

IMPACTS OF COVID-19 PANDEMIC ON NDC IMPLEMENTATION ACTION PLAN FOR THE AGRICULTURAL SECTOR IN NIGERIA

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Abstract

Climate Change is one of the biggest challenges of the 21st Century. In 2015, the world reached a milestone in addressing this menace with the adoption of the Paris Agreement on Climate Change. Article 3 of the Agreement requires Parties to the agreement to pledge and implement their Nationally Determined Contributions (NDCs) towards climate change adaptation and mitigation. Nigeria as a signatory to the Paris Agreement deposited its NDC with the Agreement's secretariat in 2017 and have also designed its internal NDC Implementation Action Plan for five Key sectors before the outbreak of the coronavirus (Covid-19) pandemic in 2019. In order to contain the spread of the coronavirus, certain restrictive measures (such as lockdown and closure of business) have been adopted both locally and internationally. This paper uses doctrinal research approach to appraise the impacts of the Covid-19 pandemic and its containment measures on Nigeria's NDC Implementation Action Plan for the Agriculture Sector. The paper finds that the Nigeria's NDC Implementation Action

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Plan for the Agriculture Sector is highly ambitious if properly implemented. There is also no legal framework for the NDC Implementation Action Plan in Nigeria. This paper concludes by suggesting a procedural right-based approach for the Implementation of the Action Plan in Covid-19 and Post Covid-19 era in Nigeria.

Keywords: Climate change; Nationally Determined Contribution; Covid-19; coronavirus, Agriculture; Action Plan; Nigeria.

1.0 Introduction

Climate change is serious global problem. Nigeria is very vulnerable to the ravaging effects of climate change due to her geographic location. Nigeria ratified the United Nations Framework Convention on Climate Change as Non-Annex 1 party on the 29th of August, 1994.¹ Nigeria also ratified the Kyoto Protocol and the Paris Agreement in 2004 and 2017 respectively.² In accordance with article 4(9) and (12) of the Paris Agreement, Nigeria's first Nationally Determined Contribution (NDC) (which shall henceforth be referred to as NNDC) to the NDC Registry on the 16th of May, 2017.³ The NNDC adopted a Reduction from Business as Usual (BAU) approach to achieve its objective of Economic and Social Development;⁴ and targets to achieve the said objective by the year 2030.⁵

¹ Third National Communication (TNC) of the Federal Republic of Nigeria under the United Nations Framework Convention on Climate Change (UNFCCC). Retrieved online May 27, 2020 from https://www4.unfccc.int/sites/submissionsStaging/NationalReports/Documents/187563_Nigeria-NC3-1-TNC%20NIGERIA%2018-04-2020%20-%20FINAL.pdf, p. 1

² Ibid.

³ NDC Registry. Retrieved February 13, 2020 from <https://www4.unfccc.int/sites/NDCStaging/Pages/All.aspx>.

⁴ This objective consists of 5% economic growth per year period, improved standard of living, and electricity access for all.

⁵ The implementation is period spins from the year 2015-2030. See Nigeria's Intended Nationally Determined Contribution, retrieved February 13, 2020 from

The NNDC set out two contributions approaches, to wit: unconditional and conditional contributions. Under the unconditional contribution, Nigeria pledges to reduce emission to 20% below her BAU which will amount to the emission of 700 million tonnes of GHGs by the year 2030.⁶ These mitigation measures includes *inter alia* ending gas flaring, 13 GW off-grid renewable electricity and 20% improvement on energy efficiency.⁷ On the other hand, the conditional contributions connotes a 45% emission reduction contrasted with the BAU,⁸ which will amount to the emission of 400 million tonnes of GHGs by the year 2030.⁹

The NNDC identified five high GHGs emitting sectors in Nigeria and designed mitigation actions for the reduction of emissions that emanate from these sectors. The five sectors are energy (power); oil and gas; agriculture and land use; transportation and industry.¹⁰

In order to properly implement these sector actions, the Nigerian government with the help of international partners came up with NDC Sector Action Plans in February, 2017.¹¹ The NDC Sector Action Plans

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nigeria%20First/Approved%20Nigeria%27s%20INDC_271115.pdf

⁶ Unconditional contribution means what Nigeria can contribute without international supports.

⁷ Ibid, 10. See Ngozi Chinwa Ole and others, 'The Nigerian National Determined Contributions 2021: Legal Implications for Off-Grid Renewable Electricity' (2023) 3 RUNJJIL 1.

⁸ Ibid, 3.

⁹ Conditional contribution means what Nigeria can contribute international supports in the areas of financial assistance, capacity building and transfer of technology.

