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AGRARIAN PRODUCTION, PUBLIC POLICY AND THE STATE IN KANO REGION, 1900-2000

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Preface

Drylands Research Working Papers present, in preliminary form, research results of studies carried out in association with collaborating researchers and institutions.

This Working Paper is part of a study which aims to relate long-term environmental change, population growth and technological change, and to identify the policies and institutions which are conducive to sustainable development. The study builds upon an earlier project carried out by the Overseas Development Institute (ODI) in Machakos District, Kenya, whose preliminary results were published in a series of *ODI Working Papers* in 1990-91. This led to a book (Mary Tiffen, Michael Mortimore and Francis Gichuki, *More people, less erosion: environmental recovery in Kenya*, John Wiley, 1994), which was a synthesis and interpretation of the physical and social development path in Machakos. The book generated a set of hypotheses and policy recommendations which required testing in other African dryland environments. Using compatible methodologies, four linked studies have been carried out in:

Kenya	Makueni District	
Senegal	Diourbel Region	
Niger	Maradi Department	(in association with ODI)
Nigeria	Kano Region	(in association with ODI)

For each of these study areas, there is a series of working papers and a synthesis, which have been reviewed at country workshops. An overall synthesis was discussed at an international workshop at London on 17 January, 2001.

The *Working Papers* on Nigeria are included in a combined Niger-Nigeria Series. The Nigeria component is limited to one in-country study of food marketing in the Kano Region (leader Dr J. Ayodele Ariyo). The remaining studies, which are written in the UK, explore other aspects of long-term change in natural resource management, livelihoods and policy, and are based on published and unpublished material. The Research Leader for these studies is Michael Mortimore. He, Mary Tiffen or Raufu Mustapha may be contacted at the following addresses.

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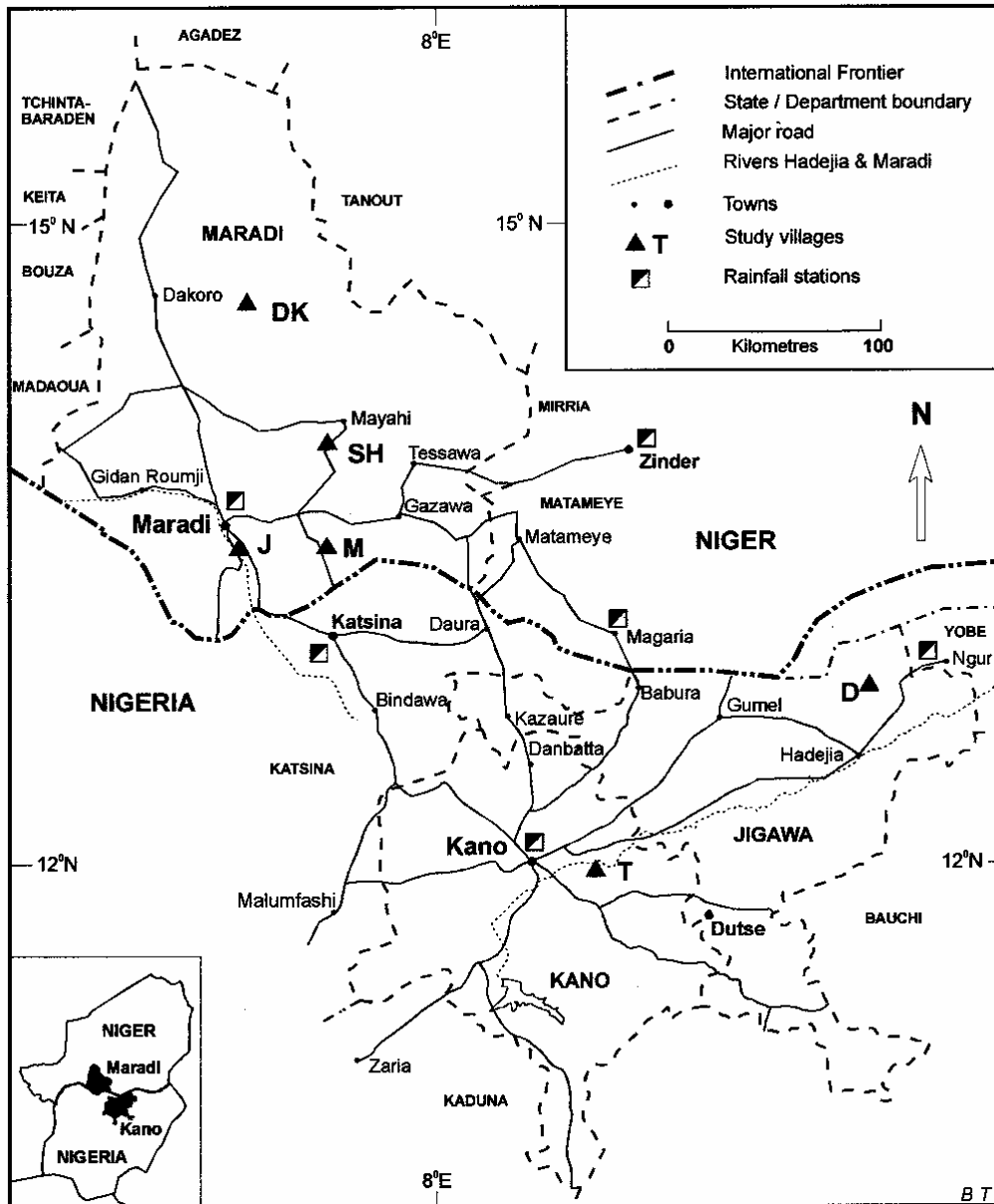
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Preface map



Abstract

This paper explores the complex interaction between the process of agricultural production in the rural areas surrounding the city of Kano on the one hand, and the institutions and activities of the state on the other. The emphasis is not only on the policies of the state, but also on its institutional and procedural changes over the period 1900 to 2000. Over the 100 years in question, agricultural producers were subjected to direct political and economic pressures emanating from the institutional design and the programmatic activities of the state in its pre-colonial, colonial, and post-colonial formats. The state also imposed indirect effects on the agrarian system through its attitude to the market and the promotion of economic specialisation. While some of the state's effects were largely extractive in their orientation to the rural areas, others sought to reshape the conditions of agrarian production for improved productivity. In tracking these processes, the central concern is to map out the forces that have shaped the contemporary realities of the region. Specific aspects of colonial economic history explored include the development of colonial science and developmentalism, the role of marketing boards, and the attempt at a capitalist transformation of Nigerian agriculture by the post-colonial state. Finally, the paper draws attention to the policy legacies of colonial developmentalism within the post-colonial state system.

Résumé

Ce document explore l'interaction complexe entre le processus de production agricole dans les zones rurales entourant la ville de Kano d'une part, et les institutions et activités exercées par l'Etat d'autre part. Il ne se focalise pas uniquement sur les politiques suivies par l'Etat mais également sur les transformations des institutions et les changements des procédures qu'il a effectué pendant la période allant de 1900 à 2000. Pendant ces 100 ans, les producteurs agricoles ont subi des pressions politiques et économiques directes émanant des structures institutionnelles et des programmes élaborés par les gouvernements de l'ère précoloniale, coloniale et postcoloniale. L'Etat a également eu des effets indirects sur les systèmes agraires par le biais de son attitude vis-à-vis des marchés et la promotion de la spécialisation économique. Bien que certains de ces effets avaient généralement un caractère extractif quant à leur orientation vis-à-vis des zones rurales, d'autres avaient pour objectif de réorganiser les conditions affectant la production agricole afin d'améliorer la productivité.

Les caractéristiques de la zone entourant Kano qui est une région densément cultivée et peuplée sont le résultat d'une longue période d'interaction couvrant plusieurs siècles entre le commerce, les institutions des pouvoirs politiques et les habitants. Ce lien étroit entre les marchés, les pouvoirs politiques et la production économique, avec ses nombreuses combinaisons possibles et permutations, fait partie intégrale de l'histoire de Kano depuis l'ère précoloniale. Les Britanniques occupèrent Kano en 1903. Ils furent confrontés par quatre problèmes cruciaux sur le plan politique. Premièrement, il y avait le problème de l'abolition de l'esclavage. Deuxièmement il fallait entreprendre une réforme du système foncier. Troisièmement, il fallait réorganiser les institutions et les procédures qui permettait de relier Birnin Kano aux régions situées plus à l'intérieur. Et enfin quatrièmement, il fallait générer des revenus afin de pouvoir financer l'administration coloniale. Afin de trouver des solutions à ces quatre problèmes, les autorités coloniales prirent certaines décisions qui transformèrent de manière radicale la structure et la dynamique des forces affectant les zones rurales de la région de Kano.

La conséquence de ces actions fut la création d'un nouvel état où fut incorporé de nombreux éléments de l'ancien système, tout en créant de nouvelles formes d'interaction entre les zones urbaines et rurales. Bien que les conséquences de ces changements eurent beaucoup d'impact, elles ne parvinrent pas néanmoins à transformer la région de Kano en une zone agricole avec de grandes exploitations capitalistes ou dominée par une élite de gros propriétaires du type latifundiste. Le résultat, et celui-ci était autant dû aux politiques gouvernementales qu'aux circonstances historiques, fut l'émergence d'une agriculture fondée sur des petites exploitations. Les paysans, plutôt que les propriétaires, constituèrent le groupe le plus important sur le plan sociologique étant donné leur nombre; toutes les politiques mises en œuvre doivent désormais trouver des solutions au « problème paysan ».

Les changements survenus au niveau des conditions dus à la dépression économique mondiale poussèrent l'Etat à intervenir dans la vie des paysans directement et indirectement. L'équilibre des marchés, des pouvoirs politiques et de la production économique prenaient graduellement une nouvelle orientation, offrant ainsi plus de possibilités pour une intervention politique dans le monde agricole. Cet effort de développement du monde agricole de la part du gouvernement colonial vers la fin de cette période fut appliqué à un certain nombre de domaines. Premièrement, une étude « scientifique » du système agricole utilisé dans la région de Kano et de ses effets fut entreprise. Deuxièmement, il y eut des efforts pour intervenir de manière directe au niveau de ce système afin d'améliorer la productivité. Troisièmement, il y eut des interventions des services concernés dans les domaines agricole, de la foresterie, de la lutte contre la maladie du sommeil, de l'élevage et de la conservation des sols. Enfin quatrièmement, des systèmes d'office de commercialisation furent mis en place permettant à l'Etat de réguler le commerce de l'arachide, du coton et des peaux, mais pas celui des produits alimentaires. En plus des offices de commercialisation, des conseils chargés du développement furent établis par les autorités à tous les niveaux de l'administration coloniale.

