"I know of no pursuit in which more real and important services can be rendered to any country than by improving its agriculture, its breed of useful animals, and other branches of a husbandman’s cares" George Washington

Land reform is an often-controversial alteration in the societal arrangements whereby government administers possession and use of land. Land reform may consist of a government-initiated or government-backed redistribution of productive land. Consequently, land reform most often refers to transfer of ownership from relatively small number of wealthy landowners, with extensive land holdings, to those who work the land, or the consolidation of small landholdings into communal estate. Our experience in Nigeria’s land reform achieved reasonable success despite myriad of problems created by the act, yet a constant review is necessary to reflect technological, cultural and economic realities of our times.

Which of the Agrarian Land Reforms?

Land Reform for Social Justice

Historically, land reforms aim at solving socio-economic and/or political discontent through either re-distribution or consolidation of land resources.
which was often achieved through forceful or voluntary change of ownership of either traditional or feudal lands or its resources to small holders or landless peasants, known as fragmentation or redistribution of land resources.

Likewise consolidation, land reform is achieved through forceful or voluntary merger of fragmented peasant land ownerships into corporate or collective ownership (communes or kibbutz), to achieve economies of scale and to enable the use of high and sophisticated technology in the production process.

In traditional societies where agricultural activities engage substantial number of its people, land becomes the primary source of livelihood. Whenever there is shortage in food supply, it is natural for the affected people to clamour for a change in the land distribution and or utilisation, rather than change in the method of production.

Land reform is a deliberate change in the ownership or possession of agricultural land holdings, the method of its cultivation, or its relation to the rest of the economy. The earliest land reform was the 6th century BC Salon reform in Athens, which abolishes debt system that forced peasants to mortgage their land and labour to landowners. The social justice land reform in Athens averted social upheavals and created an opportunity for the peasants/poor to produce enough food for themselves and their communities. Popular discontent with land related ownership provoked civil conflicts and revolutions, which necessitated agrarian land reforms in the Roman Empires of the middle ages - England, France, and Germany; as well as 20th century Soviet Union, and China. In all these countries demands for land reforms triggered violent peasant revolutions.

Land Collective Ownership
Central to Socialist land reforms is the collective ownership of land resources to encourage peasants accept ‘from each according to his ability to each according to his need” social policy. This policy was proven to be wasteful, stagnant, inefficient, and counterproductive in achieving economies of scale in the long run. The Russian, Chinese, and most of Soviet Union agrarian reforms failed to bring about sustainable production process and self-sufficiency in agricultural output. In Tunisia the reform went through several stages but subsequently resorted to abandoned collectivisation for private sector development.

The Russian Revolution in 1917 introduced collectivisation of agricultural land and output. Similar reform in communist countries of Eastern Europe and China remained central to their land reforms as agriculture dominates most of their economies at the time. In Tanzania the lack of (Ujama) capacities of the peasants led to the collapse of the idea even before late President Julius Nyerere left power. Cuba of recent is working another round of land reform to lease more state lands to peasant farmers, and decentralise decision-making process after the devastating Gustav hurricane that destroyed more than 30 per cent of crops.

Land Fragmentation
The French Revolution Land Reform established small family farm as the cornerstone of French democracy which encourages the abolishing of serfdom in most of 19th century Europe. However, in Indian sub-continent and Latin America agitation for land redistribution reform among the labourers and landless peasants failed to materialise because of the political and economic power of landlords, who continue to impose oppressive rents and usurious interest. The 1968 reform in the Democratic Republic of Yemen which redistributed lands belonging to rulers, merchants, and religious institutions to private farmers, partially succeeded. The only real fragmentation success was the Meiji (1868 – 1912) restoration and subsequent reforms by the American forces of 1945 in Japan that succeeded in abolishing feudal fiefs and stipends and handed land to those in need.