¹⁰ Ibid, 11. See Ngozi Chinwa Ole and Akinbola Bukola Ruth, 'Addressing The Capacity Deficiency in the Nigerian Off- Grid Renewable Electricity: The Place of the International Climate Change Regime' (2019) 2 RUNLAWJ 35.

¹¹ Ricardo Energy and Environment, 2017 'Developing Sectoral Action Plans for Nigeria's Nationally Determined Contribution (NDC),' report for the Government of Nigeria and United Nations Development Programme (UNDP), Ref: ED62516- Issue Number 4.

recognized that climate change mitigation is pivotal to the achievement of Sustainable Development Goal (SDG) 13 and the other SDGs. Hence, NNDC serves as a bridge between the Paris Agreement and the Agenda 2030 in Nigeria.

This paper shall appraise the sector actions both under the NNDC and the NDC Sector Action Plans towards climate change mitigation in the Nigeria's Agriculture sector. The paper shall also examine whether the Sector Action Plans are right-based. It will further examine the impacts of the Covid-19 pandemic on the implementation of Agriculture sector action plans for climate change mitigation in Nigeria. The paper concludes by making recommendations on the way forward for Nigeria.

2.0 Agriculture and Land Use

Agriculture is a very important sector for national development in Nigeria. The agricultural sector accounts for 25% of Nigeria's Gross Domestic Product (GDP) and 70% of Nigeria's labour force.¹² Nigeria has a growing population that is estimated to be 205,416,152 as at 14th of May, 2020.¹³ This population growth has both positive and negative effect for the agricultural sector in Nigeria. The negative effect is that the demand for food has skyrocketed; while the positive effect is that the high demand for food will give rise to high demand for Nigeria produce both locally and internationally. Nigeria is a major food importer. She the global highest importer rice, substantial importer of horticultural products, diary, and wheat.¹⁴

¹² Agriculture Promotion Policy; Federal Ministry of Agriculture and Rural Development (FMARD)

¹³ Nigeria Population (live). Retrieved online May 14, 2020 from worldometers.info/world-population/Nigeria-population/

¹⁴ Ricardo Energy and Environment, 2016 'NDC implementation action plan for the Agriculture sector,' report for the Government of Nigeria and UNDP, Ref: ED62516- Issue Number 3. 2

In spite of high importance of agriculture to national development, the sector has failed to develop for over the last 34 years which, accounts for lack of food security owing to the rising population.¹⁵ Increase in productivity in the Nigerian agricultural sector require a lot of funding and access to such funds for fertilizer, crop protection, and seeds. It also pertinent to note that increase in agricultural productivity in Nigeria comes with a challenge of balancing GHGs emission from production. Agricultural production contribute to the emission of two major GHGs, to wit: methane and nitro dioxide. Direct emission of methane is comes to the production of ruminant livestock, while nitro dioxide is arise from the management of manure and use of fertilizers.¹⁶ Agriculture sector in Nigeria emit 60.69 MtCO₂e of GHGs will amount to 27.52% of the total emissions of all the sectors combined.¹⁷ The total GHGs emission from Agriculture, Forestry and Other Land Use (AFOLU) stood at 371,022 Gg CO₂-eq in 2016.¹⁸ The BAU scenario under the NNDC suggests that emission from the Agricultural sector will increase to 40% by 2030.¹⁹

Although the agricultural sector contribute a large chunk of GHGs that cause climate change, the sector is not immune from the harsh effects of climate change. The sector is every sensitive to the effects of climate change as such droughts, flooding, water depletions, desertification and

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ See Nigeria's Second National Communication Under the UNFCCC, 2014. Retrieved May 15, 2020 from <http://unfccc.int/resources/docs/natc/nganc2.pdf>. 36

¹⁸ Third National Communication (TNC) of the Federal Republic of Nigeria under the United Nations Framework Convention on Climate Change (UNFCCC). Retrieved online May 27, 2020 from <https://www4.unfccc.int/sites/submissionsStaging/NationalReports/Documents/187563-Nigeria-NC3-1-TNC%20NIGERIA%2018-04-2020%20-%20FINAL.pdf>, p. 1

¹⁹ Nigeria's Intended Nationally Determined Contribution, retrieved February 13, 2020 from https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nigeria%20First/Approved%20Nigeria%27s%20INDC_271115.pdf, 4.

pestilences. The NNDC projects that under a BAU scenario the agriculture sector in Nigeria may decline to 15-25% by 2080.²⁰ The decline may be up to 50% decline in yield for rain fed agriculture in northern Nigeria.²¹ In the absence of mitigation, rice importation is expected to increase by 40% and importation of yam and vegetable will also increase on a long run.²² This turn in events is also expected to cause Nigeria's GDP to decrease.

