challenges and prospects

*Măsurarea productivității și dezvoltarea în Nigeria:
provocări și perspective*

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Abstract

Productivity (growth) measurements (describing the assessment of an economy's rate of change in the ratio of a volume measure of output to a volume measure of input use) and related analysis are regular undertakings by staff of economic development of most nations and development institutions such as the OECD. Although they strive to accomplish objectives related to studying efficiency or the achievement of maximum output physically achievable under the use of current technology and given inputs, accounting for the contribution of real costs savings; introduction of benchmarks for production processes and to highlight living standards obtaining at points in time, its emphasis has been at the expense of examination of issues related to society (institutions), history, innovation and productivity change, which are concerned with promoting growth beyond mere productivity accounting. This paper has attempted to address all these issues as they pertain to Nigeria's rather stagnant or declining economy. This slight modification was prompted by changes from philosophers concerned with the wider area of productivity measurement and change. The literature agrees that productivity measurement (growth accounting) only "identified the significance of different proximate sources of growth" but fails to employ institutional, historical case studies to investigate the underlying causes of the growth, innovation and productivity change. Details of deficiencies related to the foregoing issues are examined and policy recommendations drafted and presented to assist practitioners, policy and decision makers and other stakeholders.

Keywords: *productivity; change; improvement; growth; labour; corruption*

Rezumat

Măsurători ale (creșterii) productivității (care evaluează ritmul schimbării unei economii prin raportul dintre volumul rezultatelor și volumul resurselor utilizate) și analize conexe sunt efectuate periodic de specialiștii în dezvoltarea economică a celor mai multe

națiuni și instituții de dezvoltare cum este OCDE. Deși ei depun eforturi pentru îndeplinirea obiectivelor referitoare la studierea eficienței sau obținerea unui rezultat maxim realizabil fizic în condițiile tehnologiei curente și a unor resurse date, la o contabilitate în favoarea reducerii costurilor reale, la introducerea criteriilor de referință pentru procesele de producție și pentru a evidenția standardele de viață care se pot obține la anumite momente de timp, accentul asupra lor a fost în detrimentul examinării aspectelor legate de societate (instituții), istorie, inovație și schimbarea productivității care se referă la promovarea creșterii dincolo de simpla contabilitate a productivității. Aceasta lucrare a încercat să abordeze toate aceste aspecte în cazul economiei Nigeriei care stagnantă sau mai degrabă în declin. Această ușoară modificare a fost determinată de schimbările propuse de teoreticienii preocupați de aria mai largă a măsurării productivității și a schimbării. Lucrările de referință sunt de acord că prin măsurarea productivității (contabilitatea creșterii) doar este „identificată semnificația diferitelor surse apropiate de creștere”, dar nu reușește să utilizeze studiile de caz instituționale pentru a investiga cauzele care stau la baza creșterii, inovației și modificării productivității. Sunt examinate detalii ale aspectelor menționate mai sus și sunt elaborate și prezentate recomandări de politici pentru a veni în sprijinul practicienilor, politicienilor și decidenților și altor părți interesate.

Cuvinte-cheie: productivitate; schimbare; îmbunătățire; creștere; forță de muncă; corupție.

JEL Classification: O47, R11, R58, J24

Introduction

Productivity measurement and socio-historical imperatives for propelling Nigeria's economy towards higher growth deserves examination by scholars because of the paradoxical affliction of poverty on a disproportionately large number of Nigerians irrespective of the nation's wealth in natural and human resources. Moreover, it is also necessary as a means of achieving the expectations of development advocates, the people and the governments whose successive development planning and management have aimed towards achieving our national aspiration: economic growth and sustainability. Despite the concern of all post colonial Nigerian governments with the pursuit of economic growth and progress, these goals have tended to remain rather elusive. The proportion of poor Nigerians (i.e. people earning and spending US\$ 1 per day and US\$ 2 per day was reported to be 70.2 percent and 90.8 percent –based on a 1997 survey (UNDP, UNEP, World Bank and WRI, 2005). Increasing unemployment and underemployment, slow or declining economic growth or stagnation and weakening of fundamental and cherished values over the years compelled the Obasanjo administration to initiate the National Economic Empowerment and Development Strategy (or NEEDS) in 2004. Expectedly, the goals of the NEEDS were: wealth creation, reduction of poverty and unemployment and reorientation of values (National Planning Commission, 2004: 2-7).

