

# Covid-19 Pandemic Responses in Nigeria: Implication for National Development

Mustapha Abdullahi Aliyu, Halima Safiyan & Hadiza Mahammad Abdulkadir  
Department of Social Sciences,  
Kaduna Polytechnic

All correspondence to: Mustapha Abdullahi Aliyu

**Abstract:-** This paper examines the implications of Covid 19 a globally pandemic originally from Wuhan in china spreading to Iran, Europe, United States of America, the Americas and Africa overwhelming health infrastructure and systems, with consequences in spread and deaths. The paper triangulates among the global capital theory, the opportunity theory or entrepreneurship and the dependency theory to show that Nigeria could be a net gainer but rather a great loser after the cloud of the pandemic have settled on nations. Data from the Nigeria Center for Disease Control (NCDC) was used to illustrate geopolitical zones cases of covid 19 and deaths flow in Nigeria in relations to the existing socio-economic and political holes in the national development in Nigeria. The trajectories therefrom suggest that existing poverty, inequalities, dearth of healthcare infrastructures, and pervasive corruption in governments and governance pictured gloomy outcomes in the Covid experiences in Nigeria. This view become critical to considering the implications and future of the Covid experience in Nigeria due to the still explored novelty associated with Covid 19 in its symptomatic and asymptomatic spread, tendency to be spread by children, general lack of herd-immunity to it and the unavailability of vaccines especially in developing countries such as Nigeria for at least next two to three years. The paper recommends among other things that Nigeria government must take led in supporting the ministry of science and technology towards garnering seasoned and experienced academics, scientists and technologists, national business and entrepreneurs towards creating concrete innovations to prevent, control and fight Covid 19.

**Keywords:-** Covid 19, National Development, Pandemic.

## I. INTRODUCTION

World over the year 2020 will be remembered for many things, standing out in time to come will be people reminiscences of the impacts of the pandemic that came to be summarily defined as the COVID-19. From the developed to the developing countries the SARS Virus World Health Organization (2020) classified as COVID-19 has killed people. The old, young, male, female and children. Starting from China, Iran the U.S.A., Italy, Germany, France, South Korea, Brazil, Mexico, Argentina and Nigeria among other African countries. The rate of

deaths Covid caused world over were never witnessed in many life times in recent history. The acclaimed sophistications in sciences, technology, medicine and public health in both the United States of America (U.S.A.) and in the European Union (EU) was brought to it knees amidst the onslaught of Covid -19, raking 185,000 death and a projected 285,000 additional death before the end of the year 2020 in the U.S.A(CNN:WorldNews.9<sup>th</sup>/09/2020). The EU death toll from the pandemic is put at 170,000 with Italy topping the list with 287,753 confirmed cases and 35, 610 deaths. China the global acclaimed source of the pandemic lost 4,734 people with 90,197 confirmed case s. Central Africa has 4,749 confirmed cases and 62 death as south Africa 649,793 confirmed case and 15,447 death (Source: John Hopkins University; Coronavirus Resource Center.Access14/09/2020)

It is pertinent to note that COVID-19 ravaged Europe, the Americas and USA, much of Asia including some of the Tigers (notable Singapore and South Korea) despite having best of GDP, high level of infrastructures and general improved standard of living among the populations. The health, social and economic implications of the COVID-19 experiences in several of these nations dragged down, both GDPs and economies. For example, in the U.S. The results were in all times records of unemployment benefits application to the government. Very few phenomena throughout human history have shaped our societies and cultures the way outbreaks of infectious diseases have; yet, remarkably little attention has been given to these phenomena in behavioral social science and in branches of medicine that are, at least in part, founded in social studies (e.g., psychiatry and sociology etc.) (Huremovic,2019). Nigerians, and the Nigerian state have penchants for living a careless existence, must time the consequences are severe.

Globally, the lockdown enforced as control protocols on the spread of COVID-19 forced economy closures in industries, business, air travels, hospitality and leisure, sports and education with the effects still being felt in loss of jobs and income, by individuals, business, companies and airlines. There is increasing in declaration of business, corporations and organizations bankruptcy, global shortages in supplies food and necessities such as hand sanitizers and Personal Protective Equipment (PPEs), shortage of medical personnel and public health workers and of course deaths. In many countries the dead were allowed to litter the streets as families stayed with death member in home for scarcity or

lack of burial or preservative arrangement and structures (Aljazeera, CNN, RTV).

As a pandemic, Covid 19 spread to Nigeria a developing country and the victims unfortunately include top state technocrats and politicians. Several people got infected, many where identify and isolated. It is not surprising that the index cases spread from Lagos State the commercial capital of the nation, and the state with the busiest airport in the nation. Then Ogun State, understandably the closest neighbor to Lagos State and one of the nation's industrial hub. Later Kano State peaked in infections and deaths. Kano state is the second commercial city in the nation and host another must busiest airport for international trade from Middle-East, North Africa, China and other Asia countries. Kaduna and Katsina States all parts of North-Western state bordered Kano State pick infections in the course of the pandemic in Nigeria. The Nigerian Association of Medical Resident Doctors (NARD) include in the reasons for its strike actions deaths of its members due to lack of PPE and slow pace of testing in patients, poor incentives actions that put its members in direct contact with dangers. Daura town in Katsina reported many deaths including those of a medical personal. Members of the Edo State, State Assembly were forced to quarantine after showing symptoms following return from oversee trip (TVC:News, 7<sup>th</sup> March,2020). In River State Nigeria, there were reports of infections following leisure homes engaging in parties despite lockdown restrictions. By March, 2020 Nigeria had come under locked-down by the Federal Government starting from Lagos State, Ogun State and the Federal Capital Territory (FCT), with state governments following. By 9<sup>th</sup> march, 2020, The Presidential Task Force on COVID-19 had come into force and zoomed into action, monitoring and dolling state- by-state infection reports, while galvanizing national and international interventions in funding and donations towards controlling the spread of the pandemic.

In between this global and national pandemic outbreak in COVID-19 and processes it necessitated. Many people have become infected and died. A lot are senior national political and economic figures. Governors, Ministers, Traditional rulers/leaders, Media moguls, technocrats, academics, musicians, citizens from all works of life got reportedly infected some traced and quarantined by state (both Federal and State Governments) other went on self-isolations as the Covid19 protocol demanded, while majority of the citizens could not have defined their status even if they felt any forms of symptoms associated with the phenomena, owing to lack of adequate testing arrangement nationally. This is the cross-road through which this paper seeks to examine the implications of the nature of COVID-19 pandemic in the context of the socio-economic and political development in Nigeria, with a view to highlighting the social, economic, health, sciences, technological lessons to be learnt from the experiences globally.