In order to reduce the emission of GHGs from the agriculture sector, the NNDC proposed a shift from BAU to Climate Smart Agriculture (CSA). According to the NNDC, CSA aims are:

to sustainably increase agricultural productivity and support equitable increases in farm incomes, enhancing food security and development. It is also aimed at adapting and building resilience of agricultural and food security systems to climate change, thus, reducing greenhouse gas emissions from crops, livestock and fisheries. Farmers take agro-ecological measures that increase the resilience of the farming systems, as opposed to such measures that promote high external input farming, industrial meat production and large-scale industrial agriculture, which contribute to climate change.²³

One of such agro-ecological measures promoted by the NNDC is agroforestry, which entails the mixture of trees, animals and crops on the same land, which will result in carbon fixing and production of mulch materials.²⁴ Agroforestry is expected to reduce Nigeria's agricultural GHGs emissions from 158 million tonnes to about 712 million tonnes.²⁵ The

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Ibid, 12-13.

²⁴ Ibid, 13.

²⁵ Ibid.

NNDC also proposed improved feeding and breeding of livestock in order to reduce methane emissions from animals.²⁶

The NNDC further proposed the conservation of natural forests and halting of deforestation. It identified that the use of wood fuel contribute to forest degradation in Nigeria. However, many homes in Nigeria still depends on charcoal as essential source of domestic fuel. The NNDC suggested efficient cookstoves and Liquefied Petroleum Gas (LPG) as alternatives to wood fuel.²⁷

The NNDC agriculture sector mitigation contribution is laudable. However, the NNDC agriculture sector contribution answered the question of what Nigeria should to reduce GHGs emissions from the agriculture sector by proposing CSA and ending the use of wood fuel as mitigating measures. It failed to clearly answer the question of how Nigeria can implement the measures in order to attain the desired outcome.

A. NNDC Implementation Action Plan for Agriculture

The UNDP partnered with the Nigerian government to design NDC Sector Action Plan for Agriculture in February, 2016.²⁸ This section will discuss the NNDC Implementation Action Plan for the Agriculture Sector and ascertain whether human rights was mainstreamed in the implementation plan.

The NNDC Implementation Action Plan for the Agriculture Sector was designed to fit into Nigeria's Agriculture Promotion Policy for 2016-2020 (APP) (2016) which builds on the achievements made by the Agricultural

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ricardo Energy and Environment, 2016 'NDC implementation action plan for the Agriculture sector,' report for the Government of Nigeria and UNDP, Ref: ED62516- Issue Number 3. 2; see also Ricardo Energy and Environment, 2017 'Developing sectoral action plans for Nigeria's Nationally Determined Contribution (NDC),' report for the Government of Nigeria and United Nations Development Programme (UNDP), Ref: ED62516- Issue Number 4.

Transformation Agenda for 2011 – 2016.²⁹ The major objective of APP 2016 is to increase the sector growth from 3% and 6% recorded between the periods of 2011 -2015 to 6% - 12% between the period of 2016-2020.³⁰ The three thematic interventions of the policy are: productivity enhancement, investment, and institutional realignment. These interventions aim to address the challenges facing agriculture and achieve the vision for a prosperous and sustainable agribusiness sector. The NNDC Agriculture sector Implementation Plan is anchored on APP and CSA which is meant to reduce emission and, enhance removal and sequestration.³¹ The priority implementation measures are as follows:

- i. **Improved Soils and Nutrient Management:** This is a short-term measure that involves appropriate management of soils and nutrients. This measure is relevant to both grassland and tillage systems and it will positively impact nitros oxide and methane efficiency.³² Lack of adequate and available extension services may be a huge challenge to this measure. Second, availability and awareness of appropriate fertilizers was also captured by the Plan as a challenge. The Implementation Plan also identified the existing gap of extension services and well documented best practice advice.

We note that funding is also a major challenge to this measure. Nigeria's livestock sector is estimated to have over 19 million head of cattle which is obviously the largest in Africa. The cattle farmers in Nigeria are predominantly nomadic herders. It will be difficult to track them for the purposes of creating such awareness. Secondly, nomadic herding is relatively cheaper, so, a demand for improvement nutrients will definite require funding and expert knowledge which may not be at the disposal of such nomadic herders.

²⁹ Ibid, 3.

³⁰ Ibid.

³¹ Ibid.

³² Ibid, 6.