In Southern Africa where racial policies moved the natives from fertile to marginal lands, particularly in Namibia, South Africa and Zimbabwe led to pressure for land redistribution. In Zimbabwe wholesale land
distribution policy resulted in total breakdown of the economy, while gradualist approach adopted in South Africa and Namibia resulted in greater frustrations on the part of the landless, leading to mass rural-urban migration and re-enforcing violent crimes in the cities. Likewise in Iran the idea of large-scale farms promoted by the Pahlavi government failed despite huge subsidies, and when the Ayatollah revolution thought of fragmenting farmlands many landless agricultural peasants did not benefit from the redistribution as a result of official corruption.

Land Limitation
Northern African countries of Egypt and Tunisia, as well as Middle Eastern countries of Iraq and Syria, with limited arable lands, have at one time or another introduced agrarian land reforms with limited successes. The pressure of the landless forced Egypt to progressively lower the legal limitation of individual ownership from one acre in 1952, to one quarter in 1969.

Land Consolidation
In Algeria, the commercial lands abandoned by European settlers and colonialists were consolidated, but without major success due to lack of managerial capacities of the new owners, after independence in 1962.

Mixed Land Reforms
In Latin America land reform was only partially successful as a result of the powerful landlords (latifundios) that own substantial tracks of land and remained politically relevant, blocking all agitations for land reform. In Mexico, Columbia, Brazil, Uruguay and many others, sporadic violent clashes between the peasants and landowners seeking full land reform are constant features.

In Bolivia, recent attempts by the government of Juan Evo Morales to change the tenure laws, to cater for the needs of more than half of its peasant population, led to violent civil strife between the Latifundios and indigenous peasants. In Nicaragua, the 1979 reform transferred substantial lands to individual farmers, while the Cuban revolution of 1959 expropriated large holdings in collective hands managed by government officials.

History of Traditional Land Tenure in Nigeria

“There is not a foot of land in this country that is not claimed or possessed by some tribe or other, and the members of each tribe can apply to their respective chiefs for a grant of land to be used and cultivated for farming and other purposes. Any land so granted becomes the property of the grantee for life, and for his heirs after him in perpetuity, with all that grows on it and all that lies underneath it. But such land must be made use of; i.e. it must be cultivated or used beneficially; if not the grantee is liable to lose it and it may then be given to another who will make use of it”. Captain CWJ Orr.

Traditional Tenure in Southern Nigeria
Before the advent of Colonial Administration, the inhabitants of Southern Nigeria were living in tribal groupings and each group occupies specific lands. All members of a village, community or family have equal right over their land under the supervision of the head person in the community or family who holds it in trust. The concept of individual ownership was quite foreign to natives of southern Nigeria. This was the general observation made by Sir Percy Girouard’s - the Chairman Colonial Committee - memo on land matters in 1908, which he referred to the Secretary of State in a lengthy dispatch. He observed that all lands in the country are in the safekeeping of the Chief for the members of the tribe to whom the land belongs.

Land Tenure Laws of the Caliphate
The caliphate after conquering Hausa States incorporated Maliki laws to traditional land use practices in the early part of 19th century. The law prescribes modes of acquiring land rights with laid down rules and methods of possession, and strictly disallows transgression into others right by any other person or authority.

i. Acquisition (Mulk) lands could be acquired through possession if the occupier has evidence of physical development - (a) digging wells, or opening springs on arable not grazing land, (b) by inheritance, (c) draining swamp, (d) substantial building, (e) perennial crops and trees, (f) breaking up the soil and sowing, (g) clearing trees and bushes, and (h) breaking up rocks and levelling.

ii. Inheritance (Fara’id) possession right of land and its resources could pass to successors as soon as the owner dies; the rights
dissolve upon his heirs. Where the diseased left no heirs, the land belongs to the state and cannot be transferred to other persons as gift; but it can be rented or sold to other people and the revenue accrues to the treasury.

iii. Assignment (Hibah) possession right guarantees right to land and its resources if it is dully assigned by the Imam (Emir), particularly if it is near the town, but he cannot assign ownership of cultivated land captured in war or ceded by treaty, even if held by unbelievers. Such lands are treated as (Wakaf) public lands which the Imam (Emir) has the power to grant temporary user status as (Madmunatun) return as it is, or (Mudatun) return as it was.