Avec l'autonomie en 1954 puis l'indépendance en 1960 les efforts de développement issus de la fin de la période coloniale se poursuivirent. Réaliser des bénéfices grâce à l'exportation de l'arachide demeura l'objectif principal de la stratégie suivie par les pouvoirs publics pendant la plus grande partie des années 1960. Les revenus générés pendant le boom pétrolier des années 1970 permirent de diminuer la dépendance de l'Etat vis-à-vis des taxes agricoles et aussi de tenter une transformation de l'agriculture nigérienne sur des bases capitalistes, caractérisée par une forte intensité de capitaux et fondée sur les progrès techniques. L'échec de cette seconde transformation conduisit à l'adoption du programme SAP (Structural Adjustment Programme) qui eut un impact mitigé sur l'agriculture dans la région de Kano.

Une succession de régimes militaires et, depuis 1999, un régime civil ont dû se débattre avec les problèmes inhérents à ce système agricole ayant subsisté. L'élaboration de politiques agricoles n'a pas toujours été consistante ni efficace, mais la sécurité alimentaire et la qualité de l'environnement ne semblent pas en avoir trop souffert. Il y a néanmoins de nombreux signes de tension et de risques d'implosion potentielle dans le système agricole actuel. La tâche des pouvoirs publics au cours du 21^{ème} siècle sera de mettre en œuvre une politique explorant les possibilités de construire un système agricole durable.

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Acronyms & Abbreviations

AAC:	Administrative Area Council
ACGSF:	Agricultural Credit Guarantee Scheme Fund
ADP:	Agricultural Development Programme
DFRRI:	Directorate of Food, Roads and Rural Infrastructure
FEAP:	Family Economic Advancement Programme
HJRBDA:	Hadejia Jama'are River Basin Development Authority
HYV:	High Yielding Variety
KANPROF:	Kano Provincial Administration: Colonial archival records
KASCO:	Kano Agricultural Supply Company
KNARDA:	Kano State Agricultural and Rural Development Agency
KRP:	Kano River Project
LGA:	Local Government Authority
NA:	Native Authority
NACB:	Nigerian Agriculture and Co-operative Bank
NADF:	National Agricultural Development Fund
N:	Naira (1972: N2 = £1; Dec, 2000: N167 = £1)
NALDA:	National Agricultural Lands Development Authority
NATSP:	National Agricultural Technology Support Project
NCMC:	National Crop Marketing Company
NEIC:	National Economic Intelligence Committee
OFN:	Operation Feed the Nation
PRP:	Peoples' Redemption Party
RBDA:	River Basin Development Authority
SAP:	Structural Adjustment Programme
SS Department:	Sleeping Sickness Department
WRECA:	Water Resources and Engineering Construction Agency

1 INTRODUCTION

This paper explores the complex interaction between the process of agricultural production in the rural areas surrounding the city of Kano on the one hand, and the institutions and activities of the state on the other. The emphasis is not only on the policies of the state, but also on its institutional and procedural changes over the period 1900 to 2000. Over the 100 years in question, agricultural producers were subjected to direct political and economic pressures emanating from the institutional design and the programmatic activities of the state in the region. The state also imposed indirect effects on the agrarian system through its attitude to the market and the promotion of economic specialisation. While some of the state's effects were largely extractive in their orientation to the rural areas, others sought to reshape the conditions of agrarian production for improved productivity. In tracking these processes, the central concern is to map out the forces that have shaped the contemporary realities of the region, which is within a 50-miles radius with Kano at its centre.

This presentation is divided into a number of historical sequences, each covering both a period and a theme. First, there was the period of colonial incorporation and commercial expansion (1903-1930). This was the period when the pre-colonial format of the Kano region was fundamentally altered by the colonial state. Second, there was the period of late colonial developmentalism (1930-1954). In this period, the colonial administration sought to address some of the consequences of the incorporation carried out in the earlier period. It was in this period that colonial 'science' and 'developmentalism' sought to re-mould the agrarian economy. The granting of regional self-rule in 1954 infused this developmentalism with indigenous aspirations and symbols, and created a continuity with the period after 1960 when independence was granted. Third, there was early 'post-colonial' interventionism (1954-1970). This was the period when the post-colonial elite sought to continue with the 'developmentalism' of the late colonial period, but under radically different social and political circumstances. Fourth, there was the oil boom period (1970-1985). This period was characterised by an attempt at the capitalist transformation of Nigerian agriculture through the massive investment of petro-naira in large-scale projects. Fifth, there was the period of structural adjustment and its attendant crises (1986-1992). The oil boom economy had run aground by 1982, leading to severe stresses that the adoption of a structural adjustment programme (SAP) in 1986 was expected to deal with.

Sixth, there was the post-1992 period when both liberalisation and small-scale interventionism characterised agrarian policy (1992-2000). This period followed the immediate structural adjustment period, and was characterised by small-scale and incrementalist measures in the agrarian sector, albeit without losing sight of the demands of economic liberalisation. The period can be politically divided into two phases, the Abacha period and the Obasanjo period. This latter phase is characterised by oscillations in policy as the Obasanjo administration sought to come to terms with problems of food security, poverty alleviation and agrarian production. It will be observed that throughout the period covered by this study, 1900 to 2000, the level of the state, whose activities and institutional dynamics have the most relevance for agrarian production around Kano, was constantly shifting away from the local: from the Kano Native Authority, to the Northern Regional Government, and finally residing in the Federal Nigerian state.

2 COLONIAL INCORPORATION AND TRANSFORMATION, 1903-1930

The densely farmed and densely settled region around Kano evolved out of many centuries of interaction between commerce, the institutions of political power and the region's inhabitants. This intimate connection between markets, political power and economic production, in its many combinations and permutations, is integral to the history of Kano. Even in the pre-colonial period, the state displayed a capacity to influence the fortunes of agricultural production in the Kano region. The process of state formation started between AD 900 and AD 1000 (Palmer, 1908:61). The structures and procedures of this emergent state were increasingly refined to entrench the principle of aristocratic rule over large populations of free-born people and slaves. However, this emergent state was only lightly represented in the agrarian countryside right up to the era of the *Gidan Rumfa* dynasty, which disappeared around 1623. Subsequently, the *Kutumbawa* Sultans, who established the next dynasty, moved to bring the rural economy under closer supervision in the face of declining state revenues from commerce. This development gave rise to the increasing penetration of the rural economy by the state; a process which was only finally consolidated in the post-*Jihad* (1807) era (Last, 1983).

The *Jihad* itself led to the increased sedentarisation of nomadic pastoralists through the provision of delineated cattle tracks and grazing fields (Burnham & Last, 1994). The incorporation and integration of rural areas during the seventeenth and eighteenth centuries transformed the relationships of rural households to the state on the one hand, and the market on the other. The state increased its capacity to appropriate resources via taxation and labour services. A more complex pattern of the division of labour developed, with increased specialisation and intensification of exchange. Kano developed a complex economy based on commerce, slave plantations owned by the aristocracy, extensive holding of slaves by free-born commoners, and manufacturing. Most of the manufacturing was based in the rural areas around Kano (Lovejoy, 1980).

The German explorer, Heinrich Barth noted the centrality of the Kano region in the economy of the central Sudan in 1851 (Barth, 1962). Reverend Robinson also described Kano in 1894 as the Manchester of Central Africa, supplying manufactures to vast territories from the Gulf of Guinea to the southern shores of the Mediterranean (Robinson, 1896a: 22;1896b). The core of this economy lay in highly productive crafts in the rural areas, fuelled partly by demands from the state. The increasing integration of the rural economy of Kano into a wider regional and international framework in the eighteenth and nineteenth centuries was also matched by an increasing penetration of the rural society by state power and state institutions emanating from the capital in *Birnin* (city of) Kano. The rural areas were divided into fiefs, held mostly by absentee title-holders resident in Kano. The task of collecting taxes from these fiefs, and generally maintaining the rural-urban political connection, fell on a network of clients and messengers of the title-holders, called *jekadu* (sing. *jekada*).

The British occupied Kano in 1903. They were confronted by four crucial policy issues. First, there was the question of the abolition of slavery. Second was the reform of the land tenure system. Third was the need to re-work the institutions and procedures that connected Birnin Kano to its hinterland. And fourth was the raising of revenue to finance the colonial administration. In tackling these four tasks, the colonial authorities took several decisions which radically altered the structure and dynamics of rural Kano.

What emerged was a new state which incorporated many elements of the old state system while also creating new forms of urban-rural interaction. Contemporary rural Kano is very much a product of this colonial re-working of the pre-colonial template.

2.1 From slavery to landlordism?

The first question was that of slavery. Though the colonial enterprise sought to justify its imperial mission by the need to abolish slavery, earlier Lugardian colonial experience in East Africa (Lennihan, 1980), and the practical exigencies on the ground, suggested that the task was anything but a straightforward Christian duty. The desire to free slaves was matched by an even stronger desire to prevent the feared collapse of the pre-colonial social order, on which the colonial enterprise pinned its hopes under the rubric of Indirect Rule. The way in which the dilemma over slavery was resolved gave a specific and continuing class character to rural Kano. It is difficult today to assess the proportion of slaves within the total population of 19th century Hausaland. However, it is generally agreed that slavery was more concentrated in the Sokoto Caliphate than in any other part of Africa (Ayandele, 1967: 329). And within the Caliphate, Kano Emirate has been singled out as *the* major slave using area (Hogendorn, 1977). Both Barth and Robinson gave a ratio of freeborn to slaves in Kano Emirate as 1:1. Slavery was therefore a central part of agrarian production in the Kano region and colonial policies towards its abolition were bound to have crucial consequences.

In its quest to abolish slavery, the colonial administration was mainly concerned with two inter-related issues: how to protect the privileges of the slave-owners, thereby maintaining the social fabric of the society; and second, how to prevent the problem of freed slaves becoming idle vagrants (Lugard, 1906:136). This concern for the interests of the slave masters meant that colonial policy was addressed not so much to securing the freedom of slaves as to finding ways of creating a wage-labouring class, to till the lands of the ruling classes in the face of the gradual disintegration of slavery. Lugard defined the role of the early colonial Government in terms of *retarding* the disintegration of slavery (Lugard, 1906:138). The colonial administration seemed to be more interested in regulating slavery than in abolishing it. Towards this end, it was suggested that policy should concentrate first on stopping slave raiding; second, on stopping the buying and selling of slaves. This aimed to cut off both the supply-push and the demand-pull that kept the wheels of slave *dealing* turning. The policy deliberately sought to maintain the position of the millions already enslaved. It found expression in Lugard's Slavery Proclamation which declared all children born after April 1, 1901, to be free, and abolished the legal status of servitude, but did not make slavery itself illegal. However, domestic slaves were not to be removed for purposes of sale, gift, or transfer (*Annual Report, Northern Nigeria*, 1901).

Whatever the intentions of their British overlords, the slaves themselves had other ideas. As British occupation gathered momentum, many slaves saw it as an opportunity to get away from servitude and set themselves up as independent farmers (Jalingo, 1980). This was frowned upon by the colonial authorities, who accused the runaway slaves of 'living a life of idleness and lawlessness', and steps were to be taken to prevent the slaves from occupying new lands and cultivating such lands on their own behalf (Hill, 1972).