- ii. **Agro-forestry:** this involves the mixture of trees, animals and crops on the same land. This measure will yield tremendous benefits for agricultural development and methane emission reduction in Nigeria.³³ It will increase crop production, water retention, carbon stocking and provide shade for livestock. The major challenge of this medium-long term measure is that it requires funding and knowledge transfers. Nigeria will rely on foreign support (unconditional contribution) to achieve this measure.
- iii. **Improved management of burning of savannah and crop residue:** bush burning is very common in Nigeria. Bush burning contributes to GHGs emission, air pollution, soil degradation and reduction of soil organic matter.³⁴ This measure is meant to improve the management of burning of savannah and crop residue. This is a short and medium term measure. The measure is faced with the challenges of cultural barriers and lack of legislative backing for such control implementation. There also exist the gap of advice and administrative control.
- iv. **Use of alternative domestic fuel in rural areas:** traditional use of wood fuel and charcoal result into change in land cover and indoor air pollution which is detrimental to human health. This measure seeks gradually reduce the use of wood fuel and charcoals which will in turn lead to maintenance of carbon stock and increase Nigeria's carbon sink. The NNDC suggested efficient cooking stoves and Liquefied Petroleum Gas (LPG) as alternatives to wood fuel.³⁵ This is a medium-long term measure. The challenge with this measure is that the alternatives are limited and also costly. There also exist the gap of availability of these alternatives.

³³ Ibid

³⁴ Ibid

³⁵ Ibid.

- v. **Measures to reduce post-harvest losses in key crops:** many crop produce spoil and waste due to adequate storage and preservative facilities. This measure seeks to design adequate infrastructure and investment for post-harvest storage of crop produces in order to enhance productivity and sustainable food supply.³⁶ This is a short-medium-long term measure.
The challenge with this measure is that it is capital intensive for both farm storage facilities and transportation infrastructures. There exist the gap of finance and advice.
- vi. **Creating fixed grazing systems or dedicated pastures:** Nomadic herding is the most common means of cattle rearing in Nigeria. This measure of creating fixed grazing systems or dedicated pastures will improve animal health, nutrition and control methane emission. This is a short-medium-long term measure. This measure will face the challenge of culture and land tenure system. There also exist the gap of land availability, extension services and advice.
- vii. **Improved genetics in the dairy herd:** There exist low productivity in the current dairy herd in Nigeria. This measure of improved genetics in the dairy herd will significantly reduce GHG emission and also improve livelihood of farmers. This is a medium-long term measure. This measure will face the challenge of finance and technological transfer. There exist the gap of extension services and advice; knowledge transfer; research; and finance.

B. The NNDC implementation action plan for the Agriculture Sector Governance and Institutions

The Federal Ministry of Agriculture and Rural Development (FMARD), the Federal Ministry of Water Resources, and the Federal Ministry of

³⁶ Ibid.

Environment (FMEnv) are the key institutions for Agriculture sector plan implementation in Nigeria. The Federal Ministry of Agriculture and Rural Development (FMARD) vested with the responsibility of delivering this sector plan with support from the Federal Ministry of Water Resources, and the Federal Ministry of Environment (FMEnv).³⁷

The administrative implementation of agricultural plans and policies rests with the Federal Ministry of Agriculture; State Ministries of Agriculture; their departments and local government departments of agriculture. The National Council on Agriculture (NCA) composed of all State Commissioners of Agriculture as members and the Federal Minister of Agriculture and Rural Development as the chairman coordinates the policy actions of these ministries and departments.

The federal Ministries of Water Resources, Environment, Finance, Trade and Industry and other agencies like NESREA, which have agriculture and natural resources management relevant activities; they play active roles in NCA meetings and decisions. The legislative arm of government at both federal and state levels also involved in agricultural development in Nigeria through enactment of agricultural legislations pursuant to their concurrent legislative list;³⁸ budgetary appropriation to agriculture sector;³⁹ and oversight functions of policy process in the agriculture sector.⁴⁰

³⁷ Ricardo Energy and Environment, 2016 'NDC implementation action plan for the Agriculture sector,' report for the Government of Nigeria and UNDP, Ref: ED62516- Issue Number 3. 2; see also Ricardo Energy and Environment, 2017 'Developing sectoral action plans for Nigeria's Nationally Determined Contribution (NDC),' report for the Government of Nigeria and United Nations Development Programme (UNDP), Ref: ED62516- Issue Number 4, p. 4.

³⁸ See section 4(4) of the 1999 Constitution and first column of Part II of the Schedule to the Constitution; and section 4(6)(7)(b) of the 1999 Constitution.

³⁹ See section 59 of the 1999 Constitution.