iv. Temporary Hire of Garden Land (Musakat) agreement may be entered into for the production of onions, melons, sugarcane, and cereals provided (a) the proprietor is unable to cultivate, (b) the crop is in danger of perishing, (c) The crop is above the ground but has not attained maturity. The hire fee (Ijarah) of landed property is for only one season to avoid litigations.

v. Residential Dwellings are recognised as private family land even if is in ruin. The Imam (Emir) is expected to protect the interest of the family and has limited power over such lands.

vi. Land owned by the state. In contrast to private possession, state owned lands are directly under the care of the Imam (Emir) as the sole custodian of designated public lands described as:

- Waste Lands (Mawat) defined as lands abandoned by its owners for so many years not in cultivation even if trees have been planted could be reallocated to other people and be given right of its ownership by the Imam (Emir).
- Deserted Land (Luktah): the Imam (Emir) can assign ownership of deserted land but possession title still remains with the original owners.
- Nature Parks (Himma) lands reserved by order of the Imam (Emir) for special community purposes, which must be small in area of not more than one square mile, and contain no planted trees or buildings and its reservation, must not interfere with the needs of the community.
- Water and Grazing Lands. The law prescribes water and grazing lands must be under the jurisdiction of the Imam (Emir) and not any individual rights. The law draws a distinction between lands lying near the towns (Hurumi) and distant ones (Makiyaya) which cattle can graze and return same day.
- Trust land (Wakaf) is land acquired by conquest or under treaty and who ever farms on it must pay (Goron Gona) to the state. The Imam (Emir) can allocate it to an individual covering his lifetime only after which its possession reverts to the state.

However, settlement of land disputes lay in the hands of the executive Imam (Emir) and not with the judiciary (Alkali). The central idea is that the Imam (Emir) as the custodian of lands in his community is in a better position to know the history and or the boundaries of farmlands under disputes through his representatives. This legal backing was not without its own problems.

**History of colonial land reform in Northern Nigeria**

In 1903, when the British forces captured Sokoto seat of the caliphate and consolidated their power over Northern Nigeria, the issue of land ownership was central to their economic goal. Land was recognised as the ultimate source of all wealth and its ownership vested in the hands of Emirs has to be taken over in order to secure “economic rent”. The annual land rent (Kudin Kasa) was abolished and substituted with another (Goron Gona) by the Caliphate as conquerors of the Habe rulers. Now conquered by another superior power it had no alternative but to accept the concept. A land reform committee under Sir Percy Girouard and Lord Crewe was established to look into ways of making land more productive to generate substantial revenue, as Goron Gona could not meet revenue requirements. The Caliphate reasoned that “economic rent theory” (Kudin Kasa) was an additional burden on peasants if at the same time they were expected to pay (Zakkat) tax on production. The Land Committee dropped the idea of “Economic Rent” as a result of several complaints and its impracticability as a source of revenue. The committee’s report led to the Natives’ Right Proclamation of 1910 turning the entire lands in the protectorate, including those declared to be “Crown lands”, under the control of the Governor who should hold and administer them for the benefit of the natives of the
protectorate, having regard to native law and customs. In making its recommendations, the committee under Sir Percy Girouard found middle ground between their western ideas of private ownership and native collection ownership. The law made use of the translated land tenure law of Malam Abdullahi Fodiye (Ta’limu Radthi).

Despite some disagreements over definitions and interpretations of the Islamic Law on land as enumerated by Sheik Adullahi Fodiye, the colonial land committee had no difficulty in defining and reverting ownership of depopulated vast areas known as Dajin Allah (God’s Bush) to government lands (Dajin Gwamna) by proclamation 16 of 1902, in Northern Nigeria. The disappearance of (Dajin Allah) and other virgin lands close to towns that chiefs used to attract developers (Gandun Sarki) and their appropriation into smaller land holdings to peasants was not without its problems.