At this stage in the colonial enterprise, the major concern of the Lugardian

administration seemed to be the conversion of the pre-colonial aristocracy into a landed gentry, and the slaves into a wage-labouring class (Shenton, 1986). If this scheme had gone ahead as originally conceived, we would have seen a radically different form of agrarian production emerging in rural Kano. The resultant system might have been closer to capitalist agriculture, or something similar to the landlordism of the *mailo* system in rural Buganda. However, after the departure of Lugard in 1906, his grand project was dropped by his successor, Girouard, who was unsympathetic to the idea of creating a landlord class, either foreign or indigenous.

Even after Lugard's departure, escaping slaves who sought to attach themselves to the British, as a means of securing their freedom, were prevented from so doing by the colonial authorities, who more or less sent them back into servitude (Fika, 1978:198). And in the face of the pressures brought to bear on slaves desiring freedom - taxes, refusal to grant farmland, and an unsympathetic judicial system - the only avenue open to the slaves was to migrate to areas *relatively* outside the effective control of both the pre-colonial aristocracy and the colonial administration. Migration away from the Kano region therefore became a pronounced trend in the early part of the twentieth century (*Annual Report, Northern Nigeria*, 1910). Clough notes that many farmers in the Kankara area of southern Katsina were descendants of Kano slaves who had migrated there (Clough, 1996). The second consequence of the colonial policy on slavery was the gradual emergence of a smallholding peasantry, and not the wage-labouring agrarian working class that had been hoped for. Only a few aristocratic estates survived, with their erstwhile slaves and their descendants occupying a new situation akin to labour tenants. The smallholder peasantry today constitutes the numerically dominant social class in the Kano region.

2.2 Land policy

In Hausaland, there was not, and there is not, a concept of lineage land (Rowling, 1949). By the end of the nineteenth century, there was a tendency in Kano towards the individualisation and commercialisation of land, and the distinction between the juridical ownership of the land by the pre-colonial caliphate, and freehold by individual occupiers, was becoming increasingly a legal fiction (McDowell, 1969). In 1900, the colonial administration enacted the *Land Proclamation No. 8*, which made it illegal for non-indigenes of Northern Nigeria to buy land in the colony without the consent of the High Commissioner. In 1902, the *Land Proclamation* was amended. The new *Lands Proclamation (Amendment) Proclamation No. 13* stipulated that all lands not in the actual occupation of persons or of their tenants and agents, and all lands being the property of any conquered or deposed ruler, were to become public lands. Increasing confusion within colonial legislation on land, and the general lack of correspondence between legislation and reality, prompted the establishment of the Northern Nigeria Lands Committee, which sat in 1908.

The Committee was very much under the influence of colonial officials who were bitterly opposed to the principle of freehold rights in land, and totally unsympathetic to the Lugardian scheme of turning the pre-colonial aristocracy into a landed gentry and their slaves into an agrarian working class. The Committee decided that it was necessary to resolve the confusing situation and recommended the nationalisation of all land in order to bring it under government control. These lands could then be leased back to the users, who had only the right of usufruct, with the Government retaining the right to

cancel the lease and re-acquire the land. In the event of such an acquisition, Government would only pay compensation for unexhausted improvements made to the land, but not for the land itself. The idea behind the recommendations was the conversion of alleged 'tribal' rights in land into general 'national' rights (Girouard, 1908a;1908b). The land-use rights granted by the subsequent 1910 *Proclamation* could not be transferred without authorisation, and on no account was a market in these rights to be tolerated. Consequently, the alienation of land or land rights was discouraged. While in the Kano region, farms, houses, and building sites were freely sold before British occupation, it now became an offence, punishable by the Emir, to sell land (Luning, 1965).

As Polly Hill aptly pointed out, if the Hausa peasant knew that he did not own his land, he ignored the fact. People in both urban and rural areas continued to exchange land for money. Colonial land policy therefore rested on an historical fiction and a contemporary fiction; its significance was ideological. British policy was now firmly committed to the development of smallholder peasant agriculture, to the exclusion of the forces of large-scale agrarian capitalism, both indigenous and foreign. This land policy reinforced the smallholder character of the agrarian system. Importantly, it also created the legal and procedural foundation for subsequent interventions by the late colonial and the post-colonial states into rural life.

2.3 Administrative penetration

The third important area in which the early colonial state remoulded agrarian life was in the area of the administrative infrastructure that tied rural and urban Kano together. In 1902, Lugard pointed out that the appointment of officers of state under the pre-colonial emirates did not make for what the colonial authorities saw as good government. In Kano, Emir Aliyu was said to be one of 64 brothers, all of whom had to be found positions of some dignity within the state system; and similar positions had to be found for numerous uncles, sons, and nephews. Thus under Aliyu, the state hierarchy consisted of 12 chiefs appointed from the royal family, 20 hereditary offices, six non-hereditary, and eight held by the Emir's court slaves. Below these 46, were many petty office-holders and other minor territorial chiefs (*Annual Report, Northern Nigeria, 1902*). The colonial authorities rejected the practice of ruling through slaves and tax-gatherers, the *jekadu*. Lugard compared this system to the 'Byzantine Palace Cliques' of Constantinople, and regarded it as 'the curse' of the emirates. He argued that the system allowed the exercise of power without responsibility, and the subjection of whole communities to the tyrannies of gangs of 'low-class and avaricious retainers.' He therefore felt the necessity to carry out a systematic overhaul of the Emirate's administrative structure, ostensibly in the interest of rural inhabitants hitherto subject to oppressive demands (*Annual Report, Northern Nigeria, 1906*).

The colonial administration divided the Protectorate of Northern Nigeria into provinces. Each province was run by a Resident and contained a number of emirates. In some provinces a group of emirates constituted a division; Kano Emirate was a Division on its own. Each emirate was divided into districts, under district heads; and below the district was the village area and its village head. Each village area was composed of a major village, and some outlying hamlets. The hamlets had hamlet heads. Under Lugardian Indirect Rule, while the colonial administration ran the provincial and divisional administrations, the Native Authority, in the person of the Emir, ran the district, village and hamlet administrations. While it was relatively easy to establish the provincial and

divisional administrations, and to constitute the Emir into a Native Authority (NA), it was far from easy to constitute district and village units from the scattered fiefs of nineteenth century Kano. Thus the major administrative challenge which the colonial administration faced was the creation of effective homologous districts from the scattered fiefs of old: thereby, it was argued, ensuring a more systematic, efficient and presumably more humane hold over the emergent peasantry.

In Kano, this District Scheme started in 1903, but it was to remain a cause for serious concern to the colonial administration for a number of years. The issues involved included the accusation that Resident Cargill resorted to 'direct rule' in order to reorganise the districts; the question of the number of homologous districts into which Kano Emirate was to be divided; the role of favoured and trusted palace slaves in the Native Administration; the powers of the Emir over district heads; the requirement that these district heads reside in their districts; and the extent of the judicial powers of the Emir (Ubah, 1980). Between 1903 and 1909, Kano Emirate had been divided first into 34, and later into 14 districts; each under a district head who, from 1907, was forced to spend most of his time in his district, away from the glitter of the capital. From 1907, the quest to combat the use of *jekadu* by the new district heads prompted the division of the districts into sub-districts, under sub-district heads. By 1912, Kano Emirate had 13 districts and 56 sub-districts. Many new legislative powers, without precedent in pre-colonial Kano, were concentrated on the Emir and exercised on his behalf in the countryside by these new apparatuses of the state.

The new administrative scheme faced numerous threats, not least of which was the quality of the men sent to the districts; these men were said to be so 'ignorant' that they were considered 'an absolute danger to the proper administration of the province.' (*Annual Report, Kano Province, 1907*). Persistent problems with tax leakages, and the use of *jekadu* by the sub-district heads, meant that continuous efforts were made to reform the organs of the state in the Kano countryside. In 1915-16, attempts were made to modify the system by creating larger village units under each village head. Four thousand different village units were grouped into about 500 homologous units with paid village headmen. By 1918, attempts were underway to abolish all sub-districts, while gradually increasing the number of village units, which reached 1200 in 1936. However by 1920, the entire Native Administration had allegedly degenerated to a 'state of mal-administration and chaos...' (*Annual Report, Kano Province, 1921*). Touring political officers discovered that the peasantry had fallen prey to their new political masters, and rampant extortion was the order of the day. Thus in 1920, a series of reforms, associated with the name of Major Budgen, were carried out in rural Kano: 'unpaid blackmailing *jekadu*' working for the district heads were replaced by paid messengers with limited and specific functions. Paid scribes assigned to all district and village heads were to perform tasks which they had hitherto given to *jekadu*. Hereditary village headship was encouraged, to bolster village authority; many village and district heads were deposed; and finally, supervision was increased.

By 1926, the essential features of the new state structures in the countryside had been worked out, against the background of the alliance between the British and the pre-colonial aristocracy. Homologous districts with resident district heads had replaced the scattered fiefs of old which were subject to the authority of absentee fief-holders, and dominated by visiting *jekadu*. And homologous village units, with village heads to whom all residents were responsible, had replaced the previous situation whereby

villagers could owe allegiance to chiefs other than those in the village in which they resided. In short, colonialism resulted in the *extensive* and *intensive* penetration of the countryside by the state. The sort of 'economic autonomy' (Hill, 1977:16) enjoyed before by rural communities in the Kano countryside was fundamentally compromised.

The reforms of this emerging state structure were designed to limit the payments claimed from the peasantry by officials and aristocrats, and the number of beneficiaries of such payments. But because of the political calculations of the colonial regime, and its unquestioning alliance with the aristocracy, the reforms failed as the latter made up in extortion what they lost through the reforms (Smith, 1964). What emerged from this process was a system of bureaucratic authoritarianism, based on a failed attempt at introducing formal rationality (Weber, 1958), i.e., the determination of administrative conduct by impersonal and calculable rules and criteria. Substantive irrationality was the order of the day, and this new state structure weighed down on the peasantry in the Kano region till 1967, distorting agrarian economic life through extra-economic pressures and measures.

2.4 Taxation

The fourth and final area in which the early colonial state affected the fortunes of the agrarian economy of the Kano region was in the field of taxation. Taxation, and the related effort to quantify taxable persons and resources, was more than the simple matter of raising revenue. As Appadurai pointed out for colonial India:

...though early colonial policies of quantification were utilitarian in design, I would suggest that numbers gradually became more importantly part of the illusion of bureaucratic control and a key to a colonial *imaginaire* in which countable abstractions, both of people and of resources, at every imaginable level and for every conceivable purpose, created the sense of a controllable indigenous reality (Appadurai, 1993).

It is not surprising that in many rural communities, 'measuring the land aroused suspicion' and even resistance from the peasantry (Grove, 1990:41).

