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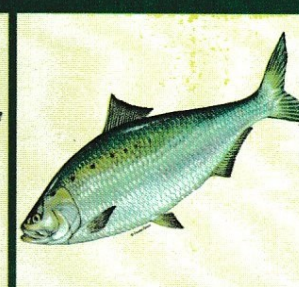
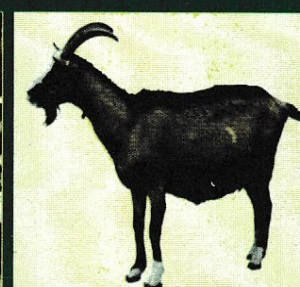
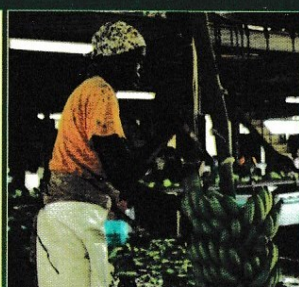
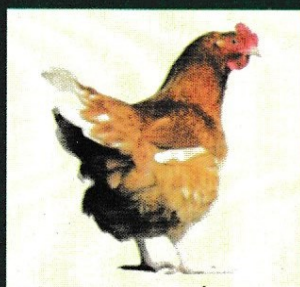
Presents

A SPECIALISED COMPENDIUM ON

**SUSTAINABLE AGRICULTURE IN
A DIVERSIFIED ECONOMY:
NIGERIA IN PERSPECTIVE**

EDITORS

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CHAPTER 1

INFRACTIONS, INEQUITIES AND GENERAL CONSTRAINTS OF THE NIGERIAN AGRICULTURAL SYSTEM

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ABSTRACT

Arising from its multifunctional nature, a strong and efficient agricultural sector has a multiplier effect on a nation's socio-economic and industrial fabric, as it is expected to; ensure food security, provide raw materials for industries, generate respectable employment, enhance poverty reduction, earn foreign exchange and generally ensure inclusive economic growth. The Nigerian Agricultural system has been unable to perform to desired expectations, with regard to the afore-stated objectives and various intellectuals have proffered reasons for this abysmal trend. This paper attempts to document a congruence of inequities and infractions committed against the agricultural sub-sector of the Nigerian economy, which have inadvertently stultified its growth, with dire consequences on the socio-economic fabrics of the Nigerian project. The paper concludes on a synopsis of experts' views on the present classification of the Nigerian agricultural system. For want of space, few recommendations are proffered on the way forward.

Keywords: *Infractions, Inequities, General Barriers/Constraints, Nigerian Agricultural System*

INTRODUCTION

Africa is in dire need of a faster pace of economic development if it is to cope with its peculiar trait of rapid population growth. Agric for Impact (A4I-2014) avers that the African population is projected to quadruple over the next 90 years. The role of agriculture in stimulating inclusive economic growth is significant. This is because agricultural transformation plays a critical role in transforming developing economies to end hunger and under nutrition while accelerating economic growth. Yifu Lin (2018) avers that countries that have achieved high-income status started with agriculture and went through an economic transformation that accelerated growth and reduced hunger and under nutrition. He attributes China's rapid growth in GDP per capita in current US dollars from \$155-8,123 between 1978 and 2016 to agricultural transformation. Arising from its multifunctional nature, a strong and efficient

agricultural sector has a multiplier effect on a nation's socio-economic and industrial fabric, as it would enable a country to feed its growing population, generate employment, earn foreign exchange and provide raw materials for industries. Agriculture is the mainstay of the Nigerian economy. It provides a means of livelihood for an estimated 65 - 70% of the country's population. It is the major driver of the non-oil sector of the economy, contributing about one-third of annual economic growth. Agriculture is reputed as the most important and resilient sector in the Nigerian economy. The contribution of the agricultural sector to the Nigerian economy in 2010-2017 averaged 3.7 Billion Naira covering about 40% of the GDP (On-line-Nigeria, 2017). The paper also reports that the triple sized expansion of the Nigeria economy to date resulted from agriculture (27% growth); while the financial, oil and gas, trading and manufacturing sectors have grown by only

between 1.4 – 18%. It has been reported that the last time the agricultural sector contributed negatively to GDP was in 1987 (Proshare, Sept 28, 2017). It was the only sector that did not decline during the recession period (which lasted for five quarters, between 2016 and 2018) and, without which the country's GDP would have contracted by 2.5% in 2016. However agriculture contributed 24.4% to the country's GDP in that year and hence helped to stem the country's recession. The sector also intensified its strength as it expanded by 4.23% in the fourth quarter of 2017.