The colonial administration later realised the advantage of providing a means of sustenance to the chiefs and leading men in the community, and the need to see the chiefs be identified with agricultural development which will bring them into closer touch with their subjects. In achieving such goal they allowed the emirs’ marginal authority over native lands even though technically all lands in Northern Nigeria were nationalised by the Ordinance. The only exception to the outright nationalisation was their recognition of Islamic law of inheritance that allows a native to hold his land without any formal deed in an indefinite and perpetual right of occupancy revocable only for “good cause”.

In Southern Nigerian, a colonial land review committee headed by Mr. Harcourt designated Crown Lands and recognised individual right to cultivate as much land as is physically possible within community land. The committee also recognised that traditional ownership passing from father to son in perpetual tenure could be forfeited unless the holder failed to use it. This rule was enforced in line with the local customs and traditions of southern regions except in some Yoruba districts. Colonial government shows no desire to interfere with the traditional land tenure and its natural evolution in the southern provinces, even though in 1911 they tinkered with the idea of unifying the “public lands ordinance of 1876” with the Northern Nigeria land tenure law.

Regardless of the land tenure systems between the North and the South of Nigeria, adopted or imposed by the colonial administration, one thing remains clear that the main objective of the land act was to safeguard agricultural and forest lands to meet their industrial and commercial needs, and secure the land that produces raw materials for their industries - at the same time creating local revenue to meet their administrative expenses. The right to native farm and grazing lands supervised by the traditional rulers ensures prompt collection of poll taxes - at the same time ensuring local control of the peasants. The taxes imposed on farmers (Haraji) and pastoralists (Jangali) not only provided the colonial government the essential local revenue, but also forced the peasants to produce cash crops (Groundnuts, Cotton, Cocoa, Rubber, Timber and Spices) that were exported for processing in the motherland. It was a win-win situation for both the colonies and the colonizers.

Post Colonial Land Reform Policies in Nigeria

At independence, the three regions were semi-autonomous in their pursuit of political, economic, and social development goals; therefore, each adopted its own land policies consistent with its customary traditions and political objectives. The West further promoted customary land tenure and ownership which supported Cocoa and Timber producers; the East did likewise with rubber and palm oil producers.

The 1962 Northern Nigerian Government re-enactment of Land tenure Act Law aimed at preserving...
and protecting native customs, with regard to the use and occupation of land, thereby giving the natives of Northern Nigeria easier access and benefits of the land and its natural fruits to enable them provide for sustenance of themselves and their families. However, the law still vested ownership and control of all lands in the hands of the governor. It recognises dual system of title ownership defined as (a) "customary rights of occupancy" to be administered by traditional authorities covering all those tenure systems administered by the traditional leaders during colonial period, and (b) "statutory rights of occupancy" which were administered by the government through the issuance of certificates of occupancy granted to persons, including foreigners, usually for a specific period and purpose, which includes commercial agricultural lands.

Military Government Land Reforms

"He that will not apply new remedies must expect new evils, for time is the greatest innovator". Francis Bacon

In 1966 when the Military took over the administration of Nigeria, their major objective was to unify political, administrative, and economic systems of the polarised regions. The idea of unification was hurriedly introduced leading to civil war, which further increased tensions and economic uncertainties. Except for the oil prices upsurge in 1972, the agricultural economy alone could not have supported the increasing population. Food import bill was growing at an exponential rate while agricultural lands were deserted by the youth seeking employment in urban centres.

The Military Government desirous of implementing economic development plans found it difficult to achieve its objective without a review of the land tenure laws particularly of southern Nigeria. The land Use decree that aimed at guaranteeing equitable and reliable access to land for production purposes encountered numerous difficulties. In Southern Nigeria, the formalised and amalgamated land tenure law became the source of consuming litigations promoted by special interest groups that slowed down infrastructural developments and increased the marginalisation and misery of small agricultural holdings.