Initially, from Lugard's point of view, taxation was seen as a means of providing for the upkeep of the privileged classes, thereby protecting the peasantry from injustices. It was also aimed at 'abolishing' slavery and the 'emancipation' of the people from indolence on the one hand, and forced labour on the other (Lugard, 1917). In practical terms, however, the major emphasis was placed on abolishing the intermediary *jekadu* who stood between the countryside and the central institutions of the state. These objectives were given legal backing in June 1904, with the first *Land Revenue Proclamation*, which concerned itself only with the land, and the produce therefrom, including livestock. The 1904 *Proclamation* was soon superseded by the more comprehensive *Native Revenue Proclamation No. 2* of 1906, which went beyond taxing agriculture, and included all forms of taxation known to the country. Under the 1906 *Proclamation*, pre-colonial taxes like *Zakka*, the tithe on grains, special taxes on crops and crafts, and the non-Islamic tribute called *Kuridin Kasa* were all consolidated into a 'Land Revenue' or 'General Tax'. The local term for this consolidated tax is *Haraji*. This tax was levied collectively on whole villages, after an 'assessment'. Village heads divided the tax up amongst individuals, supposedly based on the individual's ability to pay. The principles

of taxation changed, from the quasi-religious ones of the pre-colonial state to the quantification and ‘assessment’ of taxable resources by the colonial state.

The second category of agrarian taxation under this *Proclamation* was *jangali* or Cattle Tax. In the Emirates, with the exception of Sokoto, the colonial Government took half the General Tax and *jangali* for itself. The remaining half, which went to the Native Administration, was divided according to the following proportions: to the Emir, 50 to 60 percent, for his upkeep; to district heads, from 30 to 40 percent, depending on their standing; and to village heads, about 10 percent.

The implementation of the 1906 *Proclamation* over the next two years led to phenomenal increases in the taxation of the peasantry. In the then Madaki’s District, the tax burden was assessed in 1906, using extant local standards, at £3,000. Using local valuations, a colonial official (Palmer) assessed the district at £9000 in 1907. After five months’ assessment under the new *Land Revenue* assessment by ‘a special assessment party’, the tax burden went up to £33,000. Under the indigenous taxation system, a single payment of *kurdin kasa* covered the farming operations on all the farms of the farmer; under the new system, payment was to be on each individual farm. Peasant resistance soon led to rioting and the despatch of troops to teach the peasants a ‘badly needed lesson’. The colonial authorities were forced to revert to the ‘native system’ of tax assessment, and the failure was blamed on the ignorance, truculence and conservatism of the peasantry (Hewby: *Annual Report, Kano Province*, 1908).

The fiasco in the Madaki’s District led to a rethink of taxation in 1909. Resident assessment was introduced in the areas surrounding Kano City, where farms were measured. Second, some agricultural and artisanal taxes were scrapped. Third, to encourage the constitution of the new village authorities in rural Kano, the Compound Tax was introduced, based on residency. This move was calculated to bolster the authority of village heads, in a situation where about half of the population paid their tax, and therefore owed their allegiance, to village heads other than the ones in their villages of domicile. This development changed the nature of authority in the countryside as the peasantry was now brought under continuous supervision by agents of the state. In and around Kano City, Resident Assessment was symbolised by land and compound measurements, which became known as the *taki* system. The introduction of the *taki* system meant that the peasantry could be more thoroughly taxed. This intensification is reflected in massive increases in revenue accruing to the state from various parts of rural Kano: Dan Buram recorded an increase of 134 percent; Jaidanawa, 195 percent; Chiroma Bello, 137 percent; Madaki Turaki, 54 percent; and Sentali, 89 percent. In Kunchi, an estimated increase of 289 percent was initially assessed! (KANPROF, 1708A)

By 1912, the districts in rural Kano fell under one of four types of taxation: (a) Resident assessed and *taki* assessed, paying land rents and compound rents checked by the Resident; (b) *taki* assessed, paying land rents and compound rents checked by the Native Administration; (c) Resident assessed, paying the customary farm rents at a nominally uniform rate irrespective of the size of the farm, and compound rents checked by the Resident; (d) Native assessed, paying the customary taxes as in ‘c’, and checked by the Native Administration (*Annual Report, Kano Province*, 1913). Property and the rights and obligations deriving from them were far from agreed principles in that colonial context. Be that as it may, the colonial world around Kano could be divided

into those districts around Kano City where measurements could be introduced as a basis of taxation, and the rest, still reliant on 'customary' taxes.

In 1917, the Compound Tax was abolished. By 1925, the intensity of colonial penetration could be gauged by the spatial distribution of the pattern of taxation: (a) *taki*, involving measurement by pacing or by chain, 22 districts, covering 8,236 square miles; (b) Revenue Survey, involving a comprehensive audit of taxable resources, two districts around Kano, covering 198 square miles; (c) 'Lump Sum', i.e., the old General Tax or *haraji*, five districts, covering 4,049 square miles. It was estimated that it would have taken 75 years from 1925 to convert the *taki* areas to the Revenue system! (*Annual Report, Kano Province, 1925*; KANPROF 1708 Vol.1). By 1932, the zone of Revenue taxation had expanded to six districts, covering 426 square miles (KANPROF 1708 Vol. 1). Apart from those populous 'Home Districts' around Kano, all other districts now paid the General Tax or *haraji*, based on a lump sum assessment (KANPROF 1651). The numerological ambitions of the colonial state were now limited to the inner Kano region. Increasingly, the distinction between the two systems became blurred, and taxation became referred to universally as *haraji*.

The failure to bring Revenue Survey to all parts of Kano Emirate confronted the colonial administration with the limits of its numerological reach. Nevertheless, the political import of the attempt should not be underestimated, as suggested by a similar situation in colonial India:

The vast apparatus of revenue-assessment was in fact part of a complex apparatus of discipline and surveillance in and through which native functionaries were instilled with a whole series of numerical habits (tied to other habits of description, iconography, and distinction), in which number played a complex set of roles, including those of classification, ordering, approximation, and identification. The political arithmetic of colonialism was taught, quite literally, on the ground ... (Appadurai, 1993).

2.5 The great transformation?

When we look at the impact of colonialism in these four major policy areas in rural Kano, we can see that there is little evidence to support the claim by Hill (1977:21) that what obtained in rural Kano was 'non-rule' under colonialism. Not only did colonialism lead to the virtual collapse of the farm-slavery system and the incorporation of ex-slaves into a peasantry, it also transformed and reconstituted the extant peasantry. This transformation, fundamental as its consequences were, nevertheless stopped short of transforming the Kano region into a region of large-scale capitalist agriculture, or into one dominated by large land-holding elites of the latifundist type. What emerged, as much a product of public policy as of historical circumstance, was the development of smallholder peasant agriculture. The peasantry, rather than the landlord, would be the numerically important sociological group; all future policy must now confront this 'peasant question'.

The pre-colonial peasantry in the Kano region produced goods for its own use and for exchange within a wider regional economy. Kola nuts, cloth, salt, artisanal manufactures, and slaves were prominent items in this network of exchange (Lovejoy, 1980). This peasantry was therefore integrated into the market, and production was not

strictly subsistence-driven. This role of the market in pre-colonial Kano notwithstanding, the major basis of economic exploitation was *extra-economic* pressure emanating from agents of the state. Inputs into agriculture were largely governed by non-market forces. Though production was organised through kinship relations crystallised around the *gandu*, farmland was not corporate lineage property, as Islamic inheritance law ensures that there is a continual process of subdivision and individualisation of land holding. The foundational elements of rural Hausa social organisation are the nuclear family (*iyali*) and the *gandu*. The *gandu* is made up of the household head (*maigida*) and different combinations of adult male relatives – brothers, nephews and sons – and their families. Those under the *maigida* work for him at stipulated times in return for some privileges. Labour was mobilised by a combination of household, cliental, communal and servile strategies. With the advent of colonialism, local crafts were systematically undermined (Bello, 1982), with the attendant decline in the importance of rural manufacturing. Cotton and then groundnuts, grown for export to Europe, became the dominant commercial crops. Trans-Saharan trade networks declined, or were re-routed southwards. Though non-market ties continued to dominate the allocation of production factors, there developed a continuing incorporation of the economy into the market; a process which led to the increasing commoditisation of labour-power, the means of production and the products of labour.

During the first three decades of the twentieth century, conversion to Islam increased, and so did female seclusion, thereby increasing the changes going on in the organisation of household labour; slave labour diminished gradually. Commercial networks based on a hierarchy of patrons and clients were modified to reflect the new realities of colonialism, and some were subsequently re-invigorated as instruments of accumulation (Meagher, 1989; Hashim and Meagher, 1999). While rural networks had been dominant for many rural traders and producers of crops and manufactured goods in the pre-colonial period, they were now displaced by urban-centred ones (Christelow, 1987). In the pre-colonial period, trade based on rural manufacturing tended to skirt around Kano, probably in an attempt to escape excessive political interference and taxation. In the colonial period, all trade routes led to, or radiated from Kano. The triangular relation between markets, political power and economic production now tilted, to some extent, in favour of the market. The cash nexus became as prominent as kinship and political clientage in defining social and political relations. The power of the market was made clear when, despite all the efforts by the colonial administration to get the peasantry to grow cotton, it was the cultivation of groundnuts that finally won the day on economic and commercial grounds (Hogendorn, 1978). The major basis of exploitation of the peasantry, but by no means the only one, changed from the *extra-economic* political force of the pre-colonial period, to the *economic* commercial power of European trading companies. Developments in faraway markets in foreign lands now assumed a determining character for the Kano peasantry. In the period of boom and bust after the first world war, groundnut prices per ton went from £41 in January 1920 to £7 in January 1921 (*Annual Report, Kano Province, 1921*).

Increasingly, the peasant found it necessary to cultivate groundnuts for sale, if he was to meet his tax obligations and other reproductive needs. Groundnut production seriously encroached upon food production (Hailey, 1945: 978) which, when combined with grain requisitioning for the military and the mines, led in drought years to serious food shortages (Shenton and Watts, 1979). This appropriation by political authorities of grain, and not groundnut, limited the enthusiasm of peasants for the cultivation of grain,

further tilting the scales in favour of groundnuts. Many famines have been recorded in pre-colonial Kano. Famines continued in colonial Kano as the colonial impact limited the capacity of the society to produce its food requirements, while weakening pre-colonial mechanisms for coping with disaster. Watts has listed no less than eight famines in Kano Province between 1908 and 1958 (Watts, 1983: 370). Their character changed from famines caused by underproduction or ecological failure, as was the case in the pre-colonial period, to famines caused largely by lack of entitlement. One estimate in 1932 suggested that the farmer was getting only 26 percent of the value of his crop, while taxation took 29 percent. The balance was absorbed by the mercantilist networks superintended by the European commercial firms (Jacobs, 1934: 76: 105).

The overarching imperial philosophy underpinning this process of transformation was that of minimal direct intervention by the colonial state in African life. Political control and taxation were exercised through extant local rulers while the conduct of commercial and economic life was left to the European commercial firms. The colonial state concerned itself with the maintenance of law and order and the building of infrastructure. However, even within this *laissez faire* regime, the colonial state intervened directly in some spheres it regarded as crucial. In 1902, a *Protection of Trees Proclamation* was passed, followed in 1904 by the appointment of a Forestry Officer with special responsibility for Northern Nigeria (Cline-Cole, 1998). In 1922, an Agricultural Department was established in Samaru. It was from these early starts that colonial interventionism developed.