⁴⁰ See section 88 of the 1999 Constitution.

Agriculture extension and advisory services are pivotal for the development of CSA in Nigeria. The three tiers of government in Nigeria (that is, federal, state and local governments) jointly share the responsibility for extension system and researches through Research Institutes funded by various tiers of governments. The NNDC implementation action plan for the Agriculture sector shows that the linkage between research-extension services is weak, and the extension services do not have a wide coverage.⁴¹ The Private sector and NGOs are also significant actors in food supply chain and they also bring in much needed finance.⁴²

C. The NNDC implementation action plan for the Agriculture Sector Finance

The NNDC implementation action plan for the Agriculture Sector identified the contributions and the vulnerability of the agriculture sector to climate change and its effects.⁴³ Finance is greatly needed to achieve the NNDC Agriculture Sector Implementation Plan of shifting to Climate Smart Agriculture (CSA). Most farmers in Nigeria are subsistent farmers, and they are also fragmented, hence they lack the sufficient clout to effectively attract the needed finance. These farmers also lack storage facilities hence, they sell their produce before harvest at prices ten times

⁴¹ Ricardo Energy and Environment, 2016 'NDC implementation action plan for the Agriculture sector,' report for the Government of Nigeria and UNDP, Ref: ED62516- Issue Number 3. 2; see also Ricardo Energy and Environment, 2017 'Developing sectoral action plans for Nigeria's Nationally Determined Contribution (NDC),' report for the Government of Nigeria and United Nations Development Programme (UNDP), Ref: ED62516- Issue Number 4, p. 4.

⁴² Ibid

⁴³ Ricardo Energy and Environment, 2016 'NDC implementation action plan for the Agriculture sector,' report for the Government of Nigeria and UNDP, Ref: ED62516- Issue Number 3. 2; see also Ricardo Energy and Environment, 2017 'Developing sectoral action plans for Nigeria's Nationally Determined Contribution (NDC),' report for the Government of Nigeria and United Nations Development Programme (UNDP), Ref: ED62516- Issue Number 4, p. 10.

lesser than the price that they would have sold after harvest.⁴⁴ These poor farmers most time rely on cooperative societies which do not also have the needed bulk funds.

The NNDC Implementation Action Plan for the Agriculture Sector identified local and international sources of finance for its implementation. The potential local sources of finance are:

- a. Recapitalizing
- b. the Bank of Agriculture Limited
- c. Innovative Approaches towards demonstrating the benefits of CSA approaches to encourage uptake
- d. Weather-based insurance for crop production
- e. Potential introduction of a country Climate Fund
- f. Multilateral development banks active in Nigeria, such as African Development Bank (AfDB), the European Investment Bank (EIB) and the World Bank (WB).⁴⁵
- a. These banks have funded programmes in the region that could provide lessons to Nigeria.

The potential international sources of climate finance fund⁴⁶ for the Agriculture Sector Implementation Plan are:

- a. Green Climate Fund.⁴⁷
- b. Adaptation Fund for Smallholder Agriculture programme
- c. Adaptation Fund (AF)

⁴⁴ Ibid.

⁴⁵ Ibid, 11.

⁴⁶ Identified by Vivid Economics for the FME in 2016 cited in Ricardo Energy and Environment, 2016 'NDC implementation action plan for the Agriculture sector,' report for the Government of Nigeria and UNDP, Ref: ED62516- Issue Number 3. 2; see also Ricardo Energy and Environment, 2017 'Developing sectoral action plans for Nigeria's Nationally Determined Contribution (NDC),' report for the Government of Nigeria and United Nations Development Programme (UNDP), Ref: ED62516- Issue Number 4, p. 12.

⁴⁷ Retrieved online May 24, 2020 from: <http://www.greenclimate.fund>

- d. Global Environment Facility (GEF). This is financial mechanism under the UNFCCC.
- e. International Climate Fund (IKI)
- f. Special Climate Change Fund (SCCF).⁴⁸

3.0 Is the NNDC implementation action plan for the Agriculture Sector Right-Based?

The NNDC implementation action plan for the Agriculture Sector is very ambitious and if properly implemented will not only reduce GHGs emission from the agriculture sector but will also stimulate improved productivity which will increase Nigeria's food security and Gross Domestic Product (GDP). This will on a long run lift many farmers out poverty, create more job opportunities, improve environmental health of Nigerians. It can be said that the proposed outcome of the NNDC implementation action plan for the Agriculture Sector is pro-human rights. However, is the NNDC implementation action plan for the Agriculture Sector right-based? Put in another way, can the NNDC implementation action plan for the Agriculture Sector which is supposed to improve human lives infringe on procedural rights of the people?