Battered by the pains of poverty, most Nigerians doubt the sincerity and reliability of governments claims that this economy is getting better. While one could have, gone on and on regarding poverty and under development in Nigeria it suffices to state that intensity justifies the urgency of examining productivity change, an endeavour that is more profitable compared to productivity measurement. While productivity measurement revolves around counting or accounting for “the relative importance of different proximate sources of growth” of an economy, it is limited by its restriction to this. The more urgent task of changing the manner (or kind) of productivity obtainable at the point in time of the accounting, and the explanation of the causes of growth (of less or none of it), the degree of innovativeness being applied tend to be frequently neglected to the detriment of the economy and its beneficiaries, being the citizenry (Schreyer, 2001) owing to the fact that social and historical factors facilitate the charting of paths towards positive productivity change (i.e. economic growth), we consider it worthwhile to address these issues as we are now doing.

This paper aims to achieve the following objectives:

- (a) To briefly present the concepts theory and practice of productivity measurement and productivity change.
- (b) To highlight the limitations of productivity measurement and the need to incorporate and strive towards achieving productivity change in Nigeria;
- (c) To show how socio-psychological and historical factors in Nigeria warrant the urgent need to change the past and current levels of productivity. It is apposite to state that these historical and social aspects of productivity in Nigeria do cover the challenges of measuring productivity;
- (d) To point toward opportunities, potentials for positively changing productivity in order that what will be measured in future will be were pleasant to Nigeria’s audiences.

The article is organized in sections. In section two, we create a conceptual framework by reviewing related literature on: productivity measurement, we distinguish several kinds or typologies of productivity measurement, and show why it is an important undertaking and introduce the concepts of productivity change and growth accounting. Having provided a suitable background for the discussion, in section three, we describe the methods used for implementing the study challenges (social and historical) that have hampered, and still impede the achievement of productivity change in Nigeria. In section four we discuss some prospects for productivity change in Nigeria, while section five concludes the paper and recommends strategies that are capable of facilitating productivity growth in Nigeria.

Conceptual framework and literature review

While the literature in the disciplines of management sciences have elaborated specifically on organizational and related subjects such as structure and processes, and the concept of productivity measurement, (Gibson, Ivancevich & Donnelley,

2000) the concept of productivity change has received little attention (Organization for Economic Cooperation and Development, 2001; Schreyer, 2001).

Productivity measurement. To clarify what productivity measurement is, it is reasonable to begin by introducing the concept of productivity. Productivity is frequently defined as a ratio of a volume measure of output to a volume measure of input use (Schreyer, 2001).

Purpose and measures of productivity. Following a review by Schreyer (2001), productivity measurement is undertaken to achieve the following objectives:

(a) To account for technical change: it strives to investigate whether technology i.e. the way resources are transformed into outputs that are sold and bought by people has improved. (Griliches, 1987).

(b) To investigate the degree of efficiency that is being achieved, i.e. the achievement of maximum output that is physically achievable using current technology and given quantity of input (Diewert & Lawrence, 1999).

(c) To account for the contribution of real cost savings referring to multiple sources of productivity growth including: capacity utilization, on the job learning/training, various measurement errors, efficiency changes, technical changes and economics of scale (Harberger, 1998).

(d) To introduce benchmarks for production processes: this describes the identification of inefficiencies associated with specific production processes by comparing their various productivity measures. For example, cars per day, passenger miles per person, or graduates per lecturer per year are some physical units for measuring productivity that facilitate factory-to-factory comparison.

(e) To highlight living standards: in this regard the per capita income has tended to be one of the commonest and frequently used simple measures of measuring productivity through an assessment of living standards. However, it varies with the value added per hours worked of living standards. Another measure, the multifactor productivity (MFP), helps in measuring growth possibilities and inflationary pressures within economics.

Productivity measurement typology. Some of the major types of productivity measurement for the macro-economy have been classified from the diverse, various and multiple productivity measures in existence. They are:

(i) Single factor productivity measures (SFP) which relate measures of output to one (single) measures of input;

(ii) Multifactor productivity measures (MFP) describe those that relate output measures to a multiplicity of inputs.