3 LATE COLONIAL DEVELOPMENTALISM, 1930-1954

Whereas state intervention in agricultural production was limited in the first three decades of colonial rule, the changing conditions brought about by the world depression demanded that the state intervene in peasant life directly and indirectly. The balance of markets, political power and economic production would gradually shift in a new direction, giving greater scope for political intervention in agrarian life.

The period of the establishment of Indirect Rule confronted the peasantry in rural Kano with a political system whose main purpose was the development of British commerce and the maintenance of law and order by the cheapest means possible. The emphasis was on social control. The material welfare and social rights of the peasantry were a secondary consideration. Government budgetary policies took little, if any, regard of the peasantry's social or economic needs. While the rural areas lacked the most basic amenities, the Kano NA ran up huge budget surpluses which, by March 1933, amounted to £264,832. The sum of £64,747 was also invested in the economies of South Australia, New Zealand, Ceylon and Trinidad (Northern Provinces, 1933). However, reforms in 1926 had rationalised and bureaucratised the running of the judicial, district, and Emirate administrations. Colonial policy now sought to embrace issues of welfare. The years between 1925 and 1930 saw the full establishment of the Native Administration. By the later date, departments of the administration like health and education were beginning to spread their activities to rural districts, and the penetration of the rural areas by the forces of Indirect Rule was becoming complete.

Village headmen were now implored to get 'into activities that are not too entirely

obsessed with Tax Collection' (*Annual Report, Kano Province, 1933: 3*). A few years before that, attention turned, in rural areas, to the provision of social infrastructure like roads, the rebuilding and expansion of markets, the digging of wells, and the provision of latrines, schools and dispensaries (KANPROF 2945). The NA was at the forefront of these efforts, which also included efforts at regulating the tanning and marketing of hides, in order to meet the technical specifications of the European commercial firms. The types of weights used in groundnut marketing in rural areas also came under NA scrutiny as traders, particularly Levantines, were increasingly accused of the unscrupulous use of short measures by their European and African competitors. The frequent fights at groundnut markets, caused by the use of touts by traders, also drew the attention of the Provincial administration and the NA; both administrations would frequently lament the 'menace' the middlemen posed to peasant life.

The period after 1930 was different from the preceding period in two fundamental ways. Firstly, the institutional centre of gravity of the colonial state gradually, but perceptibly, shifted from the Provincial and NA levels, to the Regional Government, based at Kaduna. Through the Regional Government, influences of the colonial administration in Lagos and the Colonial Office in London would also be felt. Secondly, there was an increasing intervention by the state in agrarian life. Regional Departments, including the Agriculture Department, began to play a major role in agrarian production in the Kano region. This second tendency was prompted by notions of 'science' and of 'progress', and would ultimately lead to notions of 'development'. Within the context of these conceptual shifts, the state and its agencies increasingly developed the ability and the legislative instruments to intervene directly in agrarian processes.

This late colonial developmentalism in the agrarian sphere could be seen at work in a number of distinctive fields. Firstly, there was the 'scientific' study of the agricultural system around Kano and its consequences. Some of these studies took place in Kano itself, but others, with direct implications for Kano, were conducted either in Zaria or in Ibadan at the Regional Agriculture Department and the Colonial Forestry Department respectively. Second, there were efforts at intervening directly into this agricultural system for the purposes of improving productivity. Third, there were Departmental efforts in the fields of agriculture, forestry, sleeping sickness control, livestock, and soil conservation. Fourth, there was the development of the marketing board system through which the state regulated the trade in groundnuts, cotton and hides, but not in foodstuffs. Along with the marketing boards were the development councils set up at all levels of the colonial administration.

3.1 Colonial science and the agriculture department

An Agricultural Station was opened in Kano shortly after the Regional Department of Agriculture was set up in Samaru in 1922. Scientific studies of agricultural issues at both stations would form the basis of colonial intervention in peasant life. An early study at the Zaria Station was on animal traction. A report by the Station's Director, O.T. Faulkner, detailed some of the findings of trials carried out:

These trials led to the following conclusions: (a) Owing to the baking effect of the dry season on the soil, it is only possible to use the plough for four, or at most five, months in the year, when the rainy season is at its height. (b) Millet – the staple crop of the country – is sown at the beginning of the rains, whilst the

ground is still too hard for ploughing, and depends entirely upon (...) after cultivation, but the distance between the rows does not permit of the use of the plough or cultivator. (c) With crops, such as cotton and groundnuts, which are planted when the rainy season is well advanced, there is a considerable apparent economy of labour in the use of draft animals, but the economies effected are more than offset by the cost and upkeep of cattle and implements. For it was found in actual practice that it was extremely difficult to keep the conditions of the cattle without a good deal of concentrated food, and that animals when run down fell an easy prey to disease (MinAgric 3).

Faulkner also pointed out that local hand tillage resulted in ridges and furrows that were better at water retention. By 1927, the Agricultural Station in Kano was itself carrying out experiments on the use of artificial fertiliser on groundnuts, the use of bullocks in ploughing, and the best methods for the production of cheap local ploughs and cultivators. These experiments were, however, on a very small scale (*Annual Report, Kano Province, 1927*). Gradually, concern with the chemical properties of the soil and the best means of sustaining soil quality took precedence over, but did not completely displace, concern about animal tillage. By 1931, studies were coming out with titles such as 'Dietetic Work in the Northern Provinces' (MinAgric 2908). This particular study noted that:

The two chief elements which are generally scarce in the soils of Northern Nigeria, viz Calcium and Phosphorus, are of particular dietetic value, in that their presence in food considerably increases resistance to disease both in animals and in man...But those two minerals although scarce in the soils generally, are present in the subsoils in fair quantities; in this way although herbage pasture is lacking in Calcium and Phosphorus, both may be present in considerable quantities in leaves of trees or of other deep rooted plants (Director of Forests, Ibadan to Chief Secretary, Lagos).

The connection between such 'scientific' studies and the policies of the colonial state was apparent right from the start and by 1938, the implications of such studies for the Kano region was being made clear:

It is essential that we should continue our efforts to find an improved system of agriculture for the Kano Province but this is by no means an easy task. In the close farmed area around Kano City the people have already developed a system of continuous cultivation of an advanced type and in the rest of the Province the ease with which groundnuts can be grown has resulted in an extensive type of farming which will eventually lead to disaster unless we can provide a solution (MinAgric 2982. Director, Agric. Dept, Ibadan to Asst. Director, Agric., Northern Provinces).

In 1939, the Agricultural Officer, Kano, sent some soil samples to Ibadan for analysis; the results showed that the 'hand farms' of the peasantry were of better soil quality than those of the Government Farm on the Kano Station, presumably farmed by animal or mechanical traction (MinAgric 9601. Vol. 1). Studies of manure and compost production and application followed in 1940. The study noted that:

The Hausawa in old established towns apply manure to their farms. Those in

small hamlets and villages apply it only near their compounds and rely chiefly on 'bush fallow' to maintain the fertility of the soil. (MinAgric 9421. Asst. Conservator of Forests, Zaria to Director of Agric. Northern Provinces).

Other studies looked at the possibility of increasing manure production by confining goats that had hitherto been allowed to roam under the traditional husbandry system. The study pointed out that:

...efforts at keeping goats under confined conditions at Kano have not met with success. The major difficulty has been heavy worm infestation causing oesophagostomiasis...(MinAgric 9400).

Colonial sources themselves identify the complex practices of Hausa farmers. Some practices, such as permanent manuring, were thought to be 'advanced'. Those not favoured by colonial officials, such as 'extensive' farming and 'bush fallowing' might well have been recognised as appropriate in the ecological conditions in which they were applied. It was evidently not easy to identify appropriate ways of improving on local practices, but this difficulty did not stop colonial officials from trying.

The quest to subordinate peasant agriculture to the dictates of 'science' started in this period and continues to run deep in agrarian policy in Nigeria. In the 1990s, we will see the development of an elaborate and expensive network of national agricultural research. The only difference is that in the 1990s, concern for the 'hard' sciences - soil chemistry, irrigation and traction engineering - and economics are now mixed with more general sociological concerns.

How did late colonial science impact directly on agrarian productivity? The various experiments on the impact of manures and chemical fertilisers on crops carried out at the Kano Station during this period had, as their central objective, the assessment of their impact on the production and profitability of export crops. The market potential of chemical fertiliser was given as much consideration as its technical appropriateness. Indeed, the chemical fertiliser experiments were officially referred to as the 'Groundnut Fertiliser Trials' (MinAgric 9403). By 1930, these studies were already feeding into efforts at improving or sustaining agricultural productivity. This colonial impact on raising agricultural productivity in the Kano region manifested itself in a number of policies: (a) the promotion of mixed farming, (b) the fertiliser campaign, and (c) the introduction of new farming techniques and gene varieties.

Mixed farming

Mixed farming was introduced into Northern Nigeria in 1928 (Buchanan and Pugh, 1955: 124). The main objective was to encourage farmers to generate their own manure by keeping cattle, which could also be deployed for ploughing. By this scheme, it was hoped that soil fertility would be guaranteed at the same time as draught labour was introduced. Mixed farming was introduced in 'Kano Local', that is, the districts immediately around Kano, in 1932. In 1952, Donald Brown, Director of Agriculture, Northern Nigeria, stated that in 1950-51, there were 8,800 mixed farmers in the Region, out of a total population of three million peasant farmers (MinAgric 9403B). In 1955, there was a total of 234 mixed farmers in 'Kano Local'. If we include the figures for other parts within a 50-mile radius of Kano, the figure stood at around 500 (MinAgric

1118). The very small number of mixed farmers relative to the entire population of Northern Nigeria was explained largely in terms of the ethnic division of labour between Fulani herders and Hausa farmers. Because of this 'cleavage', the Nigerian Livestock Mission of 1950 came to the conclusion that: 'There can be no solution to Northern Nigeria's agricultural problem so long as the cattle population remains divorced from its soil' (Buchanan and Pugh, 1955: 123). Access to cattle and ploughs were seen as the major obstacle to the extension of mixed farming.

In reality, however, there were two major problems with the mixed farming scheme, more important than access to cattle and ploughs. First, the scheme was too closely tied to the interests of the Emirate aristocracy; agrarian innovation was not to be allowed to upset the social order on which the colonial system depended. This limited its social and geographic reach as the 'Home Districts' immediately surrounding Kano became the 'mixed farming districts' (KANPROF 2702. Agric. Devp. Officer to Agric Officer). The same social and geographic restriction took place in Katsina (Buchanan and Pugh, 1955: 124). Second, as Donald Brown also pointed out:

At present the mixed-farmer flourishes by courtesy of his hand-farming neighbours whose grass and crop residues are at his disposal. The fertility of his arable land is therefore maintained at the expense of land other than his own...(MinAgric 9403B).