## II. THEORETICAL FRAMEWORK

To focus the discuss into perspective three theoretical positions are articulated and interpolated as a guide. The Global Capital Theory espouse by Sklair (2000,2003,2017) and Robison (2010). Key to the theatrical disposition in the Global Capital Theory is the critique of globalization as a Novel state in the continue development of capitalism. The theory equates globalization with the rise in the global production and financial system which is make by advancement in science and technologies and the increasing concern for the profits in globally shared division of labour in procession. The implication of the global pandemic of the novel Corona Virus in both epidemiologically and the socio-political and economic contexts seen in the spread from Wuhan in China, Iran, to the U.S.A. Italy, France Germany, Africa (Nigeria) and the Latin America (Brazil, Mexico etc.), saw heighten activities in research and development led by both renown global academics, universities, disease controls centers, research centers Pharmaceutical companies and governments (China, USA, Russia, EU etc.) towards understanding, preventing, controlling the epidemiological spread and importantly towards the development of vaccines against it (COVID-19), world over. In the context of global capitalism antics and tactics nations, corporations or individuals that arrive firsts with proven vaccine and control measures against COVID-19 stand strategically head of others in terms of profits and gains from the pandemic experience.

Therefore, scientific technological and political economy of Covid-19 boils down to the economics, of funding the sciences and technology both for Public Health which saw the emergence and widespread temperature testing tools and digital infrared forehead thermometer, hand sanitizers and PPEs. At the peak of the pandemic in the U.S.A. PPEs went out of stoke in the USA as shortages were in ventilators, IUC units were reported in all 59 states. Hospitals were overwhelmed as morgue overflowed with dead bodies. In some counties refrigerated lorries were called in as backup to hospital morgues. To cope U.S.A did import ventilators and PPEs from China and other countries (Birmingham and Huifeng, 2020). What, the U.S.A loss on the one hand, it gained on the other. As the 'new normal' brought about by the in the conditions of lockdown, stay-at-home, social distancing increase the roles of information technologies in people's life. The U.S.A as a global tech giant and its techno-entrepreneurs gained from the global heighten use of Netflix, Google, Facebook, WhatsApp, Walmart, ZOOM as communications channels including nations governments (nation states) and International Government Organizations (IGO: WHO, EU, AU, etc.) official meetings.

Where, developing countries like Nigeria came into the scientific, technological and political economic analysis of the implications of the global significance of the COVID-19 pandemics is also discernable in Sklair (2017) conception that class in capitalist society is in terms of relations to the means of production, distribution and exchanges. While, highlighting the central roles of the capitalists' class

globally in the struggle to commodify everything, including health and diseases. Clearly, Covid classified the world into those whose public healthcare facilities and responses is adequate towards addressing such phenomena as Covid 19, those nations who could profits from such experiences as that of the pandemic and those at the receiving end of poor and inefficient public health and the consequences therefrom.

The Corona virus has been described as novel virus. And indeed, it is novel in many directions for no less the impact (severity of the disease condition: symptoms as fever, dry cough and tiredness, sore throat, diarrhea, headache and loss of taste and smell, etc.) but, for the quantum of death it extolls on humans' race. Human have been novel in their thoughts and actions and in the way, they confront life realities. Phenomena like the novel Corona, challenged humans and human's novelty which could best observed in the entrepreneurship zeal and spirit the appearance of the phenomena garnered world over. Hence, this discuss relates to the *Opportunity Theory of Entrepreneurship*. From production and sourcing of ventilators, PPE, and hand-sanitizer, increase technologies to help ease the impacts of the Stay-At-Home or Social-Distancing (such as Zoom, Skype, Google, WhatsApp and Facebook etc.) in government activities, schooling, business, diplomacy, etc. entrepreneurship came to define COVID-19 as a global phenomenon. According to Kehinde (2008) an entrepreneur is an energetic individual with a mission and clear vision, to create out of his vision product or service in a business field many may have characterized as unimportant. This action of the entrepreneur often prove lifesaving through introduction of new products or business cycle, while the entrepreneur makes profit. As events proved in both the national and international understanding, control and management of the coronavirus pandemic from China, the U.S.A, Russia, Iran, the EU, coronavirus present and opportunity both for science (medicine, vaccination production), business and economy (trade and importations of PPES etc.) politics (global realignments for quick access to the vaccines when produced and access to PPES and others) and lastly in the profits and loss, both individual, national global entrepreneurship counts.

Hence, Murphy and Marvels (2008) stated, though the entrepreneurial process begins with opportunities, it entails other important elements. Such elements include assembling resources, managing a going concern, growing a business venture, and others. Corona virus originated from China late 2019 with all its consequences. In the mid-2020 China had become the key exporter of PPES, ventilators and public health officials and doctor globally. Nigeria received the Chinese public health officials and doctors as specialists on Covid towards the fight against the pandemic. This development best described opportunity and the significance of entrepreneurship theory to the global implication of COVID-19. The view of Timmons (1989) pointed out "that the Chinese characters for crisis and problem, when combined, mean opportunity". While this is not correct, the characters actually mean "machine" and "meet" and together mean "opportunity" (Quoted in Lins and Doktor,

2014). The current global events and experiences have shown that the Chinese meet opportunity in COVID-19.

In the final analysis of the COVID-19 pandemic and the experiences in the developing countries like Nigeria the dependent nature of such nations clearly surfaces. Therefore, the significance of the Dependency Theory as the last of the tripods of the theories explored to justify the explanations in this study. Romaniuk (2017) described Dependency theory as the result of an extensive search to find a theoretical framework to sufficiently analyze and explain both development and underdevelopment within the International System. According to the scholar the theory examines external matters, such as politics, economics, and culture, and attempt to come to an understanding of how these issues influence development policies, globally. according to Romaniuk (2017) the Dependency Theory has three main salient characteristics. First, the international system is seen as the sum of two sets of states: *dominant* and *dependent*. Second, dependency theory holds that *external forces* are critical in terms of economic activity of dependent states. Third, relationships, based on strongly historical patterns and dynamics (i.e., *internationalization of capitalism*), between dominant and dependent states are a vibrant process, with exchanges taking place between the states playing a considerable role in the reinforcement of patterns of inequality.