Firm level measures of productivity of two types are as follows:

(i) Value added concepts of tracing the movement of output also exist and are applied in productivity measurement

(ii) The relation of gross output of productivity measures to single or multiple inputs.

Selecting the most suitable type of productivity measures. Individuals and organizations charged with conducting productivity measurement frequently grapple with the problem of choosing one or a few types (out of the wide range) of productivity measures available. Be advised that the most suitable type should be determined based on the purpose of the productivity measures and also the availability of data/information. These two bases or determinant of productivity measures turn out to pose serious challenges in Nigeria. For example, Kingibe, (2007), expressed government's frustration with inadequacy of data, pointing out that this problem threatens the achievement of the 2000 Millennium Development Goals. In the country this is one challenge deserving expatiation later/below.

Derived productivity measures

Major productivity measures have been (and can be) generated using the criteria earlier mentioned above. These include: single productivity measures, additionally created intermediate inputs multifactor productivity measures (e.g. labour-capital), which can be evaluated using gross output as the foundation, and multifactor productivity (MFP) which can be in form of capital-labour MFP or a value added conceptual framework for represented output or capital-labour-energy-materials MFP (KLEMS) founded on a value-added conceptual framework. The value-added concept of labour productivity is conserved as the most significant approach to their computation. The capital labour MFP is the second most frequently applied method while the KLEMS is the third.

Some inter-relationships exist among the foregoing measures. In this regard, the rate of MFP change has been identified as one of the forces driving labour productivity growth. The economic theory of production has been used to create the interrelationship among the productivity measures, the MFP change and other relationships involved in the process. The parameters of a production function (parametric approach) have been estimated using economic techniques and also derive direct from productivity growth measures. The empirical measures which approximate to the economically determined and the "real" index number are derived using the economic theory of production. Notice that the non-parametric approach is an example of the growth accounting technique of productivity measures (Schreyer, 2001).

Owing to space and time constraints, we defer the full consideration of details of the foregoing issues here. Those interested in these topics can review them from the burgeoning literature.

Productivity change describes the positive result of a combination of dynamics in technical efficiency, disembodied technical change and economics of scale that tends to raise productivity in various industries. Its measurements in a residual way results in (or shows) increased factors that bear on the residual. This is particularly obvious regarding the rate of capacity utilization and measurement errors (Schreyer, 2001).

General outlook on the main types of productivity measures

Table 1

Input measures / Output measures	Labour	Capital	Capital and Labour	Capital, Labour and intermediate inputs (energy, materials, services)
Gross output	Labour productivity (based on gross output)	Capital productivity (based on gross output)	Capital labour MFP (based on gross output)	KLEMS, MFP
Value added	Labour productivity (based on value added)	Capital productivity (based on value added)	Capital- labour MFP (based on value added)	-
	Single factor productivity measures	Single factor productivity measures	MFP measures	

Source: (Schreyer, 2001)

Growth accounting includes the index number approach (a growth accounting technique) adopted by Schreyer (2001), on behalf of and for the OECD emphasizes the study and analysis of how the observed rate of change of a specific industry's output is explainable by the rate of change of a combination of inputs. This approach therefore approximates to the residual evaluation of multifactor productivity (MFP) growth, its construction and used of an industry output involves the use of different types of output, which are weighted by their contribution to the total output. The design of an index of combined inputs involves input of rates of change of various inputs including labour, capital, intermediate inputs) which are appropriately weighted. The weights are derived from factor in come shares, following the simplified assumptions of economic theory. For example, the income shares could be in form of employee compensation in the total cost which approximates to production elasticity's or the result of about 1% change in individual inputs on output (Schreyer, 2001).

Shortcomings of growth accounting. It has been observed that growth accounting and productivity measurement (based on the index number approach) restrictively identifies the relative importance of different proximate sources of growth. At the same time, it has to be complemented by institutional, historical and case studies if one wants to explore the underlying causes of growth, innovation and productivity change (Schreyer, 2001). The foregoing conclusion prompts us and provides scope in this presentation to briefly examine some of the relevant issues in the Nigerian economy.