The agricultural sub-sector of the Nigerian economy was at boom production level in the period spanning 1960 to 1969 when it accounted for an average of 57.0% of GDP and generated 64.5% of export earnings. The sector however experienced a down turn in the 1970's with the discovery of petroleum in commercial quantity. This scenario has persisted, with the sector contributing an average of 23.5% to GDP and generating only 5.1% of export earnings in the last five years (Price Water House (PWC, 2017). The Nigerian oil boom hence, became the precursor of Nigeria's Agricultural doom. The agricultural sector is still characterized by a 60-70% labour force, working on rain fed small and scattered holdings, utilizing simple tools, and shifting cultivation and yet producing over 80% of total food requirement for the country. Recent attempts by the national administration to diversify the economy with regards to agricultural development led to the introduction of the Agricultural Transformation Agenda (ATA) between 2011 and 2015. The ATA was based on the principle that saw agriculture as a business, with the main priority to reintroduce the Nigerian economy to sustainable agriculture, centred on business-like attitude mainly driven by the private sector

The ATA had its deficiencies, and these, the current regime of President Mohammed Buhari has attempted to address through its Agricultural Promotion Policy (APP) which is aimed at resolving food production shortages and improving output quality. The Economic Recovery Growth Plan (ERGP) of the present administration also prioritizes food security and is primed to achieve self sufficiency in major crop commodities by 2020, during which the value of agricultural production is projected to be increased by 31% to ₦21 trillion in 2020. The above stated policies and plans seem to be achieving its stated objectives, because as reported by FAO (2018) Nigeria's aggregate cereal output in 2017 was estimated at about 26 million tonnes, which is about 2 percent higher than the last season's output and 12% above a five-year average. In spite of all the accolades reported about the indispensable role of agriculture in the Nigerian economic development process, there is a seeming disconnect between the agricultural sector and its contribution to Nigeria's survival and ultimate sustenance. Agriculture is widely regarded as having an undisputable capacity for employment opportunities and contributed 17.42% to nominal GDP in the first quarter of 2018. This is however not reflected in the ever expanding labour market. The unemployment rate was 18.8% in the third quarter of 2017, while youth unemployment increased to 33.1% in the third quarter of 2017 from 29.5% in the second quarter of 2017. The NBS Labour Force Statistics (2018) reported that out of the 85.08 million active labour force in Nigeria in 2017, 51.06 million people were fully employed, 16 million was unemployed while 18.02 was underemployed. It had been reported (NBS, 2012) that about 60% of unemployed Nigerians are in the 15–44 years age group – including about 2.1 million graduates. (Reuben, 2018; Financial Watch Nigeria, 2018). The above-stated statistics do not augur well for national development.

Agriculture must be empowered for better performance of its avowed and well-touted roles. It is the premise of this paper that challenges of the agricultural system arise from various infractions (non-adherence to the terms of various national and international treaties and agreements, the terms to which Nigerian policy makers have agreed to) and inequities (injustices and unfairness perpetrated by policy makers) against the sector. This paper attempts a documentation of the various infractions and inequities committed by the Nigerian nation against its agricultural sector and that has stultified its growth, diminished its contribution, and impacted negatively on national development. It is hoped that these revelations would enable policy makers re-orient their actions and inactions on the agricultural sector, as to ensure fast-paced and inclusive development of the Nigerian economy

INFRACTIONS AND INEQUITIES ON THE AGRICULTURAL SECTOR AND IMPACT ON THE ECONOMY

Infractions and Inequities on the Agricultural Sector: A lot has to be done, in order to revamp Nigeria's agricultural sector, which has been described as one of the most underfunded in the world. Nigeria's budgetary allocations to agricultural sector have not exceeded 2%, until the 2018 budget allocation of 3.2%. This is contrary to the Comprehensive Africa Agriculture Development Programme's (CAADP) Maputo Declaration's 10% agricultural expenditure target in any year. A strong stock market is typically indicative of a booming economy and although Nigeria's stock market is showing robust growth, it is a false reflection of the status of Nigeria's economy. Nigeria's growth is powered by agriculture and SME growth, but capital in-flow into these areas is negligible. Although agriculture makes a high contribution to the GDP, it contributes a minute fraction of the value of the equity