### III. COVID -19 PANDEMIC ORIGIN AND CONTROL

A global consensus has built around the origin of 'SARS-CoV-2' that causes the disease condition the associated with the novel coronavirus medically designated COVID-19 as a Sea Food Market in Wuhan a province of China (WHO,2020; Morens et.2020; Cimmino, Kroenig and Pavel, 2020). Throughout the world the disease has caused varying degrees of illness. Patient shows various symptoms usually fever, cough, sore throat, breathlessness, fatigue, malaise and deaths among others (Ahmad, Hafeez, Siddqui, Ahmad, Mishra, 2020). As at 7<sup>th</sup>/09/2020 the global infections from the pandemic is put at 27,217,700 while death toll stood at 890,220. The U.S.A infection rate is 6,297,02 with 189,122 deaths (Source: CNN.GlobalNews.com) For now, the disease is being cured through general treatment and symptomatic treatment, with the combinations of antiviral drugs, oxygen therapy and the boosting of patients' immune system. More, importantly public health preventive measures such as identification of the potential cases, contact tracing, isolation of suspected and confirmed cases of COVID-19, to prevent the potential transmission and infection to other people. These remains the key to slowing and preventing the effects and impacts of COVID-19 world over. While, lockdown, maintaining social-distance and wearing-masks in public places or in congested areas are proving the 'magic' in both slowing of spread and bending the curves in the peaks of COVID-19 infections and damages world over (Fauci, 2020a, 2020b; Gupta, 2020; NCDC, 2020), while curative drugs are in various stages of clinical trials in Britain, U.S.A, china with only Russia claiming antiviral readiness for COVID-19.

Humanity have witness countless episodes of Epidemics and Pandemic (Humerovic,2019). According to International Federation of Red Cross and Red Crescent Societies (2018) a pandemic is an epidemic of infectious disease that spreads through human populations across a large region, multiple continents or globally. pandemic emanate from diseases that infect humans and can spread easily. Pandemics become disasters when they cause large numbers of deaths, as well as illness, and/or have severe social and economic impacts. It is observed that, concerns exist about potential pandemic diseases including new strains of influenza, such as severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS) to which humans may not have immunity. In the past, pandemics have included cholera, smallpox, leprosy, measles, polio and yellow fever (International Federation of Red Cross and Red Crescent Societies,2018). COVID-19 continues to taunt and be problematic to global medicine and public health concern for four novelties it brought. The impacts of its both symptomatic and asymptomatic spread, the nature existence or not of group herd immunity, the nature, extend and impacts of child infection and spread and post-infection and cure experiences in victims (Fauci, 2020, Gupta,2010).

COVID-19 as pandemic is novel in many ways and different from other recently experienced pandemics. Aside the severity of the infections and deaths the gravity through which the COVID brought health systems and economy globally to standstill and nose-diving towards recession is marveling. The political and health concerns and finger-pointing exacerbated already existing trade wars between the U.S.A. and China and the antecedent consequence of such on the global economy is still telling. The U.S.A and China could not agree on the origin of the various with U.S.A media and government tracing the pandemic to Wuhan in China (Huet,2020, Gan,2020, BBCNews, 2<sup>nd</sup> May, 2020) while, the Chinese blamed the spread on the

U.S.A. military entourage that participated in the world military fare, leaving abruptly before the outbreak (Winter, 2020; Cohen, 2020; Dresta,2020; Aljazeera:WorldNews, May,2020 ). However, the reality is that Covid 19 first global confirmed cases were reported from China (WHO, 2020). In Nigeria the first reported case was on 27<sup>th</sup> February 2020. The confirmed case shoed mild symptoms and was managed at the designated treatment facility for COVID-19 at the Infectious Disease Hospital (IDH), in Yaba, Lagos (NCDC,2020a). Relatedly, 148 passengers on the same aircraft with the index case, were traced and tested with Lagos Laboratory testing capacity been expanded to five with the addition of Nigeria Institute of Medical Research (NIMR) (NCDC,2020a).

Additionally, the NCDC developed following resources on COVID-19 as measure to slow spread: Infection Prevention and Control Recommendations for Health Workers, Recommendations on use of Personal Protective Equipment for Health workers, Public health advisory to Nigerians, Case-definition to guide diagnosis in Nigeria, Answers to Frequently Asked Questions (Source: NCDC, 2020a). Expectedly, by the 19<sup>th</sup> of March 2020, four new confirmed cases of COVID-19 were recorded in Nigeria, with the cumulatively, cases becoming twelve (12). The four new cases are from Lagos. One had a travel history to the UK; one to France, 3<sup>rd</sup> case is a contact to one of the previously confirmed cases; 4<sup>th</sup> case had no history of travel (NCDC, 2020b). To date (10/09/2020, 55,829 cases of COVID-19 have been confirmed, 43,810 cases have been discharged and 1075 deaths have been recorded in 36 states and the Federal Capital Territory (NCDC.gov.ng). On the 10/09/2020, 197 new cases are reported from 13 states- Plateau (83), Lagos (48), Kaduna (17), FCT (16), Ogun (11), Katsina (7), Imo (4), Edo (3), Nasarawa (3), Rivers (2), Bayelsa (1), Oyo (1), Osun (1). The following tables are the geopolitical zone distributions of the state of COVID-19 pandemic in Nigeria.

**Table 1: North-West**

States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths
Kaduna	2,231	68	2,131	32
Kano	1,728	48	1,626	54
Katsina	826	345	457	24
Jigawa	322	3	308	11
Sokoto	159	0	142	17
Kebbi	93	1	84	8
Zamfara	8	0	73	5
<b>Total</b>	<b>5367</b>	<b>465</b>	<b>4821</b>	<b>151</b>

**Source: NCDC, 2020**

According to the NPC (2006) census figures for Nigeria the North-West Nigeria host 35.91 million people an estimated 25.5% of Nigeria. The table above shows that Kano state recorded highest numbers of deaths at 54 deaths despite having 1,728 confirmed cases. Kaduna state followed with 2,231 confirmed cases and 32 deaths. Katsina state recorded 826 confirmed cases and 24 deaths. Kaduna state was quick at enforcing the coronavirus protocols lockdowns of schools, businesses, public places, and worships centers, including establishment of mobile court to

enforce compliance. However, Kaduna state proximity to the FCT and as the social political and administrative center and nerve of the northern region prone it to VIPs spread of the pandemic. COVID. Kano state heed to COVID-19 scare lately. Observably, it made flexible its COVID-19 control protocols. This unfortunate action backed by perception and belief of the state stakeholder that the state is both the commercial and political center of northern Nigeria. Kano experienced spikes and peak of deaths from May. According to the *Reuters* (Tuesday, 9<sup>th</sup> June, 2020) quoting the

Nigerian Minister of Health, 60% of the recorded deaths in Kano state results from Covid infection and complications. In Katsina State, Daura and other LGAs deaths rate peaked amidst insecurity associated with banditry. Another northwestern state to experienced death is Jigawa State which bordered Katsina along Kazaure/Daura axis among other borders.