One of the arguments of this paper is that the social environment provides the underling forces that condition the emergence of the economic elements. It is

well known that social values mores culture and institution determine the kind of innovativeness, science and technological development that will emerge and operate in any region.

Method of study

The method of aetiology and description were used for the study. It was considered to be suitable because it facilitates the tracing of the origin and development as well as understanding of phenomena. These methods have recently been described in the literature and do not require elaboration here (Obasi, 2005, Scott & Marshall, 2005). The data for the study were mostly textual description of the nature of productivity in Nigeria.

Social and historical challenges to productivity growth in Nigeria. Several social institutional and historical issues that have been pervasive in Nigeria either recently, currently or for the past one to two or three decades, are bode well with our current task of attempting to explain the underlying causes of productivity change in Nigeria. They include the following:

(a) *Inadequate energy supply:* Compared with most countries higher with higher Gross Domestic National product, Nigeria's energy declined over the years leading to the closure of many factories. Electricity outages have been very embarrassing in spite of the huge investment (US\$10-US\$16 Billion) in the past eight years, this cannot encourage high productivity at all levels of the economy.

(b) *The psychology of most Nigerian people:* the attitude of Nigerians has been conditioned to be shock resistant. The high poverty level brings out the worst in each leader, since the tendency is to think of one's immediate family first, not even with the thought of training for higher productivity, but with the intent to defraud the masses and stockpile billions of naira in different accounts.

(c) *Low quality labour and poor attitude of most Nigerians to work:* Inexperienced men and women become political leaders with no administrative or managerial training. Many times, people are sent overseas for training and are retired compulsorily before the course is completed, thus making security of labour to seem like a non-existent matter (consider the general purge of federal civil servants from 1975 without any benefits).

(d) *Funding:* a very crucial drive for increased productivity is funding. Most public enterprises are poorly funded hence the need for their privatization, workers remuneration is also low, making it impossible to get a total commitment to work. It should be known that the social security of each person impacts on his level of productivity, when monthly earnings take one beyond the level of physiological and safety needs, the drive to be productive is sustained. The absence of life assuring parameters has been responsible for the menace of increasing crime rate, failed or financially distressed banks, corruption, indiscipline, general system failure and religious psychology which emphasizes miracles instead of hard work for higher productivity.

There is need to be concerned about the poor state of collection and management of development data and information as one of the most serious impediments to the achievement of the Millennium development goals (MDGs) in the country. Recall that the availability and quality of data determines the choice of approach towards productivity growth measurement.

Corruption in Nigeria. Relevant historical issues include: high propensity to embezzle public funds by officials, beginning in the 1970s, up to the present; the disgusting consignment of work in the public sector to nobody's work, derisively described as "nobody's work"; indictment of 31 out of 36 state governors of the Obasanjo Administration (1999-2007); the civil war and its legacy; federal system of government, and perhaps the super eagles who flew rather awkwardly in Ghana in January, 2008. Smith (2007) describes the rampant perpetration of fraud by Nigeria's youth by employing the internet for a campaign of distributing millions of 419 letters designed to capture victims of their fraud worldwide. While corruption is not restricted to Nigeria, Smith (2007) claims that Nigerian discussants of the problem frequently describe it as "our Nigerian problem" therefore making it too significant to ignore. It reviews prominent cases of corruption perpetrated by Mariam Babangida while her dictator husband arrogated to himself "presidency of Nigeria under the guise of the NGO "Better life for rural women" which Nigerians dubbed "Better life for Rich Women" due to the way its money was cornered by the Babangidas and their cohorts in Nigeria's elite minority at various states and sectors. While Smith's book title, (Smith, 2007), might draw the ire of Nigerians and compel a debate on the fairness or otherwise of the analysis or label of Nigeria, the consistent ranking of Nigeria as the world's top one percent to 10% most corrupt nation by the global anti-corruption monitoring organization: Transparency international for about one decade tends to underline the intensity of corruption in the pre fourth Nigeria republic. The fourth republic Nigerian governments inaugurated on 29 May 1999, has not in anyway dispelled the label of "A culture of corruption in Nigeria". If anything, reports of scandalous corruption perpetrated by the Obasanjo presidency, the Executive at the federal level and in most (about 31 out of the 36 states and the FCT) have tended to substantiate the description, despite the derogatoriness of it. Is it not difficult to ascertain the potential for productivity growth in a state whose governor stole several billions thereby preventing the deployment of resources to achieve growth whatever you chose as an answer, 31 governors were indicted, most are currently being investigated, being held by various security agencies especially the EFCC, ICPC, (Jail-bound: Obasanjo is a candidate, 2008). After leveling money laundering charges against Lucky Igbinedion, former governor of Edo State under the Obasanjo administration from 1999-2007, (Money laundering charges against Igbinedion, 2008), he was found guilty and consequently convicted in January 2009.