market. This Day bgl 50 (2011) reported that the agric sector in 2009 contributed only 3 percent of the market value of the Nigeria Stock Exchange (NSE), as only five (5) companies were listed. Of the top 10 non – oil exporters, in 2010, only one was in agriculture. Of the CBN's top 100 non – oil exporters (mainly agro and agro – allied) in 2010, the highest (Okomu oil) occupied the 42nd position. With regard to public Agricultural research and development (R&D) spending plans, figures reveal that between the periods of 2010-2015 Nigeria spent on the average, only about 1.5% of the budget on agricultural research activities [cf. Uganda (12.6 percent), Benin (17.0%), and Côte d'Ivoire (20.0%)] (Benin, McBride and Mogue, 2016). It is not surprising therefore, why Nigeria has been ranked a very low 11th position out of 22 African countries, with regard to the Global innovation index 2018. South Africa, Mauritius and Kenya are ranked among the best places for innovation in Sub-Saharan Africa (Ojekunle, 2018). In a related development, Nigeria has been ranked 125th position, out of the 137 countries on the World Economic Forum's (WEF) Global Competitiveness Index (GCI) for 2017-2018 (This day live, 2017). Lending to the agricultural sector peaks at 3 percent for 2017 (cf. Kenya -6%; Brazil, 18%). This abysmal trend also re-echoes in Africa, where it is reported (Ssozi, Asongu and Amavilah, 2017) that of the total *Foreign Direct Investment* (FDI) in flow to Africa only an abysmal 0.04% goes into agriculture.

It has been reported by the International Fertilizer Development Centre (IFDC) that fertilizer use in Nigeria increased by 63% in 2017 rising from 959,364 metric tonnes in 2016 to 1,564,816 metric tonnes. (Punch on-line, 2018). Reports (IFDC, 2010; Knoema, 2018) indicated that this increased the fertilizer use proportion in the country from 7 kg/ha in 2010 to 8.3 kg/ha, as at 2015. At this rate, it still remains one of the lowest in SSA, which has an average of 8kg/ha (far less than

the global average of 99 kg). Less than 1% (8, 000 tonnes) of improved seed inputs, is made available to farmers out of the estimated required figure of 1, 000, 000 tonnes per annum. Reports reveal that less than a third of African farmers use improved inputs. This has led to the sad commentary of Blanke and Fregene (2018) to the effect that in all regions but Africa, crop yields have remained a step ahead of population growth, helping free the world of hunger and famine. With regard to mechanized agriculture, the FAO reported that Africa has less than 50 agricultural tractors per 100 square kilometres of arable land and classifies Nigeria as one of the least mechanized farming countries globally, with a tractor density of 0.27 hp/ha, far below FAO recommended 1.5 hp/ha. It then ranked Nigeria 132nd out of 188 countries surveyed on agricultural mechanization (Business day on-line, 2017). Against this background, it has been estimated that Nigeria needs about 750,000 tractors to be at par with global average (Business day on-line, 2017).

As a fall out from the above depicted scenario, Africa is reported to have the highest share of food loss and waste, which totals 36 percent. According to the Malabo-Montpellier Panel (IFPRI, 2018) the major share of this, about 30% is lost due to poor harvest, post-harvest, processing, and packaging processes. In Nigeria, post harvest losses have been estimated at about 15–40%. To compound matters, agricultural re – investment is at very low ebb, because only a reported 1% of farmers can easily access insurance, while of the estimated 20 million commercial farmers in Nigeria, only 700,000 (3.5%) have accessed agricultural insurance in the last five years as of 2014, implying over 19 million farmers are still unserved (OXFAM-2017). Based on the above – highlighted inequities against the agricultural sub-sector of the Nigerian economy, the Hunger and

Commitment Index for Africa (HANCI-AFRICA) has put Nigeria in 37th place out of 45 countries based on its political commitment to tackle hunger and under nutrition. South Africa, Malawi and Madagascar occupied the top three positions. Nigeria's low ranking stems from the fact that the country spends low on its agriculture and health sectors. The report which covered the periods of 2014-2016, as highlighted by Business-Post (July, 27, 2018) also berated Nigeria's medium/long term development policies (Vision 20:2020) on the premise that it places weak importance on nutrition. The report highlighted weak access to improved source of drinking water and poor sanitation facility (29% in 2015) as deterrents to positive outcomes for hunger and nutrition in Nigeria. The report surmised that constitutional protection of the right to food is weak while social safety nets in Nigeria are basic and only cover few risks for a limited number of beneficiaries.