The North-West Nigeria despite its huge population suffered high rate of poverty and inequality in the geopolitical space in Nigeria. Low level of literacy (western

education), income levels, access to safe water, access to toilets and family sizes remains deficient in most counts (Aigbkoka,2008; Eze, Okpala and Ogbodo, 2014, Archibong, 2018). In controlling phenomena such as COVID-19 in Nigeria, the challenges of youths unemployment occasioned by industrial closure, begging, climate change, conflict, fragility and violence (International Crisis Group ,2010, radda,2010, Danaan,2018) as being experienced in North-West Nigeria id sure to affects any response and outcomes.

**Table 2:North -East**

States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths
Adamawa	230	35	180	15
Bauchi	671	11	646	14
Gombe	746	80	643	23
Borno	741	2	703	36
Yobe	67	0	59	8
Taraba	91	12	73	6
<b>Total</b>	<b>2,456</b>	<b>140</b>	<b>2,304</b>	<b>102</b>

Source: NCDC, 2020

Table shows the trends in COVID-19 from the North-East Nigeria. Borno top the deaths rate (36) followed by Gombe (23), Adawama (15) and Bauchi (14). Infections where more sever in Bauchi, Gombe and Borno states. The zone with a population of 18.98 million people about 13.5 percent of Nigeria population. Critical to the out of Nigeria's management of COVID-19 must be finding the lasting peace in the North-East Nigeria. This is for the double of challenges the North-East continue to pose for to governance. One is the rising the battle with Boko-Haram and the continue displacement of people and destruction of

life and properties it wrought. The devastation from the insurgency affects schools, Primary Health Cares, and general livelihood etc. The severity is excruciating on the people (UNDP,2017 Brechenmacher,2019). Before, 2009 the northeast Nigeria have experienced extreme forms of poverty, inequality and general infrastructural deficit. Poor politics and policies heighten youth unemployment, worsen by extreme environmental conditions such as drought and desertification, all combined to create Bokoharam and its consequences (Danjobo,2007, Bamidele,2018, Kamta, Azadi and Scheffran,2020).

**Table 3:North-Central**

States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths
Plateau	3,037	1,100	1,906	31
Benue	460	50	401	9
Nasarawa	446	136	298	12
Niger	244	16	216	12
Kogi	5	0	3	2
Kwara	989	170	794	25
<b>Total</b>	<b>4283</b>	<b>341</b>	<b>3691</b>	<b>97</b>

Source: NCDC, 2020

Table 3 display the trend in Covid19 infection in the North-Central Nigeria. The North-Central contains 20.37 million Nigeria that is 14.5 % of Nigeria population. The region is generally described as the food basket of the nations, even as poverty and inequality remain widespread in the zone. This zone intermittently suffers ethnic and religion crisis with serious consequences on intergroup and inter-religion relations in Plateau, part of Nasarawa and Benue states and axis. Displacement is a major consequence of crisis in Nigeria (Liman,2016). From Greece, to France and Libya, Syria enforcing Covid 19 protocols on displaced communities or conflict zones is daunting (UN,2020; ICRC,

2020, Novone, 2020, Council on Foreign Relations, 2020). Nasarawa and Niger states are seriously battling kidnapping and killings that affects farming. Insecurity and their repercussion such as forcedly abductions and detention are sure to affects the efficacy of the Covid 19 control and management protocols. The region Plateau State has the highest number of confirmed cases at 3037 and 31 deaths, as Kwara State follow with 989 confirmed cases and 25 deaths. Benue State follows with 460 confirmed cases and only 9, while Nasarawa State has 446 cases and 12 deaths as Niger state 244 confirmed cases and 12 deaths.

**Table 4: South-South**

States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths
-----------------	------------------------------	-----------------------------	----------------	---------------

Akwa Ibom	283	28	247	8
Rivers	2,197	49	2,089	59
Delta	1,780	116	1,616	48
Bayelsa	392	6	365	21
Edo	2,606	86	2,420	100
Cross River	83	2	73	8
<b>Total</b>	<b>7341</b>	<b>287</b>	<b>6810</b>	<b>244</b>

Source: NCDC, 2020

Table 4 demonstrate the trends of COVID-19 in the South-South Nigeria. The South-South zone has a population of 21.04 people which is about 14.99 percent of the total populations of Nigeria. Importantly, the zone environments host the largest of the nation's crude and gas reserves that made almost 90% of the nation's foreign earnings even as poverty and inequality sour high in the region. The zone is the most underdeveloped in terms of infrastructures and human development in Nigeria, giving rise to intermittent agitations often turning violent. From 2010-date the zone has enjoyed various forms of amnesty

programmes and a Ministry for Niger-Delta to look into and address development challenges in the Zone. However, corruption have marred the existence and efficacy of policies and programmes such as displayed on the on-going national assembly probe of the expenditure of the Niger Delta Development Commission (NDDC). The trends of COVID-19 in South-South Nigeria show Edo State having 2606 confirmed cases and 100 deaths. River State follows with 2197 confirmed cases and 59 deaths. As Delta State follows with 1780 confirmed cases and 48 deaths. Bayelsa State has 392 confirmed cases and 21 deaths.