The part of the NNDC that was close to a human right clause is Paragraph 4.2.8 of the NNDC that deals with gender impacts and social inclusion.⁴⁹ It observed that the degree of the impact of climate change is influenced by social status, political power, wealth, access or control of natural

⁴⁸ Ricardo Energy and Environment, 2016 'NDC implementation action plan for the Agriculture sector,' report for the Government of Nigeria and UNDP, Ref: ED62516- Issue Number 3. 2; see also Ricardo Energy and Environment, 2017 'Developing sectoral action plans for Nigeria's Nationally Determined Contribution (NDC),' report for the Government of Nigeria and United Nations Development Programme (UNDP), Ref: ED62516- Issue Number 4, p. 12.

⁴⁹ Nigeria's Intended Nationally Determined Contribution, retrieved February 13, 2020 from https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nigeria%20First/Approved%20Nigeria%27s%20INDC_271115.pdf, 16.

resources.⁵⁰ It further noted that women, youth, and rural communities are the most vulnerable to the impacts of climate change and are also less able of coping with climate impacts. NNDC stated that its mitigation measures can empower these vulnerable groups that are socio-economically underprivileged in a differentiated manner.⁵¹ The NNDC noted for example that households pay poverty penalty in their search for fuel wood and potable waters. However, women will benefit most from clean efficient cook stoves where these are introduced; as the women will gain good health and productive time. It also not that current agricultural extension services get to men than woman, and proposed a policy change that will give way a gender neutral social inclusion.

No doubt, if the mitigation measures are properly implemented, they will sure protect and promote social economic rights like health, employment, healthy environment; water, and food. However, it is important to note that the NNDC focused more final human rights impact on the people, but failed to recognize procedural rights such as access to information, participation and involvement in decision making, accountability, non-discrimination and equality, and access to justice in the mitigation process. Transparency and fairness provided for in paragraphs 5 and 6 of the NNDC were made in respect to Nigeria's obligation under Article 13 of the Paris Agreement which deals more with national inventory report and global GHG stocktake under article 14 of the Paris Agreement. In a nutshell, it failed to mainstream human rights in the implementation action plans.

It also worthy to note that the implementation of the sector action plans will require international funding, investment, technology and capacity building;⁵² but the Sector Implementation is silent on the modalities for

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Nigeria's Intended Nationally Determined Contribution, retrieved February 13, 2020 from

these foreign intervention in order to safeguard the human rights of Nigerians that may be threatened by such interventions. Many Nigerians have in the recent past been subjected to gruesome human rights abuses in the hands of so called expatriates that they work for.⁵³ It is also on record that some of these expatriates are more focused on the economic benefits of such projects (such as carbon emission trading and profits) than on the human rights consideration. A vivid example is the Kwale gas flaring project (a CDM project) that was approved by the Nigerian government in 2006.⁵⁴ The proponent of project failed and refused to carry out environmental impact assessment of the project despite outcries from Environmental rights NGOs. The proponent of the project did not also secure the informed consent of the host communities; nor did they oblige the communities and stakeholder access to details of the project. This led to loss of human lives and properties; and further desecration of the environment.

Coming to the Sector Action Plan, the NNDC implementation action plan for the Agriculture Sector is silent on procedural rights such access to information, participation and involvement in decision making, accountability, non-discrimination and equality, access to justice for people that are likely to be affected by the mitigation measures proposed under the

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nigeria%20First/Approved%20Nigeria%27s%20INDC_271115.pdf, 18.

⁵³ Labour Petitions FG over expatriates Human Rights Abuse By Expatriates in Akwa Ibom Must Stop- CLO. Retrieved online June 12, 2020 from www.saharareporters.com/2012/05/13/human-rights-abuses-by-expatriates-in-akwa-ibom-must-stop-clo

⁵⁴ Gas flaring is a major environmental concern in Nigeria. It is estimated that 3.5 billion cubic feet of associated is produced annually in Nigeria, and 2.5 billion cubic feet (over 70%) is wasted through flaring. This wasted gas in Nigeria represent 40% of the entire gas annually consumed in Africa, and 25% of gas consumed in the UK. See D.S. Olawuyi (2013) The Human Rights Based Approach to Climate Change Mitigation: Legal Framework for Addressing Human Rights Questions in Mitigation Projects (Unpublished PhD Thesis), Faculty of Law, Oxford University, London. Xxvii + 500, p. 65.