Infractions/ Inequities on the Socio-economic Fabric of the Economy

A clear paradox is that of reported increase in domestic food production and increasing hunger and malnutrition in the country. CBN (2016) reported an increase of 3.5% in food production and 5.9% in livestock and fishery. The report also indicated that over 20 million MT of food was added to Nigeria's domestic food production between 2012 and 2015. In spite of the above-stated figures, the Food and Agriculture Organization (FAO, 2017) declared that in March 2017 about 7.1 million people in Nigeria were facing acute food insecurity and in need of urgent life saving and livelihood protection. In a similar vein, Nwalie (2017) quoted statistics indicating that the proportion of Nigerian population that were undernourished in 2008 was 5.9%, however in 2016 that proportion has gone up to 7% . On a related note, the Global Hunger Index of International Food Policy Research Institute (IFPRI), data shows that from 2001 to 2014 Nigeria food insecurity situation

remained on the "serious" category, which is between the score of 10.0-19.9 using the old formula and it has remained in the serious category up to 2016 scoring 25.5 in the new formula. In other words no significant change was recorded. (Nwalie, 2017) It is also reported (FAO -2018) that Nigeria is still the largest rice importer in Africa, importing on average about 2.6 million tonnes per year. The FAO asserted that despite the above-average 2017 production, import requirements for the 2017/18 (November/October) marketing year are set at 7.8 million tonnes, with an increase by about 7% compared to the previous year and about 6% above the average due to higher demand for human and industrial use. With regard to food inflation, especially, in terms of prices of food items, Okojie (2018) reports that despite the continuous increase in Nigeria's food prices, global commodity prices have been declining. She quotes figures from the FAO food price commodity index, to the effect that on a global level, prices of major food commodities declined for the fifth year in a row in 2016, averaging 161.2 points for the year as a whole. In contrast, the NBS shows that the country's food inflation rose by 17.4% year-on-year in December 2016, up by 0.20% recorded in November, 2016. Okojie (2018) also quotes data from the National Bureau of Statistics (NBS) showing that between January, 2016 and January, 2018, food prices have been skyrocketing, not just because of inflation, but partly due to conflicts, mainly in the northern part of the country.

In a related development, the Brookings Institution has rated Nigeria as the nation with the highest number of extremely poor people in the world. According to the report, "at the end of May 2018, Nigeria had about 87 million people in extreme poverty and the number of Nigerians in extreme poverty increases by six people every minute (Vanguard Newspaper, 2018).

The *inflation Rate* in September, 2017 was reported at 15.98% resulting in low purchasing power, while Nigeria ranked a very lowly 6th on Hanke's Misery Index 2017, behind Egypt, and with an index score of 52.1. On the *prosperity Index*, the Legatum Prosperity Index ranked Nigeria 128th out of 149 countries. Nigeria also ranked a poor 131st in Economic Quality sub-index. Despite being Africa's largest economy, the country has been unable to exploit its vast resources for the benefit of its population. Its rising tide of economic growth has failed to boost its economy because as reported by the Legatum Prosperity Index, Nigeria has the highest poverty rate in all OPEC countries. Against the above detailed scenario, hunger and poverty have become the lot of majority of the Nigerian citizenry. It has been reported that 60.9% Nigerians lived in abject poverty (less than US\$1 or N160/day) in 2010, while 64.4% lived below the poverty line of US\$1.25/day (NBS, 2012). Against this background, Nigerians spend over half (56.4%) of household income on food (the highest of all the 10 nations, world-wide that spend more than 40% of their income on food). This is in sad comparison to the USA where its citizens spend at least 6.4% household budget on food. Oxfam (2017) views poverty in Nigeria as outrageous because it thrives in the context of expanded economy, where benefits are reaped by a minority. Oxfam (2017) avers that lifting all poor Nigerians living below the poverty line of US\$1.90 for one year will cost about US\$24 billion, the amount of which is lower than the total overall wealth owned by the five richest Nigerians (US\$29.9 billion).