Rampant failure of state owned enterprises. A multiplicity of institutions that were created to engage in productive activities had to be de dared failed,

wound up within the past decade. Among them are the Nigeria Airways, whose counterpart in the United Kingdom: the British Airways has been credited with highly commendable levels of annual productivity growth, Nigeria Railways, Peoples Bank, National Electric Power Authority, NEPA, which had to be unbundled and separated into 18 separate companies, Nigeria telecommunications refineries among others.

It makes sense to speak about “productivity retrograding” in Nigeria in most of the failed institutions when it is carefully considered that the failure to manage the nation's refineries has compelled unscrupulous Nigerians to import fuels to the tune of trillions of Naira for over one decade. The dailies report that Nigeria spends USD 1.8 billion monthly on oil importation (The Punch, 23 August 2007). It is mind-boggling when it is also considered that it costs lower than the above monthly oil import bill (US\$ 1 billion) to build an average refinery capable of producing 100,000 barrels of oil day in Nigeria.

Failure of productivity catalyzing institutions (education and training centres) in Nigeria – a factor in reducing innovativeness. Under innovativeness, the failure of Nigeria's education sector has been acknowledged since the mid 1980s when Dr. Festus Iyayi, spoke on the issue on the "Save Education Day" at the University of Port Harcourt in 1986. Other factors that have bearings on labour productivity and innovativeness as factors of production and also in productivity in Nigeria are emerging: between 2006 and 2009), Nigeria's top government functionaries in the ministries of education and national planning (Dr. Chukwuma Charles Soludo) have declared that about 80% of Nigerian graduates –including about 40 million youth- are unemployable, (Nigerian Tribune, 25 February 2009). Others have explained the failure of Nigeria's universities to be globally competitive (The Punch, 29 January 2008).

The literature is replete with reports on the failure of Nigeria's education sector at all levels (from primary schools, secondary schools, through universities and training centers). This painful subject has formed the bases for recurrent commentary by Nigeria's dailies, newsmagazines and journals. It has become widely known that since the ranking of universities in the world was undertaken recently none of Nigeria's nearly 100 universities has been included in the list of the best 200-500 or top performers (Why Nigeria Universities are not World class, 2008). Claiming that 6,000 schools were illegal, had inadequate facilities or both, the Lagos State government shut 3,000 of them after threatening to shut all the 6,000 schools a month earlier (Closure of illegal schools in Lagos, 2008). This rather drastic reaction by the Lagos State government has been criticized (Lagos defends closure of schools, 2008). The Punch editors pointed out that the government has not shown exemplary leadership by showcasing model schools that private investors can emulate and replicate. Since pupils of the closed school are likely to enroll later and graduate, the reaction is tantamount to disruption and is one of the several factors hampering the quality of productivity in Nigeria.

The innovativeness of Nigerians is likely to be hampered by the combination of the problems of grossly inadequate political will, destructive regulation, disruption of programs of educational institutions among other impediments.

Brown-outs, black-outs: the tragedy, frustration of expecting encouraging productivity levels without stable power supply. In (Ingwe, Aniah & Otu, 2008) it is described the scandal that is Nigeria's electric power sector and it is shown what Lagos can do. Productivity is at best at a mediocre or primitive level in circumstances of poor or no power supply. The power supply which was as little as about 3,000 megawatts (mw) has declined by as much as 1000mw. The power sector is also smeared by scandalous corruption. The public is yet to be told whether it was USD 23 billion, or USD 16 billion or USD 10 billion that was spent to buy Nigeria this virulent brown-out or black-out!