**Table 5: South East**

States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths
Abia	816	96	712	8
Anambra	226	25	182	19
Enugu	1,198	89	1,088	21
Ebonyi	1,034	18	986	30
Imo	541	318	211	12
<b>Total</b>	<b>3815</b>	<b>546</b>	<b>3179</b>	<b>90</b>

Source: NCDC, 2020

Table 5 shows the trends in COVID-19 in the South-East Nigeria. The South-East Nigeria the home for the Igbos contains a population of 16.39 million people which is about 11.68 percent of Nigeria. While many of the zones' people are found conspicuously spread in other zones and the world over on accounts of enterprising, industrious, competitiveness and individualistic tendencies. A visit to the South-East zone in Nigeria will depicts existence of affluence and poverty displayed in widespread luxurious homes built by 'absentee' owners, mostly living abroad or in

other zones of Nigeria. This is as the old and other less privilege lived in adjacent dejected properties (Umezina,2016). This zone has a lot of movement of people (merchants, entrepreneurs, expatriates etc.) locally and internationally. Enugu state top infection rate with 1198 confirmed cases with 21 deaths, while Ebonyi followed with 1034 confirmed cases and 30 deaths. Anambra has 226 confirmed cases and 19 deaths as Imo has 541 cases and 12 deaths.

**Table 6: South-West**

States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths
Lagos	18,504	3,059	15,241	204
Oyo	3,210	1,130	2,041	39
Ogun	1,726	42	1,657	27
Ondo	1,575	53	1,488	34
Osun	804	30	757	17
Ekiti	299	40	254	5
<b>Total</b>	<b>26118</b>	<b>4354</b>	<b>19950</b>	<b>326</b>

Source: NCDC, 2020

Table 6 shows the trends in COVID-19 spread in the South-West Nigeria. The South-West Nigeria has the population of 27.72 people, this translate to about 19.74 percent of the total population of Nigeria. The South-West Nigeria has an estimated GDP of about N67 trillion naira (about \$302 billion US dollar) which is more than half of the GDP of the nations (Businessday.ng 12<sup>th</sup>/09/2020). Agriculture (forestry), economy (industries, manufacturing,

export and import), commerce (trade) drive the economy of this zone. Nevertheless, wealth and affluence clearly coexisted with poverty and penury, where income inequality is exacerbated by urbanization and social problems often overwhelming state social services provision (Eze, Okpala and Ogbodo, 2014). Additionally, the problems of the zone are compounded by several forms of Nigerians migration to the zone for employment and other social-economic needs.

Lagos State was struck early COVID-19 largely through Nigerians government officials' carelessness in not subjecting themselves to COVID-19 travel protocol for airport screening on arrival. Nigeria immigration officials complained bitterly on flagrant violation of Covid protocols on international arrival by Nigeria officials. Additionally, expatriates, Nigerians international businessmen and women, and Nigerians studying abroad arrived enmasse from Europe and America fleeing Covid.

In Nigeria as COVID-19 pandemic stands, Lagos State has the national highest of COVID-19 confirmed cases 18,504 and highest number of deaths 204. The state

government has put-up serious measures and efforts at controlling and curtailing spread. Starting from 27<sup>th</sup> March, 2020 Lagos State government issued the Infectious Diseases (Emergency Prevention) Regulations 2020. With full lockdown, contact tracing, isolations and treatment enforced by mobile courts for enforcement, six months after Lagos state is easing restriction warranting reopening of schools and places of worships from 7<sup>th</sup> august,2020 (Source:Nairametric.3/08/2020). In the zone Oyo followed Lagos moderately with 3210 confirmed cases and 39daeths, as Ondo follow with 1575 confirmed cases and 34 deaths. Ogun is next with 1726 confirmed cases and 27 deaths.

**Table 7:**

States Affected	No. of Cases (Lab Confirmed)	No. of Cases (on admission)	No. Discharged	No. of Deaths
FCT	5,391	3,680	1,640	71
<b>Total</b>	<b>5,391</b>	<b>3,680</b>	<b>1,640</b>	<b>71</b>

Source: NCDC, 2020

The FCT is the administrative capital of Nigeria. The FCT has been the seat of Nigeria/ government from 1991 it has a total population of 1,406,239 people. The is divided between the municipal which host government establishments and state official residence (in areas designated as green-zones) with the suburbs such as Karu, Gwagwalada etc. hosting low-income informal sectors workers and middle cadre state employees. From 1999 to date due to the heighten political activities in the return to democracy in Nigeria mad FCT gained notoriety for high cost of living among the population. From housing/rent, to schooling and health care access, financial out-of-pocket is the key determinant. The first index of the virus COVID-19 in Nigeria in the FCT is a top government official on a return from official duty abroad en-route Lagos. As at count the FCT confirmed case are 5,391 with 71 deaths. Government's COVID-19 response include keeping people informed of recent developments in the federation about COVID-19 spread and the economic consequences and responses. Providing updates on key announcements, polices or regulations that impact you people and business and dolling out palliatives. From the 30<sup>th</sup> March 2020 the Federal Government of Nigeria COVID-19 Regulations, have taken effects enforcing social-distancing, ordered schools, organizations and businesses closure in FCT, Lagos and Ogun States for an initial period of 2 weeks. By APRIL 2020 Virtual -Meetings for governments and corporations have taken effects as COVID-19 pandemic spread control mechanism and protocol.

Pandemics are characterized by wide geographic extension, disease movement also refer to as spread via transmissions, high attack rates and explosiveness, minimal population immunity, infectiousness, novelty and Severity (Morens, Folkers and Fauci,2009). The history and impact of COVID-19 is still being recounted world over. The U.S.A is still recording average 40,000 infections and 1000 deaths per day. The infections rates in India is 90,000 cases, in Brazil 70,000 and Mexico 67,000 (Source:CNNWorldnews.com.10<sup>th</sup>/09/2020). The implication is that the pandemic continues to open a chapter

in the life of nations, taunting how nations and people prepare to deal with its unpredictable nature. According to WHO's David Navarro (2020) "we must learn to live and cope with it." Epidemics and pandemics can be prevented and mitigated through a range of household and community measures, such as: good hygiene and sanitation access to clean water, handwashing use of antiviral medications, social distancing, good clinical practice, proactive surveillance and early warning systems to control vectors, access to safe food and vaccination etc. (International Federation of Red Cross and Red Crescent Societies,2018).