GENERAL BARRIERS TO A MORE PRODUCTIVE AGRICULTURE SECTOR

Akpabio (2012a, 2012b, 2015); Downie (2017) and Price Water House (PWC-2017) attempted a summary of the salient macro-level barriers to a more productive Nigerian

agricultural sector. These are as summarized below:

- i) *Uncompetitive environment for agribusiness:* These include infrastructure deficits (unreliable power supply, dilapidated irrigation systems, overcrowded ports, and poor roads); and governance shortfalls (abundance of stifling bureaucracy, corruption, overlapping responsibilities between the three tiers of government, and unclear policies including, for example, a constantly shifting list of items that are prohibited from being imported).
- ii) *Production constraints:* Inputs like fertilizer are either, scarce/ low in quality or not formulated to suit diverse ecological zones, when available; poor quality/ counterfeit seeds, due to poor regulatory system; high cost of agrochemicals and poor access to mechanized tools as tractors and crop sprayers. All these, when compounded with frequent pest and disease attacks, poor irrigation systems and climatic variation- high temperature and irregular rainfall- prevent farmers from utilizing their labor and their land efficiently.
- iii) *Gender and Land Tenure/Access:* Insecure land tenure is a great impediment to rural economic development. This deters investment and increases vulnerability to eviction by state or corporate interests. Weak tenure has become more pronounced with the feminization of agriculture brought about by men migrating for urban work. Women now produce 60-80% of food in developing countries, despite owning only 10-20% of the farms. Discrimination limits availability of credit, advisory support and access to local economic decision-making. As a result of insecure tenure, and harmful policies at the local level that limit

access, Nigeria scored poorly (60th out of 62 countries) for its land governance policies in a 2017 survey of the business climate for agriculture (on a set of issues related to land management, access, regulation, and equity) conducted by the World Bank.

- iv) *Marketing/Trade constraints:* Poor logistics infrastructure, high cost of transportation, bad roads, and long distances from the farms to the market negatively impact the marketing of agricultural produce. Poor market access also arises from underdeveloped value chains, including, inadequate skilled personnel, high cost of power generation and a dearth of processing and storage facilities. Also, export markets remain underdeveloped, partly because agricultural goods are uncompetitive and do not meet international phytosanitary standards. Illegal food imports, low cost of imported agro-produce and inadequate market information to identify domestic and external opportunities, worsen the situation. From a trade perspective, limited understanding of key export markets (US, UK and EU) and low quality of agricultural products have hindered international trade.
- v) *Processing constraints:* Processing of agricultural products is vital for the reduction of post – harvest losses. In Nigeria, this is estimated at between 35-50% for fruits and vegetables, and 15-25% for grains. Inadequate extension services for post – harvest handling, poor quality control, and limited use of modern processing practices and technology have limited the processing of agricultural output.
- vi) *Access to credit:* Nigerian banks are wary of extending loans to farmers. Several initiatives have been taken to try to promote more lending to the agriculture sector, notably the Nigeria

Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL), launched by the Central Bank of Nigeria (CBN) in 2013, which guarantees loans extended to farmers and offers rebates to recipients who pay back the money on time. However, the ongoing recession has choked lending and by September 2016 the average interest rate of loans to the agriculture sector had risen to 26%.

- vii) *Lukewarm political commitment:* Rhetorical supports by various levels of governance as tool of economic diversification are not backed by budgetary support/ policy enactment/ implementation.
- viii) *Neglected agricultural research system:* Nigeria's agricultural research system, the largest in sub-Saharan Africa, has stagnated. It is plagued by inadequate funding, poor research infrastructure and unskilled workers and has become largely disconnected from the priorities of Nigerian farmers.

CHARACTERIZATION OF THE NIGERIAN AGRICULTURAL SYSTEM

As a fall-out from the above-listed; Akpabio, (2015); Downie (2017) and (PWC, 2017) have attempted a characterization of the present scenario of the Nigerian Agricultural system, as follows:

- i) Relative declining yields per unit area of land across key crops (cassava, cocoa beans and wheat) over the last four decades. This is unlike rice which has recorded a steady rise in production, resulting from government's increased intervention (subsidized agrochemicals and credit facilities).
- ii) Increased agricultural land use, primarily driven by an increase in the farming population.
- iii) Low share of global production of key crops: In 2014, yields for key crops (cassava, cocoa beans, oil palm (fruit

and groundnuts) were lower than the global average yield of all producing countries.