To overcome the second problem, mixed farmers would have had to be given enough land to guarantee their pasturage, with their cattle kraaled in rotating fields. To do so would have struck at the very heart of the agrarian social structure developed in the period 1900-1930; peasants would have been dispossessed to make land available to capitalistic farmers. But colonial policy in Northern Nigeria could not countenance this type of 'Betterment' intervention along the lines of developments in colonial Kenya and Southern Africa. In 1947, the Deputy Director of Agriculture put the dilemma succinctly:

As mixed farming increases ... difficulties will arise with shortage of grazing and demarcation would take place, so we have to check up periodically that we are not approaching too closely to this stage (MinAgric 9500).

In the final analysis, mixed farming could not therefore transform the agrarian system fundamentally; its practitioners were few, and their scope for expansion was limited by physical and policy constraints. The legacy of this model of agrarian transformation lives on today in the use of draught animals, mostly in areas with lighter soils.

The fertiliser campaign

The fertiliser campaign was to have a much deeper and longer-lasting impact. By 1949, concern about the impact of continuous groundnut cultivation on soil quality had reached a high pitch, with opposing sides of the colonial bureaucracy battling to direct policy. The fertiliser and manure trials, suspended in the war years for lack of staff, were resumed in earnest in 1947. It was claimed that these trials showed that 'phosphate deficiency is widespread throughout the various soil types of the Northern Provinces' (MinAgric 9403B. Dir. Of Agric. Northern Province to PRO, Lagos). In 1949, a fertiliser scheme was launched, to encourage the use of chemical fertilisers by farmers.

Fertiliser was issued free to farmers or sold at highly subsidised prices as an introductory measure (Helleiner, 1966: 113). Of the total of 11 propaganda teams sent to different parts of the Northern Region, four were sent to Kano Province with the expectation that they would contact and influence about 3,200 farmers. Many of these, no doubt, would have been in the immediate Kano region (MinAgric 9403B).

Two arguments were used to justify this drastic intervention: deteriorating soil quality and economic rationalisation. As far as officials like Donald Brown were concerned, the case for chemical fertiliser had been established by experiments at the Kano Station even before the war broke out. Action could not however be taken because 'prices of foodstuff' were so low as to make fertiliser purchase an unprofitable proposition for most peasants. Government subsidies were strongly considered. Post-war increases 'in foodstuff prices' made subsidies unnecessary (MinAgric 9403B. 'Fertiliser Distribution Scheme', p.6). The case concerning soil quality was canvassed by M. Greenwood, Assistant Director to Brown. In his piece, 'The Peasant Use of Fertiliser in Northern Nigeria' (MinAgric 9403B), Greenwood argues that:

unless we are to jeopardise the land reserves needed for a rapidly expanding population, an annual export of 300,000 tons of shelled nuts, containing 3,000 tons of phosphoric anhydrides, cannot be maintained without the return to the land of an equivalent amount of phosphatic fertiliser (17,000 tons of single superphosphates).'

Brown supported Greenwood by arguing that a deficiency of phosphate is more serious than one of nitrogen or potash. While the latter two were in the plant's stems and leaves and are largely returned to the soil, phosphates are transferred at maturity to the seed, the only part of the plant that was not normally returned. It is, however, interesting that while Brown made his economic argument on the basis of 'food crop prices', the technical argument was built on the impact of groundnut cultivation on the soil. The economics of foodcrop cultivation was used as a justification for a policy driven largely by the effects of export crop cultivation. The active support for chemical fertiliser within the top echelons of the Agriculture Department did not go unchallenged. Brown himself pointed out that the introduction of the fertiliser scheme was met with 'considerable opposition' within the Agriculture Department. Agriculture Officers, described by Brown as 'members of the "Humus School" and the "Living Soil School" claimed that "the scheme is criminal"'. These naturalist schools claimed that 'the last state of the land will be worse than the first'. They were certain that Dust-Bowl conditions would soon follow (MinAgric 9403B. J. Donald Brown, 'Fertiliser Distribution Scheme').

After three years of raging argument, it took the intervention of the Civil Secretary in Kaduna in 1952 to resolve the dispute in official circles:

There is no need to emphasise the importance of maintenance of the fertility of the few inches of top soil which is all that the average farmer in the Northern Region has between himself and starvation, and His Honour is particularly anxious that the fears of those of the 'Humus' school of thought should be allayed....(It (is) clear that the superphosphate fertiliser so far from being a danger, is a necessity to the soil (MinAgric 13190/S.3).

Indeed, soon after this official ‘consensus’ was reached, it was challenged in 1953 by the Chairman of G.B. Ollivant in England. The argument shifted to the abuse of chemical fertiliser by an illiterate peasantry:

I believe that the excessive use of fertiliser acts as a poison on the ground. Knowing the native mentality I can quite well understand that when he was given the first phosphate pellet and used this ... he got an initial boost. So much so that in the next season he actually purchased additional fertiliser. In that year also he probably got a boost and I can imagine the farmer arguing, ‘Well, if I had so much luck with one pellet to each unit, why not give it two?’ (MinAgric 9403B).

By the late 1950s the Humus School had virtually died out. Chemical fertiliser was now a crucial component of agriculture in the Kano region. It was claimed that increases in yields to the tune of 33 percent could be obtained for groundnut and sorghum through the appropriate use of fertilisers. Still, the extent of usage remained low, expanding in 1961 when subsidies were introduced (Helleiner, 1966: 113). Henceforth, the politics of fertiliser procurement and distribution would feature very prominently in the agrarian politics of the Kano region and of the Nigerian State as a whole. Fertiliser procurement and its subsidisation lie at the heart of some of the dilemmas faced in contemporary Nigerian agricultural policy.

Improved techniques and varieties

In 1944, an irrigation engineer from the colonial service was sent to look at the irrigation potential of parts of Northern Nigeria, including Kano (Palmer-Jones, 1987: 153). As a result, irrigation was declared a priority in Kano. In concrete terms, this declaration of official interest only led to limited improvements of the indigenous irrigation system, used to lift water onto *fadama* farms. *Fadamas* are wetland and valley bottom farms, usually with heavier and richer soils which retain moisture for longer periods than the upland farm. Prioritisation of irrigation also led to some interest in the development of small dams, particularly in the Kano, Challawa, Hadejia and Tomas valleys. Though not much came out of this interest in irrigation during this period, the whole exercise was to lay the basis for the massive interventions and developments in this field in the 1970s. In the post-war period, new emphasis was also placed on garden crops like chillies, tomatoes, potatoes, carrots and onions (Lennihan, 1987: 261). The cultivation of fruit trees such as mangoes and guava were also encouraged. These fruits and vegetables have since become important aspects of the agrarian economy of the Kano region, particularly during the dry season, and on *fadama* farms where orchards were developed. A new type of sugar-cane, the *kantoma* variety was also introduced in this period in response to red rot infestation of the local variety. Many of these new varieties are now integral to agrarian production in the Kano region.

In 1951, a new variety of groundnut called ‘K50’ was introduced into the Kano region. It was claimed that use of this variety with fertiliser raised yields by 38 percent (Helleiner, 1966: 113) By the mid 1950s, tractors rented from the NA Agricultural Department were also being used for the ploughing of private farms, leading to concerns about wind erosion (MinAgric 7616. Prov. Agric Officer to Director of Agric., Kaduna). Great success was achieved in the post-harvest stages of groundnut production. The traditional method of shelling with mortar, very destructive of the seed, was

successfully replaced with small mechanical decorticators which were widely adopted by farmers (Helleiner, 1966: 113).

In its Annual Report of 1954-55, the Department of Agriculture, Northern Region listed some of the areas in which it was taking some interest. First, mixed farming which had a total number of 12,761 participants in the Region in 1954. Second, fertiliser distribution; third, mechanisation experimentation, especially on *fadama* farms; fourth, localised irrigation schemes; fifth, farm settlement schemes; sixth, agricultural research and training; and finally, the direct production of beef, poultry and pigs (MinAgric 801 Vol. IV). The Kano region was subjected to at least five of these interventionist strategies. In subsequent years, the post-colonial Nigerian state would call on this repertoire of state interventionism as it sought to transform the agrarian economy.

In a review of state intervention in agrarian production in Nigeria in the late 1950s, Helleiner highlights three broad patterns. First, there was the spreading of new techniques through incremental demonstration work, promotion of extension, incentive schemes and credit facilities. Little effort is made to change the organisation of peasant life. Second, the establishment of large-scale capital intensive plantations, with the latest technology. This approach seeks to bypass the extant peasant basis of agrarian life, and is heavily dependant on the successful creation of a managerial elite and a reliable wage-labouring class. Third, large scale co-operative schemes and farm settlement schemes of the kibbutz type in which farmers, some being secondary school graduates from the towns, are expected to be landowners, but their operations are systematised and rationalised to make it possible for the use of modern technology (Helleiner, 1966: 302). The second and third 'paths' were the main strategies chosen by the regional Governments in Eastern and Western Nigeria. The Northern Regional Government largely chose the first path, though it also supported the Niger Agricultural Project at Mokwa, which attempted to introduce mechanised farming by tenant farmers but ended up as a colossal failure (Forrest, 1986). The results of the first path in the North were often variable. Helleiner (1966: 112) points out that:

It is remarkable that despite the backward technology and the land-intensive technique employed, the yields per acre (though, perhaps, not per man) are quite good by international standards. Nigeria's yields of about 500-700 pounds of shelled nuts per acre compare favourably with U.S. yields, are about double those of the world's leading producer..., India, and far exceed any others obtained in tropical Africa.

3.2 Specialised departments

Late colonial developmentalism also manifested itself within agrarian life in the Kano region through the activities of specialised departments of the colonial administration, usually, but not exclusively, based at the Regional level. Some of these departments, like Adult Education, Health and the Judiciary, had a crucial, but indirect, effect on rural livelihoods and productivity. However, these equally interventionist departments are not covered in this analysis which focuses more closely on those departments with a direct agrarian remit: agriculture, forestry, sleeping sickness service, livestock, and soil conservation. As already pointed out for the Agriculture Department in the preceding section, the measures taken, and sometimes imposed, by these departments, and the conflicts and contradictions arising between them, left an indelible mark on the agrarian

economy.

The forestry department

Cline-Cole (1997: 1998), documents the emergence of colonial forestry in Northern Nigeria. From the evidence, we can surmise that concern for the 'proper' management of forests and the regulation of access to forest products preceded concerns about the agricultural system itself. The *Protection of Trees Proclamation* of 1902 sought to control the exploitation of forest products around government cantonments and stations. In the same year, a survey of forestry resources in Northern Nigeria was undertaken. In 1904, a Forestry Officer with special responsibility for Northern Nigeria was appointed and in 1906, the *Forestry Proclamation Number 6* extended the coverage of the 1902 *Proclamation* to unreserved areas. By 1913, nurseries had been established for the propagation of exotic and indigenous species, and the first regional fuel plantations were started in Zaria and Sokoto.