All of the above is dependent on good governance which boils down to quality leadership, adequate national economic planning, fight against corruption. The reverse of this indices of good governance continue to dwarf state investments in economic, education, health infrastructure and public health mechanism. This is compounded by severe poverty and inequality among the population, a combination worsens by low level of literacy, that gave room for manipulation of the poor and the downtrodden by both political and religion elites, questioning the wisdom of science of pandemic however disastrous or catastrophic. Unemployment is rising, the agriculture is in sorry state based on practices not sustainable rising food insecurity worsen by banditry. As hunger and poverty struck amidst plentitude in the land. As COVID-19 continues it move in nation, the government in Nigeria is seen as not straight forwards its palliative measures to cushions the effects of national lockdown. Whence, the masses are lefts to their 'wisdom' and 'will' to find ways around both the pandemic (Covid-19) and the effects of stay-at-home and lockdowns imposed by governments.

Few doubts that major epidemics and pandemics will strike again and few would argue that the world is adequately prepared. Since the 2013–2016 Ebola virus disease outbreak in western Africa, the United States National Academy of Medicine and several other groups have pointed to gaps, and the need for greater investment, in preparation against epidemics and pandemics, viruses and

other infectious diseases (Fans, Jamison and Summers, 2018). Relatedly, Humerovic (2019) noted more cautiously with regards to COVID-19 that: As a consequence, we cannot say how long the pandemic will last, whether it could linger and return as long as herd immunity has not been reached, or whether a reliable vaccine can be made widely available. If we assume that COVID-19 is flu-like in terms of the immune response it provokes, we may know later this year whether there will be light at the end of the tunnel sometime in 2021, which would eventually lead to normalized policies and point to specific geopolitical outcomes. If it is not like the flu, we may have a bigger problem. Although coronaviruses are different the AIDS-causing human immunodeficiency virus (HIV), it is sobering to remember that a vaccine that some forecasted would materialize within two years of the disease's discovery is not yet within reach, and that it took some six years to develop azidothymidine (AZT) as the first effective from treatment for AIDS in 1987.6 The pandemic's ultimate duration and future severity thus remain unknown. This makes for massive uncertainty in forecasting its societal, economic and political consequences.

As COVID-19 rage on, the technique of testing, drug manufacturing and access to care in Nigeria remains in people imagination. As Humeric pointed out 2-6 years is required for effective availability and access to virus medications. In the main time what becomes of people infected with Covid-19 in such countries like Nigeria? The difference between a pandemic from an epidemic is that an epidemic refers to an increase, often sudden, in the number of cases of an infectious disease above what is normally expected in a given population in a specific area. Examples of major epidemics include cholera and diarrhea diseases, measles, malaria, and dengue fever. Nigeria and Nigerians still battle malaria and its consequences.

#### **IV. NIGERIA, DEVELOPMENT AND THE EXPERIENCES OF COVID-19**

Nigeria is a rich country in all ramifications even as it continues to battle national development. John Vaizey (1962) a noted economist defined National development, as the total effect of all citizen forces and addition to the stock of physical, human resources, knowledge and skill that drives nations growth and development. In Nigeria, economic growth and development have been one-sided driven with crude oil export as its engine and the antecedent rent-seeking behavior built in the elite occasioned by grafts and corruption. This is often supported by policies fashioned in neoliberal terms limiting state investments in education, health and general wellbeing. World over Covid 19 have demonstrated the weakness in the economy and political arrangements deaths rates surge high due to political, economic and social inequalities that conditioned access to health-care and public health. Vaizey (1962) view summed what national development is, indicators of national development clearly contrast the background in national development in Nigeria. National Development encapsulates such parameters as: Development through a planned national economy (ii) Increase in agricultural production

through application of modern technical know-how (iii) harnessing industrial production, (iv) Development of human resource (v) Application of science and technology in production sector, (vi) provision of mass education and (vi) Provision of various facilities to meet the needs and aspirations of disadvantaged, deprived and poorest of the poor segments of population (Bawa, 2010)

From independence in the 1960s Nigeria, has planned its economy up to 1980 (Sanusi,2010). The trust of the World Bank and IMF global liberalization policies changes the course of public policy and governance to conceding welfare such as education, health and unemployment in favour of private sector drive privatization that saw quality healthcare access continuously build around depth-people-of-pockets and foreign medical tourism. From 1999 Nigeria partly returned to planned economy in New Poverty Reduction Strategy (NPRS) partly sponsored by the IMF and WorldBank, with little improvements investment in health and public health (Hafiz,2018).

The history of Nigeria shows that from the colonial period, the distribution of medical care delivery favoured urban areas at the expense of the rural areas (Ademiluyi and Aluko-Arowolo, 2009). Also, in terms of infrastructural distribution of healthcare, the rural areas (that is, the rural majority) in Nigeria are being neglected to satisfy the urban areas (a minority), where the educated, the rich and government functionaries reside. Despite these discrepancies between the rural and urban tendencies for infrastructural provisions, acute healthcare needs (by the political and economic elite in the nations) has raised the level of medical tourism in Nigeria and the net effects which it put the economy, suggesting that the urban healthcare facilities may not be adequately equipped and manned (Osain,2011; Oyekele, 2017; Aliyu and Amadu,2017).

Covid-19 experiences show globally the need for consistencies in national development through development and increasing use of science and technology to discover cures and prevents epidemic and pandemic. Attention is called on increase equality in the provisions of health and healthcare infrastructures. Strengthening national healthcare and healthcare personals through training and sponsoring of research (WHO,2020 and Synder and Iton,2020). The ability to manufacture PPES, ventilators etc. Globally, all these relates to nature and quality of investments in education, human development and industrialization. The existing global income and unemployment rate has been critiqued as the greatest bane of developing world and people in their drive towards self-sufficiency and in observing measures and protocols to curtail phenomena such as Covid-19 (Jain et al.,2020 and Durizzo, et al.2021). Increase in agricultural production through application of modern technical know-how needed to be financed to aid food production to prevent hunger and ensure food security.