Sector Plan. Like we noted above creating fixed grazing systems or dedicated pastures will face cultural and land tenure system challenges. This measure of creating fixed grazing systems or dedicated pastures will not only improve animal health, nutrition, control methane emission; it will also reduce or even end farmer-herdsmen clashes in Nigeria.

The expansion of the Sahara Desert has pushed Fulani nomads down central and southern parts of Nigeria in search of pasture leading to competition of arable land between herdsmen and crop producers. This in most cases degenerate in bloody conflicts.⁵⁵ 100s of this herder-farmer clashes occur in Nigeria annually with lives and properties lost in the process.⁵⁶ The major causes of these conflicts are competition over land use; destruction of farmlands, crops and livestock; cattle rustling; grazing rights disputes; and reprisal attacks.⁵⁷ The effects of these conflicts *inter alia* are loss of human lives,⁵⁸ internal displacement;⁵⁹ destruction of farmlands and properties;⁶⁰ distrust,⁶¹ threat to national and food security.⁶²

Ten days to the expiration of the first tenure of the administration of President Muhammadu Buhari, he introduced the RUGA Policy (Human Settlement Policy) to which proposed to create cattle colonies in all the

⁵⁵ J.P. Okoro, 'Herdsmen/Farmers Conflict And Its Effects On Socio-Economic Development In Nigeria' *Journal of Peace, Security, and Development* 2018 Vol. 4, No. 1, Pp.143-158, 145.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Oli, N. P, Ibekwe, C. C Nwankwo, & Ignatius U 'Prevalence of Herdsmen and Farmers Conflict in Nigeria.' *International Journal of Innovative Studies in Sociology and Humanities (IJISSH)* (2016) Volume: 3 Issue: 1, 1-15, 1.

⁵⁹ Ofem, O.O. & Inyang, B. 'Livelihood and conflict dimension among crop farmers and Fulani herdsmen in Yakurr Region of Cross River State.' *Mediterranean Journal of Social Sciences*, (2014) 5(8), 512-519. 512.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Chukwuma, O. A. 'The Trajectories and Dynamics of Herdsmen Militancy in Central Nigeria.' *Journal of Humanities and Social Policy*, (2016) vol. 2, No. 1 pp. 22 – 30. 22.

states of the Federation, starting with 13 pilot states.⁶³ Central and Southern States of the Federation vehemently opposed the policy, hence, the government was forced to suspend the policy.⁶⁴

No doubt, ranching will go a long way in ending the crisis. NNDC implementation action plan for the Agriculture Sector like RUGA and other governmental land policies are not likely to succeed. For example, the Land Use Act of 1978⁶⁵ was promulgated to make land accessible to all Nigeria and also eliminate land speculation; over 40 years down the line of administration of this law, it has failed to live up to the expectation of government and the people.⁶⁶ The reason can largely be attributed to lack of involvement and participation of the people in the decision making process; lack of access of information regarding such policies; and lack of transparency and accountability of the government in the process. The people are detached from such laws/policies and views them as affronts to their cultural antiquity. Land is fundamental in African society. Any decision that will affect land and land tenure system must adopt a bottom-top approach if it must be effective.

The above discussion is also applicable to other measures under the Agriculture Implementation Action Plan.

4.0 Impact of Corona Virus Pandemic on NNDC implementation action plan for the Agriculture Sector

⁶³ See Guardian Newspaper of May, 20, 2019, retrieved June 5, 2020 from <https://guardian.ng/features/agro-care/national-livestock-plan-is-ruga-in-disguise-nigerians-warn/>

⁶⁴ Ibid.

⁶⁵ Land Use Act 1978, The Complete 2004 Laws of Nigeria <<http://lawsofnigeria.placng.org/view2.php?sn=228>> accessed 19 June 2020. (Land Use Act 1978).

⁶⁶ Otubu A. 'The Land Use Act and Land Administration in 21st Century Nigeria: Need for Reforms' *Afe Babalola University: J. of SUST. DEV. LAW & POLICY*(2018) VOL. 9: 1: 80-108, 82.

The coronavirus disease (Covid-19) is a novel communicable respiratory disorder that is caused by novel strains of coronavirus that causes illnesses.⁶⁷ Current scientific discovery trace the virus to a meat market in Wuhan, China in December 2019.⁶⁸ The disease now spread from human to human. The World Health Organization delivered the coronavirus disease a global pandemic on the 11th of March, 2020.⁶⁹ The National Centre for Diseases Control (NCDC) confirmed the first coronavirus case in Nigeria on the 27th of February, 2020.⁷⁰ In a swift reaction to contain the spread of the virus, the Nigeria government following the WHO guidelines *inter alia* imposed lockdowns on major hit States of Lagos, Ogun and the Federal Capital Territory (Abuja); placed ban on inter-state travels; and also imposed curfews.⁷¹ The rapid spread of the virus has also led to wide panic in the society.