Prior to the amalgamation of Northern and Southern Nigeria in 1914, the Forestry Department of Northern Nigeria was under the Agriculture Department. After Amalgamation, it was 'emancipated' and 'absorbed' by the Forestry Department of Southern Nigeria (Thompson, 1926: 18). In 1915, the creation of government-owned and managed forest reserves intensified. In 1916, a forestry law applicable to the whole country was enacted, giving the Government the power to compulsorily delineate forest reserves and also imposed restrictions on the exploitation of 150 protected tree species. Also in 1916, a regional forestry school was opened to train local foresters. In 1927, the *Forestry Amendment Ordinance* empowered Native Authorities to create forests within their jurisdiction; importantly, authority over, and the management of, regional government reserves passed to Native Authorities. Henceforth, the NA would directly face the brunt of peasant resentment against forestry policy. By 1930 there was a major expansion in the number of forest reserves created and controlled by various NAs.

Informing this gradual but systematic effort to impose state control over forestry resources was the experience of the British in many contexts as diverse as the American colonies and India (Grove, 1990). For instance, from the Indian experience came the notion that the 'forest estate' should be about 30 percent of the land space (Grove, 1990: 19). From thence also came the propaganda connecting deforestation, drought and social and environmental breakdowns (Grove, 1990: 22). By 1933, forestry officials in Nigeria were becoming concerned by the 'threat of desiccation and shifting sand dunes' in the northern fringes of the country (Cline-Cole, 1998: 326). The imagery of the North American Dust Bowl was transferred into the Nigerian discussion through Stebbing's sensationalist report on the 'encroaching' Sahara (Stebbing, 1935). An Anglo-French Forestry Commission was appointed in 1936 to investigate Stebbing's claims. In 1937-38, the Commission report rejected Stebbing's claims of desiccation and desert encroachment. Nevertheless, the Commission condemned some indigenous land-use practices and recommended the establishment of shelterbelts, the maintenance of farm trees, the planting of live hedges and farm-boundary trees, protection of watershed forests and the reservation of natural forests and woodland (Cline-Cole, 1998: 327). In 1937, an Anti-Desiccation Campaign was launched, and a new *Forestry Ordinance* was proposed with specific provisions for protected forests. Sanctions were also imposed on bush burning in forest reserves, thereby depriving peasants of a popular method of hunting. The *Burning of Bush Order* was extended to unreserved areas in 1940.

The fear of deforestation leading to soil degradation, drought and social dislocation continued to have a strong purchase on the colonial imagination. As a 1946 review of forestry policy in Nigeria pointed out:

Our first aim is ... to acquire (sic) a forest estate in blocks of size suitable for practical management. These are the Forest Reserves. And here we clash with the people.... In areas where reservation is not complete an interim control is applied by Forestry Regulations over the whole area. Where reservation reaches the maximum possible and desirable (i.e. the proverbial 30 percent), and the local forest estate is complete, the (Forestry) Department will concentrate upon the management of that estate, the unreserved lands being almost entirely the concern of the Agricultural Department (Anon., 1946).

From this premise, forest reservation and plantation forestry became the colonial norm. This was particularly the case after the neem tree was successfully introduced into Northern Nigeria from arid India in 1929 (Watters, 1947). The resulting craze for plantations was condemned by M.L Pattullo, Assistant Conservator of Forests, Nigeria: 'almost every station that boasted a Forest Officer had its fuel plantation. Many of these were both uneconomic and unnecessary... (Pattullo, 1941). The 'radical change' supported by Pattullo did not fundamentally question the rationale of plantation forestry; it sought to systematise it. Such was the faith in plantation forestry that an indigenous forester wrote in 1944:

It is mainly on ... farm trees that Kano city people rely, and hundreds of them seem not to know that fuel should, if conditions were normal, come from forests and not from farms....It is very interesting to note that most farmers practise a kind of rotation as we do in our well organised plantations (Adelodun, 1944).

The work of the Forestry Department in the Kano region started in earnest in 1929, when the Assistant Conservator of Forests in Kaduna initiated a process that would have led to the creation of a forest reserve in the Challawa valley. He set himself a target of 25 percent of the territory 'of the country' to be held as forest reserves (MinAgric 11356). If this scheme had gone ahead, massive restrictions would have been placed on peasant access to land. This plan was immediately condemned by the Tsetse Investigator, who claimed that the proposed reserve was in sleeping sickness infested areas. The efforts of the Forestry Department would be continually frustrated by the contrary views of officials in the Sleeping Sickness Department. In 1930, the Forestry Department issued calls for the promotion of forest reserves, pointing out that progress hitherto had been 'disappointingly slow' (MinAgric 12063).

The target for forest cover in the Kano region was then reduced from the 25 percent originally set to eight percent (KANPROF 2137. Resident Kano to District Officers) in the hope that the reduced limit would not elicit the predictable hostility of the Sleeping Sickness Department and the peasantry. But even this limited objective would be stoutly resisted by both opponents of the policy of reservation. Grove (1990) argues that local populations, from pre-revolutionary France to the American colonies, from colonial India to colonial Northern Nigeria, have always resisted the attempts of the state to set itself up as 'environmental arbiter', regulating and controlling access to natural resources, particularly forest resources (Grove, 1990: 30). That colonial forestry policy

met with peasant hostility is therefore not surprising. It was in this environment of 'contested' forestry that peasants increasingly composed salacious songs condemning the restrictions placed on their access to forest resources by the policy of reservation (Mustapha, 1990; Hiskett, 1997).

In subsequent years, the tsetse team would actually clear existing forests, leading to furious protests from the Forestry Department. In 1946, the Agricultural Officer, Kano, condemned the methods of the team as being 'very dangerous', insisting that tsetse control and anti erosion measures must be carried out simultaneously:

I consider that if the Sleeping Sickness Department wish to destroy the surface cover on the banks of Kurmi and elsewhere they should take all the necessary precautions, with their own staff, to safeguard the area denuded by their activities. It seems little use safeguarding health and destroying livelihood at the same time (MinAgric 9500. Agric. Officer Kano to Asst. Dir., Dept. of Agric., Zaria).

Despite this continuous problem with both the Tsetse Team and the local population, some forest reserves were actually created. By 1951, three reserves had been consolidated and two others were demarcated. Most of the Forestry Department's activities were however largely located in the south-east and south of the Province, where 300 square miles of forest were being processed in that year (MinAgric 11356). It seems that only one forest reserve was successfully established in the immediate surroundings of Kano, and tree cover in the Emirate was said to be as low as four percent (MinAgric, 2424).

Failing to create the sort of forest cover it wanted, because of opposition from peasants and a rival colonial department, the Forestry Department turned its attention to the protection of the farm trees that dotted the landscape in the Kano region. Here, the department was confronted by the hostility of the peasantry, nomads, and some members of the NA administration. In a bid to protect farm trees, the Resident, Kano, suggested in 1939 that tree 'lopping with axes or machetes should be prohibited'. To enforce this, he suggested that 'courts should take into account the circumstantial evidence of possession of an implement other than a knife in the neighbourhood of mutilated trees' (MinAgric, 31448). Predictably, the local population and the NA both kicked against the order, leading to a debate within the colonial administration. For example, the Senior Conservator of Forests in Bornu pointed out that lopping was 'essential in order to feed goats and sheep in the dry season', and the Resident, Bornu, claimed that lopping did no harm to the tree. In 1939, a *Schedule of Farm Trees* was produced under the authority of the NA, proscribing the cutting down or lopping of the scheduled trees from farmland by their owners without a permit from the Government (KANPROF 209. Vol. III). Even the Emir, under whose authority the edict was given, protested the inclusion of two out of the twenty species on the list. In Kano, the ban on felling farm trees was modified by a girth limit beyond which the trees could be felled (MinAgric, 2424). In 1942, the restriction on the lopping of farm trees was extended to the entire Northern Region through the *Forestry (Northern Provinces Native Authorities) Rule Number 48*.

By 1947, many District Heads in Kano adopted an attitude of non-co-operation in stopping the felling or lopping of farm trees. The overwhelming majority of cases

brought before the NA *alkali* courts were let off without punishment, even after the Provincial Forest Officer had specifically asked for their prosecution. In the rare instances where punishments were handed out, these were extremely lenient. Even Forest Guards took to ignoring offenders (KANPROF 4117). Despite this concerted opposition, the edict on farm trees was renewed in 1948, this time with a list of just six farm trees. However, the recalcitrant attitude of the NA staff should not be taken to mean that the rules had no consequence. It was within this colonial ambience that the Emir acquired the powers to regulate peasant access to some products of the trees on their farms, as illustrated by the local phrase '*an saki dorawa*'. This means that the Emir has given permission for the commencement of the harvest of the *dorawa* on farmers' fields.

The sustained response of the peasantry to these edicts was to break them when they could. They also stopped planting new trees and it was soon realised that 'the peasantry no longer respect their trees as they used to do...(MinAgric, 25089 Vol. II.). A similar situation obtained in Katsina Province, where the Acting Resident sought in 1956 to get £10,000 of the colonial 'development' fund to pay as bounty to encourage peasants in his domain to 'protect' their farm trees. This scheme was shot down by the Chief Conservator of Forests (MinAgric, 25089 Vol. II).

While edicts on farm trees could be observed in the breach, often at a cost, laws on forest reservation were a different matter. In 1950, Emir Sanusi of Kano voiced the disaffection rife in the countryside concerning forest reservation:

I now come to Forestry. We have noticed the great work that is being undertaken in the increasing Forestry reserves. We really appreciate this kind of work, but nevertheless, I cannot help pointing out that this kind of work is not popular to our common peasants. I can well remember when I was touring the districts... anywhere I went that was the type of the major complaints that used to be lodged before me against the Forestry Department. I tried my best to explain to the people the usefulness of the work, but they would not agree with me. The argument they always submit is that they too have their own traditional methods of producing and preserving firewood in good condition... So this is their contention against those forest reserves, which they consider as unnecessary. Now, for example, quite recently an estate of 200 acres was reserved in Dutse District for the so-called forest reserve... Such large reserves obviously cause great suffering to the people. Moreover, this encourages day-to-day emigration... It is indeed the pressure of those complaints that are brought in Kano which compels me to bring this matter up...(MinAgric, 14449 Vol. II).

Though all levels of the colonial administration were acutely aware of the perverse consequences of their forestry policies, especially that pertaining to farm trees, they were at a loss as to what new policy or policies to advocate. This dilemma was captured by the District Officer, Kano, in 1954:

The general position of farm trees and their gradual disappearance with inadequate replanting is worrying me very greatly. The present Forestry rules are hated and are in many cases entirely ignored. If the Forestry Laws however were repealed and farmers were free to cut what trees they want Kano would soon become a desert (KANPROF 3475).

This clash between the peasants trust in their own abilities to manage the trees of the Kano region, as shown by their statements to the Emir, and officialdom's distrust of the peasants' abilities, as shown by the DO, was never resolved. This clash has been inherited by the post-colonial state and informs much of forestry policy in the contemporary period. Furthermore, as we shall show, the central concern of the colonial Forestry Department, the concern to avoid desiccation and desertification, continues to inform official policy at the highest levels of the contemporary Nigerian state.