- iv) Increasing food consumption - driven by increased population: In the last five (5) years, Nigeria's share of global food consumption has averaged 3.4%, the highest amongst all African countries. This could increase to 4% by 2050, when population may have risen to 400 million.
- v) Promotion of import dependency because the rate of consumption has outstripped production. The deficit has been met largely by importation, making the country a net importer. On the average, between 2011 and 2015, ₦1.4 trillion was spent on food imports with wheat, milk, rice, sugar and malt extract, constituting the bulk of Nigeria's food import bill. Consequently, Nigeria is vulnerable to changes in the global agro commodity prices, with significant impact on inflation and foreign reserves.
- vi) Agro-processed exports have declined as a result of declining production and quality. Between 2011 and 2015, agro-processed exports declined by 41% to NGN 143 billion. Nigeria is estimated to have lost US\$10 billion in annual exports of agriculture and agro-processed commodities including groundnut, palm oil, cocoa and cotton as a result of the decline in production of these commodities, arising from non-compliance with regulatory and documentation requirements for food imports to the European Union and the United Kingdom. It is estimated that Nigeria and other developing countries could have lost as much as US\$6.9 billion in 2015, as a result of food exports rejection.
- vii) On the contrary recent data indicates a steady rise in the volume of Nigeria's non-oil exports particularly in the agricultural sector, with a focus on raw

materials. According to an NBS report, raw material exports value increased by 31.8% in Q2 2017 against the level in Q1 2017 but 206.4 per cent higher than Q2 2016," (New telegraph on line, 2017). Major traded agricultural products include cashew nuts, sesame seeds, frozen shrimps and prawn, flour and meals of soya beans and ginger.

CONCLUSION AND RECOMMENDATIONS

The future of Nigeria and agriculture are closely linked. There is an opportunity and great potential for Nigeria to leverage the opportunities inherent in the agricultural sector to create sustainable employment and incomes for youth, and to ensure that small holders benefit from their sweat. In this wise, the myth of 'agriculture as a culture' (way of life) - must be jettisoned - to focus on a revitalized view of 'agriculture as a business'. A sure way to enhance this vision is by commercialization of agriculture and ensuring broad based participation in agricultural markets. This will open up opportunities in the broader food systems, including; food processing, packaging, manufacturing, marketing, and transportation, etc.

Indications however are that Nigeria's economy is gradually returning to a path of sustainable positive growth. Central Bank of Nigeria (CBN) 2018) asserted that the Nigerian economy recorded an overall growth of 0.83% in 2017, thanks to Agriculture (1.08%), industry (0.56%) and trade (0.35%) which were revealed as the main drivers of the revived Nigerian economy. To ensure an inclusive sustenance of this momentum, Akpabio (2015) had condensed a congruence of various expert opinions proffering solutions to food insecurity challenges in Nigeria. A lot of reforms are also on track in the Nigerian agricultural sub-sector of the economy (See Akpabio, 2015; Downie, 2017; PWC, 2017; and many other publications in the public domain).

To revamp and empower the agricultural sector in order to ensure and assure sustainability, Nigeria should critically appraise, adapt and assiduously integrate its development policies and programmes into the goals enshrined in the African Union's Agenda 2063 which sets the vision and action plan for the development of the continent over the next 50 years. The nation should also align itself with the principles enshrined in the CAADP's 2014 Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. This should be done in consonance with the Africa Regional Nutrition Strategy 2015-2025 of ending hunger and halving poverty by 2025. All these are closely aligned with the SDG 2 and the Decade of Action on Nutrition 2016-2025, the framework to implement the commitments taken at the second International Conference on Nutrition and achieve the World Health Assembly targets.

Mobilization of governments and all stakeholders, improved welfare system and targeting of recipients to ensure broad based impact will be decisive in determining if agriculture pursues the part of intensification and productivity needed to attract and accommodate the growing ranks of future young, mainly rural people. It is they who will have to ensure food security in the decades to come. They must be empowered to perform.

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