Perhaps what epidemic and pandemics such as Covid-19 has come to teach Nigerians and Nigeria's leaders and politicians what national development is all about, as succinctly captured by the United Nations Decade Report,



“growth plus change.” Change in turn is social and cultural, it is political and definitely an economic phenomenon both quantitative as well as qualitative. The pandemic has reinforced the power of the state in its most traditional role as protector of society from outside threats (Heisbourg,2020). There is a new world health crisis threatening the public with spread of COVID-19. Since December of 2019, when Covid-19 emerged in Hunan Seafood market at Wuhan, South China and rapidly spread throughout the world, the virus outbreaks a public health emergency of International (Ahmad, Hafeez, Siddqui, Ahmad, Mishra, 2020). Of what is not known about COVID-19 and the future course of the pandemic is as extraordinary as the event itself and WHO have cautioned: “the world has a long way to go with the virus. As the virus is sure to be with us for a long time.” On another note WHO (2020) cautioned “the world cannot go back to the way things were. There must be a “new normal” – a world that is healthier, safer and better prepared”

## V. CONCLUSION

Whatever the origin of COVID-19, the point is ‘nature’ has tested the world in COVID-19 as both warning on our lapses in the use of the environment land, air and water and all resources existing in them. COVID-19 test humanities resolve in sciences, technology and politics and economics especially relating to health and healthcare. Every serious-minded nations and people are overwhelmed in the race to win both prevention and care for COVID-19 victims through development of vaccination and other care needs. For now, curtailing normal human activities is the key in the drive to control and curtail COVID-19. In-person meetings have been limited or cancelled, travel of all sorts drastically cut back, quarantines and home confinement mandated, and non-essential economic activity closed down. These measures have become part of the features of the ‘new’ global ‘normal’ (WHO,2020, NCDC.2020). Sustaining these measures remain costly to people in developing countries like Nigeria. Entrepreneurship has become an essential element of the economic progress towards ending COVID-19. There are business opportunities in PPES, ventilators, mask and hand sanitizers production and sells. Innovation for example, in various version of infrared thermometers both hand versions and door versions are increasing becoming the normalcy towards safeguarding people lives in organizations and institutions.

Covid-19 did create new jobs and opportunities through competence, job creation- and by generally improving the wellbeing of society. The gainers and losers are still being counted. Nigeria and other developing nations will continue to battle COVID-19 and its impact with both advisory supports from the agencies like WHO and material support from China and other countries. In the end who benefits from the aid relations, between Nigeria and any benefactor? Aid dependents generally relates to dependency and the continue under development in many forms. With huge population projected to be around 250 million by 2025, rising poverty and inequality, dearth of both healthcare and

social amenities, ill-preparedness towards another pandemic signal catastrophe waiting to occur.

## RECOMMENDATIONS

From the foregoing discuss the following recommendations observably will go a long way in properly strengthening Nigeria’s readiness towards fighting COVID-19:

- 1) The tertiary institutions and affiliating research institutions associate with them remain on strike for the past ten months. Globally the key to addressing COVID-19 have been the outputs from universities and research centres. Nigeria government must use this window to get university dons back to university laboratories in the search for relative cures and way out of the pandemic in Nigeria.
- 2) Managing and controlling COVID-19 have shown the increasing role of government and government interventions world over through subsidies on research and innovations to curb covid. Nigeria government must take led in supporting the Ministry of Science And Technology towards garnering seasoned and experienced academics, scientists and technologists towards creating concrete innovations to prevent and fight COVID-19.
- 3) The dearth of healthcare infrastructure in Nigeria was not really tested by COVID-19 as experienced in Europe and the Americas. Government must prepare towards another pandemic with serious investments in healthcare and public health measures.
- 4) Addressing poverty and inequality in all forms is key to controlling pandemic such as COVID-19 and its impact. Poverty policies must be strengthened and followed sincerely to cut substantial Nigeria’s out of poverty, suffering and improve people health.
- 5) The impact of corruption shown in the fight against COVID-19 in Nigeria make mockery of the efforts. Huge figures are ‘doled’ out as cash or material palliatives which didn’t reach the needy. Amidst pandemic like COVID-19 such actions are counterproductive to controlling and curbing spreads as trust in government is waned and people resigned to their wimps- and- caprices to wade out of the effects of the crisis.
- 6) The private sector investment in sciences and technology relating to health and public health is limited. With the outbreak of COVID-19 in Nigeria, many private sectors do contribute to controlling the pandemic in various forms as corporate social responsibility. This effect must be sustained with private sectors sustained investments in science and technology for pandemic control and overall development in Nigeria.