One of the major objectives of the land reform of 1978 was to enable government control the use of land and its resources, unify the land tenure system, and create opportunities for landless peasants, as well as attract agricultural investment in rural areas and carve land speculations in urban areas. The economic upturn of the 70’s from increased oil revenues changed land status from physical to financial asset and increased its speculative value particularly in urban centres. Land was excessively high in price and accessibility was difficult to obtain by peasant farmers or private developers.

Criticisms of Military Land Reforms

i. The objective of the 1978 Land Use Act remained largely unfulfilled because it only substituted control from family and traditional rulers to the governor and local government chairman. It obliterates age-old tradition of land tenure system of ‘customary law’, in favour of political control by people that have no attachment to land or substantial interest in the local affairs of the community. Technically, the land use decree dispossessed family and the community leaders of the customary rights of agricultural lands in favour of alien arrangement, which creates absentee landlords even in communities that are living on marginal agricultural lands.

ii. Even where land was readily available and fertile, the decree allowed land speculators to acquire substantial portions in anticipation of future development by vesting control of rural land in the hands of local Government. The Law discourages local supervision by community leaders and encourages destruction
of ecological balances as transient local government functionaries abused their power by allocating forest reserves and wetlands lands to their political cronies indiscriminately, without consideration to the long term effect on the communities.

iii. Instead of making land available to the peasants, the law merely encourages city elites to take the opportunity to acquire substantial agricultural lands in rural areas depriving the local communities the right to their livelihood and fuelling civil discontent. Several cases are abounding in the Emirate where speculators acquired legally substantial fertile lands, even in some cases beyond the legal limits, and left them fallow to the detriment of local peasants. In some areas where the communities encroached on such lands, punitive measures were taken against them.

iv. The idea of absentee landlords as promoted by Land Use Act of 1978 justifies its failures to correct the mistakes of traditional tenure system, which was said to place constraints in achieving self-sufficiency in agricultural production. The dispossession of peasant farmers of fertile agricultural lands in many areas led to general degradation of agricultural outputs and greater reliance on imported food (rice, wheat, and sugar) that could easily be produced in sufficient quantities locally. The policies generally disfavoured the peasants and seriously affected the social fabrics of the society it was meant to protect.

v. A landless peasant has only two options open to him under this arrangement, one is to remain in the village and earn his living working on other peoples land for a fee that will hardly support him and his family; or to migrate to urban centers and try his hand in other less attractive occupation such as crime.

vi. Moreover, the obvious provisions of land reform laws have placed additional hardships on the poor in securing grants and certificates of occupancy that take years of bureaucratic formalities. The time and money consuming procedures exclude the weak in society from possession of land and promote feudal/serf relationship, which the laws aim to eliminate. Under the traditional land tenure in Northern Nigeria a peasant could acquire permanent or temporary farmland within the shortest possible time through his village head for a small annual stipend (Goron Gona), usually one percent of production. If a peasant fails to acquire land in one village, he moves to another until he is able to secure a permanent land.

vii. Another problem of the reform vested substantial powers in the land allocation committee appointed by the governor, usually civil servants and or political office holders whose interest is in serving their boss, not the long term needs and aspirations of the peasant farmers. It is a common knowledge that land allocations in all parts of the country are done through favours to friends, family members and cronies, while those that needed the land most could not benefit from such bonanza.

**Land Reform for Increased Food Production**

"It is not enough to understand, or see clearly the future will be shaped in the arena of human activity, by those willing to commit their minds and their bodies to the task". **Robert Kennedy**

If the sole purpose of land reform is to increase productive capacities of the nation, then any agrarian policy that fails to balance the competing social and economic needs of its people is bound to create food insecurity as it happens in Zimbabwe land reform.

One of the reasons adduced by many observers of Nigeria's abysmal performance in agricultural production is the absence of effective and efficient land reform program that will provide rural communities easy access to farm lands. However, our problems in Nigeria go beyond easy accessibility by peasants with small land holdings, even though significantly important to our overall production. Fundamental paradigm shift is required to open up new frontiers for commercial agriculture in line with the Kwara State experiments.