In (Ingwe, Inyang, Ering and Adalikwu, 2009) it is shown that Nigeria is characterised by prolonged use of neoliberalistic political framework: military dictatorship, ineptitude in terms of adoption of sustainable energy due to the culture comprising historical scramble to steal and misappropriate funds earned from export, production and use, of fossil fuels (petroleum oil and natural gas).

A culture of planning without facts in Nigeria. As for back as, Stolper (1966) raised to global attention the strange culture of planning development without using information derived from data analysis in Nigeria. Nearly half a century (42) years later, government functionaries in Nigeria comment on the failure of institutions charged with managing data and information in a way that suggests that the problem seems to be so entrenched, in a way that we can speak of it as another subculture of adversity. Kingibe (2007) shown that inadequacy of data information in the country threatens to thwart Nigeria's achievement of the 2000 Declaration to raise various living standards by 2015 Millennium Development Goals. Also, it is alleged that bureaucrats and technocrats in public sector deliberately alter and tamper with data information in order to gain selfishly by enriching themselves.

There are other cases of this subculture. After the 2006 census managed by the National Population Commission the public is yet to get useful breakdown of the result for application in productivity measurement / change and related development work (Makama, 2007). The performance of the population commission during and after the 1991 census was not better than what we are suffering (National Population Commission, 1998).

Historical factors relevant to productivity in Nigeria. A few historical events and phenomena have determined productivity change in Nigeria. some of them will be briefly outlined here. The discovery of crude petroleum oil at Oloibiri 1945 and its drilling from the late 1950s led to the oil boom and the "Dutch Disease or oil doom in the 1980. The boom prompted one of the nation's rulers to declare that Nigeria's problem was to spend the "abundant" money in its possession and not making money! This ruler proceeded to pay salaries of foreign

nation's workers and to engage in planning projects of squandermania, megalomania and also encouraged low productivity. The ineptitude, encouraged by the oil boom has made some to regard the economy as cursed. It has made Nigerian governments to create an economic culture of relying on the export of hydrocarbons: oil and recently gas to the neglect of solid minerals, agriculture and other resources which sustained the economy in the pre-oil Nigeria. A notable economist has shown how this attitude has produced billions of poor people around the world (Collier, 2007).

The distortion of the federal system of government into a strange way of arrogating revenue collection and sharing responsibility by the Federal Government to the chagrin of member sub national states has led to a situation whereby sharing of revenue at the "Federal" level has become a rather resource (time and energy) consuming preoccupation. The importance of this point is that other productive programmes tend to be neglected because of the scramble for oil money in the pool. The distortion of the federal system was facilitated by the 30 months civil war 1966-1970) which made an excuse for security funding through federal funds an expedient reason.

Mediocrity in productivity caused by a public-sector-dominated economy. An explanation of the grossly poor productivity in Nigeria has been that apart from being dominated by revenue earned from exporting crude oil, and royalties paid to government by foreign oil companies, Nigeria's economy tilts disproportionately towards the public sector. Without receiving funds from the Federal Pool Account, managed by the Federal Government, the internally generated funds (through taxation and so forth) in Nigeria's 36 states and Federal Capital Territory in Abuja, are insufficient to run their socio-economic activities and programmes.

Prospects for productivity growth in Nigeria

Despite the dismal productivity levels and the poor condition of productivity inducing factors as reviewed above, several factors promise to change the situations for the better. Optimism that Nigeria's productivity measurement and productivity change will improve has been indicated by the following: existence of a considerable stratum of the Nigerian population and institutions who are keenly interested in accomplishing and/or catalyzing productivity measurement and growth; the President Administration's commitment towards enthronement of servant leadership for changing the fortunes of Nigerians; commitment of the National Productivity Centre towards sustaining measurement of productivity and the pursuit of improved productivity levels by Nigerians and their organizations.

Servant – leadership: a plus for productivity growth. The president Yar'Adua (2007) promised his commitment to offer servant-leadership to the nation and the citizenry. He said that a servant leader should possess a "strong sense of stewardship a firm commitment towards redeeming the trust and faith of that which the Nigerian pledge have lost to the government... virtues of governance

comprising honesty, probity, accountability, transparency, fairness, justice, equity, service to others before and above self and the trust and fear of God.” These words sound good. Despite the fact that they come from a politician, a few points indicate some optimism.