The pandemic and its containment measures has negatively impacted the NDC Implementation Action Plan for the Agriculture Sector in Nigeria, even due Agriculture sector was exempted from the lockdown. Some of the major impacts are:

- a. Farm activities have been suspended in some areas of the country due to impact of the virus on people's lives and the restriction of movements. Where they are still in operation, farmers currently have shortage of labour due to morbidity, restriction of movements,

⁶⁷ Africa Centre for Disease Control, 2020, *Coronavirus Disease (Covid-19)*. Retrieved June 8, 2020 from <https://africacdc.org/covid-19/>

⁶⁸ *Ibid*.

⁶⁹ Domenico Cucinotta & Maurizo Vanelli 2020, *WHO Declares COVID-19 a Pandemic*. **PMID**, 191(1), 157-160. 157.

⁷⁰ NCDC, 2020 *First Case Coronavirus Disease Confirmed in Nigeria*. Retrieved June 8, 2020 from <https://ncdc.gov.ng/news/227/first-case-of-corona-virus-disease-confirmed-in-nigeria>

⁷¹ Fidelis Mba, Nigeria Announces Lockdown of Major Cities to Curb Coronavirus. Retrieved online June 8, 2020 from: <https://www.aljazeera.com/news/2020/03/nigeria-announces-lockdown-major-cities-curb-coronavirus-200330095100706.html>.

and the social distancing rules.⁷² This has occasioned a drop in production, hence, a threat to food security in the coming year.

- b. Effective implementation of measures a,b,c,e,f, and g of the NDC Implementation Action Plan for the Agriculture Sector largely depend of Agriculture extension services. Before the outbreak of coronavirus, lack of adequate and available extension services have been noted as a major challenge for the implementation of the Plan; with the outbreak, minimal available extension officers will not be able to make reach farmers because of the fear of contacting the coronavirus and the restriction of movements.
- c. Effective implementation of measures excerpt measure f of the NDC Implementation Action Plan for the Agriculture Sector also depend largely on technology transfer. The pandemic has led to the ban on foreign travels, and people are also skeptical to travel; therefore, the needed experts and technologies for the Sector Plan Implementation will not be able to be transported to Nigeria. This will grossly impact negatively on the implementations of the Sector Plan.
- d. All the measures require funding both locally and internationally. They also require international investment, technology and capacity building. The pandemic have wrecked National economies and has also crumbled businesses all over the world. It is even more difficult to access funds or loan facilities for Agricultural activities. Farmers need funds to invest in Climate Smart Agriculture, but with this pandemic, farmers may be left with no other choice than to return to business as usual (BAU). Farmers equally need funds to acquire work PPEs which is part of the new normal introduced by the pandemic.

5.0 Conclusion and Recommendations

⁷² World Bank, 2020, Food Security and Covid-19. Retrieved June 8, 2020 from: <https://www.worldbank.org/en/topic/agriculture/brief/food-security-and-covid-19>

The NNDC and the NDC Implementation action plan for the Agriculture sector are laudable, being that if they are properly implemented, they have the capacity to reduce GHG emissions from the Agriculture sector, stimulate productivity and create wealth. However, the implementation plan is devoid of a right-based approach, which may on the long-run be counter-productive. Similarly, the outbreak of Covid-19 pandemic has also negatively affected the implementation of the sector action plan for agriculture in Nigeria. To attain a pro-right desired result in reducing GHG emissions from the agriculture sector in Nigeria, we suggest that:

- i. The NDC Implementation action plan for the agriculture sector be revised to incorporate procedural rights such access to information, participation and involvement in decision making, accountability, non-discrimination and equality, access to justice for people that are likely to be affected by the mitigation measures proposed under the Sector Plan. This will give the people a sense of belonging, and also create a basis for a cause of action for people upon the violation of their rights.
- ii. The deployment of innovative technologies is crucial to making the effect of climate change not much felt in the country. The option mention above will transform the energy system in the country. In advanced and poorer countries like Nigeria, and policymakers must adopt the smart measures needed to encourage further momentum and ensure a fair and open global market for innovation, clean technologies and know-how. Furthermore, it is required of governments and the private sector to work closely together and shift their focus to low-carbon technologies. The challenge is daunting, but it is possible to fill the gap.
- iii. Nigeria is an urgent need for a legislation to compel the Nigerian government to release subventions to cushion the effects of Covid-19 on the five key sectors for climate change mitigation in Nigeria.