Regardless of the method adopted in the agrarian land reform, its success or failure is determined not by any particular group benefit but its overall impact on socio-cultural and economic conditions of society in general. We should take into account that while in some of our communities, fragmentation of large holdings into smaller units will be of greater advantage in increasing productive capacities as well as social harmony, in others, consolidating the fragmented land holdings will increase the level of output as well as provide equitable distribution of resources.
Many people’s views on land reform are generally in favour of redistribution of land resources - erroneously considered the easiest way of eradicating food insecurity and rural poverty - “the greatest good for the greatest number” or “land to the tiller”. However, these notions as cogent as the benefits of modern technology could best be achieved through land consolidation. Moreover, the notion of forceful acquisition of land will be in direct conflict with the prevailing democratic belief and ideologies of free enterprise, which emphasises “Protection of Property Rights”.

Established Local Land Registry
For the long-term success of any land reform in Nigeria, a local land registry must be developed to meet the immediate as well as the long-term goals of the reform. Modern (GPS) technology has provided an inexpensive way of establishing cadastral map of land holdings. A well-documented and recorded land will not only enable peasants secure good land titles they can trade for cash, but also allow them to pledge as collateral to obtain seasonal loans and improve their economic position in society, as well as reduce their level of poverty.

Food Security beyond the Land Reform alone
The 1999, Federal Government economic policy direction recognises agriculture as the mainstay of rural economy that deserves highest priority in achieving rural development and poverty reduction, yet nothing was said in the policy about land reform as a means of achieving such objective. However, regardless of what Land reform is adopted, land redistribution or consolidation alone could not guarantee increased agricultural production or self sufficiency in food, until we are able to translate into action the agricultural potentials enumerated in the policy document.

Problems of Unfulfilled Promises
Government to provide adequate and easier delivery of agricultural credit to peasant farmers could not afford to borrow at prevailing two digit interest rate and produce at a profit. Government promised empowerment of the private sector enterprises to provide high yielding seeds and other inputs, yet farmers could not afford the commercial process charged by distribution companies. Government promised to embark on massive expansion of grains, beans, palm produce, rubber, and cotton production; yet agricultural extension workers are not trained to meet the demands of modern agricultural technologies. Government said it would embark on a massive campaign with appropriate policies designed to achieve self sufficiency and expand export volumes in crops, such as rice sorghum, ginger, groundnut, cocoa, coffee, and others, yet our food import bill of grains and animal products is growing exponentially. Government said it would aim at self-sufficiency in industrial crops, such as soya and guarantee producer prices in line with national priorities for self sufficiency and increased exports, yet the nature of our exports is still in primary not processed manufactured goods.

The huge resources expanded by government to support agrarian programme to revitalise production, such as Operation Feed the Nation, Green Revolution, Directorate of Food and Rural Infrastructure, River Basin Authorities, Agricultural Development Agencies and Supply Companies, NALDA, FADU, Agriculture and Co-Operative Banks, Micro Finance Banks, Grants in Aid from World Bank and other donor agencies, have done little in moving our farmers away from primitive agricultural tools and practices of subsistence crop farming and animal husbandry, simply because of top down approach and unnecessary overheads.

Since in the early seventies, agricultural Policy distortions and inconsistencies eroded the enthusiasm of peasant farmers and forced the closure of commercially oriented farms. One of the major difficulties in achieving sound policy is the general deceitful attitude of our political leaders and government functionaries in dealing with peasant issues. Promises of abundant fertilisers to peasant farmers have always been top in their campaign agendas for vying political office. Even our intellectuals operate at different wavelength with the peasant farmers in the conceptualisation and application of agrarian policies. The distorted policy approach to fighting hunger, poverty, environmental degradation, provision of easy credit, and reliable marketing systems is an example of lack of in-depth understanding of peasant farmers needs. Our Universities and research centres are under-funded to carry out meaningful researches, while our Banks are not geared to developmental lending.