In appreciation of the significance of president Yar’Adua’s promise, I. K. Muo (2008) observed that it is a retreat or transition from narcissism to servant leadership. This suggests the level of frustration of Nigerians with their past leaders.

Nigeria’s immense human resource endowment. With a total population put at 140 million people based on the report of the most recent 2006 census (Makama, 2007), Nigeria remains Africa’s most populous nation with a huge human resource base awaiting mobilization, encouragement and support by governments and development institutions. If adequately supported through productivity enhancement tools and facilities, Nigeria’s huge population could be profitably harnessed, and directed towards achieving higher economic growth for the nation and beyond.

Creative individuals, Nigerians and organizations. Within the 140 million Nigerians are to be found a huge mass of good people who are relentlessly yearning for and working toward the achievement of higher productivity in several sectors. While the Nigerian public sector has been entrapped in corrupt practices and mediocrity, signs or indicators of change have been introduced intermittently. Moreover, in a world that is increasingly learning from other sectors, in United Kingdom, administration managed to emulate what two non-government organizations (Red Cross and Sans Serif) achieved in the health and education sectors respectively. Despite the stunting and stultification of the civil society and non-government organizations by prolonged dictatorship, Nigerian civil society successfully pushed the revolt against the military dictators to global and local appreciation thereby prompting effort culminating in the withdrawal of soldiers from the government. Thereafter, Nigerian civil society has been diversifying into and undertaking innovative programmes in various sectors. Some are engaged in productivity related programmes such as intellectual property management, traditional knowledge (culture) and genetic resources and work in other economic sectors.

Conclusion

Productivity measurement is a routine undertaking of managers of national and regional economies. Owing to its complexity, several various approaches can be used to measure productivity. In Nigeria where several problems hamper efforts towards institutionalizing economic and productivity growth, undue and restrictive emphasis on productivity measurement at the detriment of productivity change towards increased growth serves to perpetuate economic stagnation, decline or mediocre levels of growth. Collaborative programmes on productivity

measurement and productivity change (growth) could be designed to mobilize resources from other sectors such as civil society and the academia. The worrisome problem of economic stagnation and modest growth in Nigeria warrants that the National Productivity Centre engages in serious productivity measurement, research, testing before selection of appropriate productivity and growth approaches and implementation.

Recommendations for improving productivity in Nigeria

The following recommendations aim to support the work of the national Productivity Centre, in particular and productivity growth in general.

- There is an urgent need for collaboration between the National Productivity Centre and civil society and non-government organizations in form of organizing and managing programmes aimed to formulate suitable productivity measurement strategies, approaches as well as promoting productivity change programmes. The significance of this recommendation can easily be appreciated by considering the tremendous profit that the world has recorded in the past decades from the insight, innovativeness and creativity of the civil society in drawing attention to near intractable problems and also formulating solutions to the problems. Space and time constraints disallow listing of the numerous examples here.

- The National Productivity Centre would gain by funding further studies into productivity measurement productivity change (growth), the contribution of history, innovation, institutions to productivity change as a rapid and cost – effective way of improving its performance in the area of research, development and demonstration. Numerous examples have demonstrated the potency and cost – effectiveness of this approach in both advanced and developing economies.

- The National Productivity Centre should strategically work with civil society as a way of surmounting the limitations on it by fragmentation or compartmentalization of its roles, responsibilities, mandate that prevents it from effectively collaboratively with other departments and ministries of the Government in resolving problems that adversely affect and influence productivity. For example, while the National Productivity Centre can cause higher productivity by collaborating with Education Ministries at State and federal levels to prevent deleterious disruptions to educational programmes and training, it is not doing this effectively because the roles of both departments/ministries are rigidly defined in a way that abhors “infringement” by non-members of individual ministries/ departments. Fortunately, civil society has the experience, courage, independence to design governance schemes for developing multi-sectoral and multi-stakeholder approaches towards providing solutions to problems that are inter-sectoral in the incidence of implementation.

The impressive accomplishments of the global civil society in providing solutions to various problems generally and some of the problems that hamper productivity change or increment in Nigeria must be appreciated and used as a basis for increasing the participation of other stakeholders in various sectors of Nigeria's economy. This approach is capable of enthroning good governance and causing the reversal of low productivity.

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