## REFERENCES

- [1]. Ademiluyi, I.A. and Aluko-Arowolo, S.O. (2009). Infrastructural Distribution of Healthcare Services in Nigeria: An overview. *Journal of Geography and Regional Planning*, 2(5), 104-126
- [2]. Aliyu, A.A. And Admau, L. (2017). Urban, Cities and Health: The Challenges To Nigeria: A Review. *Healthreview*. Vol.6:4.
- [3]. Archibong, B. (2018). Historical Origins of Persistent Inequality in Nigeria. *Oxford Development Studies*.
- [4]. Bawa, B.C. (2010). National Development: Meaning and Problem. Retrieved from. <http://defining national development.net>.
- [5]. Brechenmacher, S. (2019). Stabilizing the Northeast Nigeria After Boko-Haram. *Carnegie Endowment for International Peace*. U.S.A.
- [6]. BBCNEWS (2020). Coronavirus: Trump Stand by The China Lab Origin Theory of The Virus. May,2020.
- [7]. Cimmio, J.; Kroenig, M. And Pavel, B. (2020). Where Are Geopolitics Headed in The Covid-19 Era. *Atlantic Council Strategic Paper*.
- [8]. Cohen, J. (2020). "Trump Own Us Apology" Chinese Scientist at The Center of COVID-19 Origin Theory Speak Out. *Science*. July 24<sup>th</sup>,2020.
- [9]. Cohen, J. (2020). "The House Was on Fire" Top Chinese Virologist. On How China and US Have Met The Pandemic. *Science*. May,2020.
- [10]. Council on Foreign Relation (2020). Peace, Conflict and Covid-19. *Center for Preventive Action*.
- [11]. Cuervo, A.; Ribeiro, D and Roig, (2007). *Entrepreneurship: Concepts, Theory and Perspective*. Introduction. Source:researchgate.net.
- [12]. Danjibo, N.D. (2007). *Islamic Fundamentalism and Sectarian Violence: The "Maitasine" And: Bokoharam"* Crises in Northern Nigeria. *Peace and Conflict Studies Programme, Institute of African Studies, University of Ibadan*.
- [13]. Danaan, V.V. (2018). Analysing Poverty in Nigeria through Theoretical Lenses. *Journal of Sustainable Development; Vol. 11, No. 1*.
- [14]. Diresta, R. (2020). For China. The "US Virus" Is a Geopolitics Ploy. *The Atlantic*. 11<sup>th</sup> April,2020.
- [15]. Durizzo, K.,Asiedu, E. Van Der Merwe, A. Van Niekerk, A. And Gunther, I. (2021). Managing The Coiv-19 Pandemic In Poorer Urban Neighborhood: The Case Of Accra And Johannesburg. *World Development*. Vol.137.
- [16]. Eze, T.C.; Okpala, C. S.; Ogbodo, J. C. (2014). Patterns of Inequality in Human Development Across Nigeria's Six Geopolitical Zones. *Developing Country Studies*. Vol.4, No.8.
- [17]. Fan, V. Y.Jamison, D.T. and Summers , L. H. (2018). Pandemic Risk: How Large Are the Expected Losses? *Bull World Health Organ*. 96:129–134.
- [18]. Gan, N. (2020). The Wuhan Lab at The Centers Of US-China Blame Game: What We Know and What We Don't Know. *CNN/POSTCARD* May, 2020.
- [19]. Hafiz, R. (2018). Nigeria's Health Financing System Assessment. *World bank group (Discussion Paper)*.
- [20]. Heisbourg, F. (2020) From Wuhan to the World: How the Pandemic Will Reshape Geopolitics, *Survival*, 62:3, 7-24.
- [21]. Huet, D. (2020). Coronavirus: As US and China Fight Over Origin of COVID-19. *RU call for independent probe*. *EuropeNewsonline*. March 2020.
- [22]. Huremović, d. (2019). Brief History of Pandemics (Pandemics Throughout History). Chapter in D. Huremović (ed.), *Psychiatry of Pandemics*. Springer Nature Switzerland AG 7.
- [23]. Iboiy, E.; Sharomiz,O.O.; Ngonghalayy, C. And Gumel, A.B. (2020) Mathematical Modeling and Analysis of COVID-19 pandemic in Nigeria. *Medical Review*. Xiv. doi: <https://doi.org/10.1101/05.22.20110387>.
- [24]. International Crisis Group (2010) Northern Nigeria: Background to Conflict.
- [25]. Nabarro, D. (2020). We Must Learn to Live With COVID-19. *BBCHardTalk, Monitored 21<sup>st</sup> April,2020*.
- [26]. Nairametrics (2020). Lagos State List Conditions That Must Be Met By Churches And Mosque Before Reopening.
- [27]. Navone, A. (2020). The Damages of Coronavirus in Conflict Zone. *United States Institute of Peace*.
- [28]. Oyekale, A.S. (2017). Assessment of Healthcare Facilities Services Readiness in Nigeria. *BMC Health Service Research* 172.
- [29]. Radda, S.I (2010) "A Theoretical Discourse on Social Problems" in *Issues in Nigeria's Social Problems*, By Radda, S.I, M.Lawan and M.Mukhtar, 2010, p 1 – 21.
- [30]. Robinson, W. I. (2010). *Global Capitalism Theory and The Emergence of Transnational Elites*. *UNU-WIDER*. Working Paper No. 2010/02
- [31]. Romaniuk, S. N. (2017). "Dependency Theory". Chapter in Paul Joseph ed. *The SAGE Encyclopedia of War: Social Science Perspectives*. Thousand Oaks: SAGE Publications, Inc.
- [32]. Sklair, L. (2017). The Transnational Capitalist Class – Theory and Empirical Research. <https://www.researchgate.net/publication/39731179>.
- [33]. Synder, M. H. and Hon, A.B. (2020). *Advocacy for Public Health Policy Change: An Urgent Imperative*. APHA Press.
- [34]. Murphy, P.J. And Marvel, M. R. ( )The Opportunity Y-Based Approach To Entrepreneurial Discover Y Research. : <https://Www.Researchgate.Net/Publication/39731179>.
- [35]. ICRC (2020). Coivd-19 in conflict zones-visualizing the risk. *ICRC Publication*. Article 12. 5<sup>th</sup> may,2020.
- [36]. International Federation of Red Cross and Red Crescent Societies (2008). *Major Epidemic and Pandemic Diseases*.
- [37]. Jain, R. Budlender,J, Zizzamia,R., Bassier, I (2020). The Labour Market and Poverty Impact of Covid19 In South Africa. *CSAE Working Paper (WPS/2020-14)*.
- [38]. Lins, F.A. and Doktor, R. (2014). A Theory of Entrepreneurial Opportunity Discovery, Knowledge Creation, and Decision-Making. *Business and Management Research* Vol. 3, No. 1.

- [39]. Morens, D.M.; Breman, J.G.; Calisher, C.H.; Doherty, P.C.; Hahn, B.H.; Keusch, G.T.; Kramer, L.D.; LeDuc, J.W.; Monath, W.P. and Taubenberger, J.K. (2020). The Origin of COVID-19 and Why It Matters. *The American Society of Tropical Medicine and Hygiene* 103(3). pp. 955–959.
- [40]. Morens, D.M.; Folkers, G.K. and Fauci, A.S. (2009). What Is a Pandemic? *The Journal of Infectious Diseases*. 200:1018–21. Morens, D.M.; Breman, J.G.; Calisher, C.H.; Doherty, P.C.; Hahn, B.H.; Keusch, G.T.; Kramer, L.D.; LeDuc, J.W.; Monath, W.P. and Taubenberger, J.K. (2020). The Origin of COVID-19 and Why It Matters. *The American Society of Tropical Medicine and Hygiene* 103(3). pp. 955–959.
- [41]. NCDC (2020a). Covid-19 Outbreak in Nigeria. Situation Report. S/N: 003 Date: 2nd March, 2020.
- [42]. NCDC (2020b). Covid-19 Outbreak in Nigeria. Situation Report S/N: 020. 19th March 2020.
- [43]. Umezina, C. (2016). Health and Economic Growth in South East, Nigeria. *An International Multi-disciplinary Journal*. Vol. 10(3), Serial No.42. 111-123.
- [44]. UNDP (2017). Business Case Assessment for Accelerating Development Investment in Famine Response and Prevention: Case Study Northeast Nigeria. A report prepared for UNDP Source/<http://developmentcrisisinNigeria.net>.
- [45]. Vaizey, J. (1962). *The Economic of Education*. London: Faber and Faber.
- [46]. WHO (2020) Coronavirus disease 2019 (COVID-19) Situation Report – 94.
- [47]. Winter, L. (2020). Chinese Officials blame U.S. Army for Coronavirus. *The Scientist*. March, 2020.