The top bottom approaches and dissemination have proved to be of
The top bottom approaches and dissemination have proved to be of limited effectiveness in addressing the real issues affecting the farmers. Each time government reacts to situations by introducing new policy; it does so without recourse to old policies and consultations with farmers as stakeholders.

The obvious disconnect in policy formulation linking the interdependency of socio-economic factors to agricultural activities led to improper pricing of farm outputs. As a result, farmers are forced to sell their early produce at below cost of production, after harvest just to pay nagging loans. Those farmers with less to sustain themselves through months are forced to pursue ecologically destructive, economically unproductive activities to sustain their families for the remaining season. By the end of the hunger months they have destroyed their immediate forests, in the course of making firewood to sustain their livelihood. The destroyed eco-system increases soil erosion, which pollutes their rivers and lakes. Subsequently ravaged agricultural landscapes become unproductive wetlands. The competition for remaining productive lands leads to civil conflicts as the impoverished disease stricken people vie for control of scarce fertile lands, as we constantly witness every year in our rural communities.

In the course of the promotion of commercial production of staple crops, experience has shown that the real issues affecting the farmer are shrouded with policies that have no direct consequence to his overall development or output. Looking back to the amount of money expanded on several agricultural support programs, compared to other less endowed countries that have overcome their deficiencies and forged ahead in exploiting their agricultural potentials, it gives a cause for serious concern that despite Nigeria’s God given material and human resources agriculture is still at the back seat in our development efforts.

The Future lies in Science and Technology

During his visit to Nigeria James D. Wolfensohn, President, World Bank in an interview said as follows:

“In every village and urban slum that I have visited around the country, I have been profoundly moved and impressed by the spirit, will, creativity, and determination of people to live and provide for their families, even in the most difficult circumstances. Our challenge as outsiders is to find ways of tapping and unleashing the inherent creativity of people to mobilise resources, come together and solve their own problems.”

Nigeria’s best hope for food security is in the strategic

limited effectiveness in addressing the real issues affecting the farmers. Each time government reacts to situations by introducing new policy; climatic changes, are likened to a person who got stuck in a pot of glue, the more he tries to pull himself out, the deeper he gets in sticky mixture.

Traditional small-holder farmers, who use hoes, cutlasses, rakes, animal drawn tools, bush-fallow system of cultivation, account for around two-thirds of Nigeria’s total agricultural production of subsistence food crops (mainly sorghum, maize, beans, yams, cassava, rice and millet); yet these farmers depend on elites to determine what subsidy or when they receive those subsidies. A deceitful free trade policy imposed on third world countries has added miseries to small farmers who now have to pay over N2, 000 to purchase one bag of fertiliser.

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development of agro-allied industrial centres that will utilise domestic raw materials and raise productive capacities of small farmers through application of scientific agronomic practices. Recent scientific developments worldwide are reducing the strategic importance of land as the primary resource for agricultural production. In the heart of the cities of Tokyo and Hong Kong where land value per square metre could buy several hectares of land in rural Nigeria, experiments are proving that the future of agricultural production is not in the land area alone but the utilisation of available technology. If a Wisconsin farmer who has to battle with frost in the winter months can grow enough food to feed two thousand people on his two hectare farm, there is no reason why a Nigerian farmer with plenty of sunshine and in some areas abundant water resources could not feed half as much people on the same size land. Likewise in the Brazilian semi-arid regions and Israeli desert, research innovations have produced crops and grass species on marginal lands that few years ago were thought to be impossible. In Canada and several northern European countries with virtually no summer month, the use of GM crops has revolutionised production output per hectare to an unimaginable level.

If we wish to stimulate agricultural productivity and provide food security, we must introduce productivity enhancing biological, chemical and mechanical technologies that will boost food production and reduce the size of land required for production purposes. Despite the concerns of ‘terminator seeds’, the future of agricultural revolution lies in genetic engineering (GMC), which helps us produce plants with greater tolerance for drought and insects, and at the same time improve nutritional qualities of our staple foods. In Jigawa, particularly, experiments by Sasakawa Global 2000 proved that with little support in existing farming methods (availability and application of improved seedlings, chemical fertilisers, pesticides, water utilisation, and correct timing) yields in maize and wheat increased up to three fold on the same plot of land. Our farmers were able to synchronise the seasonal variations by planting improved open-pollinated maize early in the rainy season and MB2 Seri wheat varieties during the harmattan.

Urgent Steps

- Government should continue to be the prime mover in providing extensive rail transport and road networks that will enable farmers transport their products from farm gate to the market at relatively cheap rate.
- Chemical Fertilisers must be affordable and available at all seasons in all rural areas.
- Introduce smallscale mechanical tools and make them available at subsidised price to peasant farmers.
- Water, as the most valuable input in agricultural activities, must take centre stage in agricultural policies. Federal and State must find an amicable solution in joint control of river basins. The total control of Federal Government of river basins has prevented many states from actively developing irrigation projects. Persistent flooding during the rainy season as the dams overstretch their capacities, perennial supply of water during the dry season have not only affected the ecosystem but also placed substantial burden of poverty on the peasant farmers. State governments must invest in water management by constructing more small dams, wash bores, tube, wells, rain harvest, and drip irrigation.
- There is sufficient technology worldwide for dissemination, if we could encourage extension staff to put their knowledge into increased production of crops. Highly trained extension workers are essential in enabling farmers to improve agronomic practices from land preparation, soil condition, seedlings, planting methods, fertilisers, weeding, pest and disease control, storage, and marketing of their produce.
- It is common knowledge that this country loses as much as 30 per cent of its agricultural production to poor storage, farm loss, and marketing difficulties. The effort of (NSRD) and other related bodies to reduce wastage and achieve substantial result in the preservation of output has been hampered by policy induced distortions.
- Institutional credits are still top to down functions that are supply-driven rather than demand-driven; it makes farmers to wait for what is available and when it is available. This
condition is compounded by double-digit interest rate charged on agricultural loans, low level of literacy and poor flow of market information in rural areas. Our micro-finance banks were promised in January this year that 1 per cent of their respective local government revenue will be made available as micro-credit to small farmers to enable them purchase inputs for this year’s rainy season; as at today, no farmer has received any support in procurement of input through our micro-finance Banks.

- There is no doubt increased funding in environmental disaster studies, soil erosion/degradation, soil fertility restoration, development of conservative-tillage, drought monitoring and greater use of organic and judicious use of chemical fertiliser will enable us not only better protect our environment but also help us restore its productive capacities.
- Encourage the use of one of our traditional measures of reducing hunger and providing daily supply of food to the under privileged and physically challenged persons in society is achieved through traditional social support mechanisms, community food reserves (rumbun-tsimi), community farms (gandu), special nutritional programs during harvest festivals, religious injunctions of Zakkat, sadakah, etcetera. The Dutse Emirate in Northern Nigeria, last year alone, distributed more than 10,000 metric tons of grain to the needy through Zakkat.
- Fast track land reform is required by our legislators to include the establishment of land legal assistance centre, which would offer free legal services to most deserving peasant farmers to acquire agricultural land in their immediate communities.

**Conclusion**

Land reform alone is not a guarantee for food security unless vigorously supported by intensive agricultural production of high yielding varieties that will lower cost of production, be able to cut wastes through output preservation, improve infrastructure and distribution network, and at the same time save ecosystem. Government must initiate and expand the capacities of existing dams and lakes, encourage water conservation for aquaculture and irrigation, establish grain silos and cold rooms in strategic locations, and reduce bureaucracy in agriculture land certification.

In today’s Nigeria, land is still the most important factor in agricultural and livestock production. Our total arable land area (71.2 million hectares) currently could support the entire African population and still be able to export surpluses.
"Nuhu Muhammad Sanusi is the Emir of Dutse, Jigawa State

An unedited version of this paper was first presented at the 14th Nigerian Economic Summit, which held in Abuja-Nigeria from October 21-24, 2008

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