The sleeping sickness department.

The Sleeping Sickness Department was important in three important respects. First, it was the most prominent of the colonial institutions which sought to control pests and diseases amongst people, animals and plants. Second, the Sleeping Sickness Department tended to block the more ambitious interventionist programmes of the Forestry and Soil Conservation Departments, thereby preventing both from realising their ambitions in forest reservation. Third, the Sleeping Sickness Department was largely responsible for the Anchau Settlement Scheme, an early effort at large-scale rural development in Nigeria. Each of these three impacts was felt in the Kano region.

With *pax Britannica*, many communities abandoned the old pattern of defensive settlement surrounded by intensively cultivated, and consequently tsetse-free, fields. This led to the spread of tsetse (Buchanan and Pugh, 1955: 48). From 1921, organised research into the problem was underway, culminating in the work of N.E.W. Anderson and T.A.M. Nash in the area around Anchau in 1934 (Nash, 1941). By 1935, £180,000 had been expended on treatment and research (McLetchie, 1945). Estimates of the incidence of sleeping sickness infestation fell from 8.6 percent of the population to 0.47 percent by 1952. Seventy percent of all cases were located in the southern parts of Katsina, Zaria, Plateau and Benue Provinces. Southern Kano Province was also affected (Buchanan and Pugh, 1955: 49). The major impact of the sleeping sickness campaign was lowering of mortality, improved health, and a rising population.

To achieve its preventative objectives, the Sleeping Sickness Department developed an obsession with vegetation clearance, particularly along water courses. This approach, sometimes referred to as the Swynnerton method, had been developed in controversial circumstances within colonial science (MacKenzie, 1990), and perfected in Nigeria through the works of people like Nash (McLetchie, 1945). This unwavering commitment to vegetation clearance, described as either 'aggressive' or 'defensive', was at odds with the ambitions of the Forestry Department and justifiably cast the Sleeping Sickness Department (SS Department) as a contrary institution within the colonial system. The SS Department blocked efforts by the soil conservation and rural development departments at creating forest reserves, arguing that 'general forest protection should not be contemplated in areas where the savannah tsetse... exists (MinAgric, 9500)'. But for the SS Department, the Forestry Department would not have been content with the four percent forest cover in the Kano region; getting the figure closer to 25 percent would have caused a major social and political upheaval.

Not only did the SS Department block the reservation of forests, it also enacted its own edicts, forcing farmers to cut down trees already planted within a quarter of a mile of any river, stream, water course, lake or pond. In the event, some farmers were

compelled to cut down mango orchards they had planted at the behest of the Agriculture Department (MinAgric, 9300). It even cleared existing forests, leading to accusations of 'drastic clearings' from the Forestry Department, and the advice that 'a little more caution should be exercised before irrevocable acts of forest destruction on a large scale were undertaken' (MinAgric, 14449 Vol. II). Without the unwitting brake put on the Forestry Department's enthusiasm by the SS Department, forestry policy could have resulted in more open confrontation within the Kano region.

The SS Department was also important as a pioneer of 'planned rural development' in Nigeria. In the course of a sleeping sickness survey in 1934, Anderson discovered that 30 percent of the population of Anchau District in northern Zaria Province were infected; in some villages, the rate was as high as 50 percent (Nash, 1941). A second survey by Nash reported that:

the population was so scattered that anti-tsetse measures were impracticable, but that if the people could be concentrated into smaller areas it would be easy to rid such areas of tsetse by clearing the thin strips of riverine vegetation.... Our object is to increase the density of population where necessary to at least 70 to the sq. m., which is the minimum density possible if one is to have a sufficient population to keep down the re-growth in the cleared streams.... It has been found possible to lay out the northern part of the corridor so that only some 4,300 people out of 50,000 will have to be moved....The proposed corridor will be about 70 miles long with an average width of 10 miles, and a population of about 70,000 (Nash, 1941).

This was essentially the Swynnerton method, which led to 'schemes which were either counter-productive, like the movement or concentration of human population, or of doubtful effectiveness (MacKenzie, 1990: 209)'. The Anchau scheme was indeed an expensive programme; 477 square miles of country were freed from tsetse by clearing 440 linear miles of stream at the cost of £11 per mile, not to mention the forced labour imposed on the peasantry (Nash, 1941: 81).

In southern Africa, the rhetoric of community development was often preceded by the rhetoric of improved land husbandry under betterment programmes. In Nigeria, however, the colonial aversion to the potential social disruption under betterment programmes meant that not much was heard of it until the Anchau Scheme was launched. This scheme incorporated within it the twin rhetoric of community development and better land husbandry. Because it was foreseen that the scheme would lead to mass movements of the population, it was seen from the start as 'an opportunity of making a large scale experiment in rural development' (McLetchie, 1945). On the other hand, the spirit of land betterment was equally present:

The original idea had been to lay out a series of 12 acre farms with an 80 yd. water frontage, the farms to extend back for nearly half a mile up the slope. The village was to be built on the high ground behind the heads of these parallel farms. The idea was that each householder would have 80 yd. of stream slashing for which he would be responsible, his own piece of grazing, and a range of land suitable for anything from Yams to Ground-nuts. The theory was discarded soon after work started as streams unfortunately wind about, the land is seldom uniform, the size of the family may vary from 1 to 20 and increase or decrease

throughout the years, and - worst of all - the definite marking out of the farm might tend to make the householder consider that he *owned* the land (Nash, 1941: 78).

Between 1938 and 1942, the number of people affected by the Scheme and its offshoots amounted to about 200,000 in Zaria, Katsina and Kano Provinces (McLetchie, 1945: 74). In Kano Province, much of the activity was carried out in Tudun Wada Dan Kadai District, to the south-east of the core region around Kano City. However, the Schemes' impact was felt in a broader field, through the training of Kano Native Authority staff at Anchau (McLetchie, 1945: 76), and through the percolation of the sense of pre-eminent 'environmental arbitration' which the Scheme engendered in the staff of the SS Department. Even before the Scheme was launched, the Forestry Department had been forced in 1930 to concede that no reservation would be carried out south of a line running from Gwarzo to Hadejia and the Senior Conservator of Forests had also been forced to concede that:

I wish to add that the progress of sleeping sickness ... is obviously such a menace that under no circumstance could I press for reservation of lands without first consulting him (Tsetse Investigator), and I am convinced that the forest problems of Kano Province are dependent on the work of the Tsetse Investigators (MinAgric, 11356).

The sense of power and social engineering deriving from the 'planned development' of the Anchau Scheme made this dependence even greater and this blocked the policy of forest reservation for another decade.

The livestock department

From the 1920s, as a result of the expansion of groundnut production, the expansion of population and increased urbanisation, pressure mounted on grazing lands and migratory paths that had been maintained by the state in the pre-colonial period. By 1932, the situation had, it was said, reached crisis point in the Kano region, leading to suggestions for drastic action:

The grazing areas for cattle near large Towns have been encroached on progressively in recent years by farmers and threaten to vanish altogether. It is considered that grazing areas (e.g. the 'Hurimi' near large Towns) and the cattle tracks ('Burtalin Shanu') should be reopened, compensation being given to farmers where necessary (e.g. when the encroachment has occurred with the tacit permission of the Native Administration) (MinAgric, 2908. Resident, Kano to Vet. Officer).

From this beginning, the colonial state maintained a guardianship role, protecting the interests of pastoralists against the pressure of expanding cultivators and increased urbanisation. This was a Herculean battle, given the relentless pressure coming from the farming population. In 1950, 3,892 farms throughout Kano Emirate were said to have been established on grazing lands, thanks to the connivance of crooked village headmen. In 1951, an additional 662 farms on grazing lands were reported (KANPROF 2702). This conflict between the interests of pastoralists and those of farmers and urban dwellers has become structurally embedded in agrarian life in the Kano region.

Regardless of the activities of the Livestock Department, the keeping of cattle herds would gradually diminish as urbanisation and cultivation proceeded in the region. In other parts of the savannah, this conflict of interest, involving cattle herds from further north en route to grazing areas to the south, has led to endemic violence.

Soil conservation

Soil conservation efforts in colonial Nigeria started near Udi in the Eastern Provinces in 1924, spreading to the Northern Provinces in 1934 with the construction of terraces in parts of Zaria Province (Brown, in MinAgric, 9500). By the late 1930s, the Dust Bowl in America, the flooding in the Thames Valley and the Fenlands, the 'accelerated' erosion problems in East Africa and Stebbing's scare-mongering, had all come together to create a panic in official circles in London (Fairbairn, 1939, in MinAgric, 4048). Soil erosion was increasingly seen 'as a problem equal in importance to that of maintaining fertility' (KANPROF 2702). Along with the Forestry Department, the Soil Conservation Department was to have a serious impact on the fortunes of the peasantry. The initial efforts at conservation were reinforced in 1938 by a Colonial Office order, requesting every Colony to report on its soil erosion situation annually (MinAgric, 29543/S.2). The report for Kano Province in 1938 divided the Province into three distinct zones: the region around Kano, the areas to the north of it with lighter soils, and the areas to the south with heavier soils. The report was full of praise for the situation in the Kano region, and recommended no immediate practical measures:

In the densely wooded area round Kano the extent of water erosion is, generally speaking, negligible. This is due primarily to two reasons. Firstly, to the general flat nature of the country and, secondly, to the method of agricultural practice which has been evolved by the local native farmers and which has been very successful in controlling erosion. In fact it may be said that the intensive farming which has been carried on in the vicinity of Kano for centuries has resulted in no apparent loss of fertility to the soil but rather the opposite. The measures which have been adopted by the local farmers are: (a) retention of numerous trees where farms were originally cleared. (b) planting of hedges and retention of grass verges around farms. (c) not too frequent weeding of farms. (d) cross furrowing. (e) frequent manuring (MinAgric, 29543/S.2. Soil Con. Annual Report, Kano).

For much of the early 1940s, soil conservation work in the Kano region consisted mainly of 'propaganda' aimed at encouraging contour ridging, grass strips between plots, and the preservation of trees and shrubs on farmland (MinAgric, 9500). By the late 1940s, active intervention for the purposes of conservation had started. For instance, it was reported in 1947 that 'some 500 acres at Dambarta (Dambatta) have been surveyed and will be protected with S. terraces...' (MinAgric, 9500). These were apparently on over-grazed lands. In 1950, the level of intervention was stepped up with the *Kano Native Authority (Control of Soil Erosion) Order* which now sought to regulate the practice of farmers by stipulating that: '(a) ridges must run across slopes on the contour. At 25 yards, adjacent ridges to be joined by bars; (b) *gamba* (*Andropogon gayanus*) grass strips must be planted round farms; (c) no farming within 15 feet of roads, tracks, or banks. The boundary of the 15 feet must be planted with trees, and the intervening space between the boundary and the bank or road must be planted with *gamba* grass' (KANPROF 2702).

Had peasant practices in 1950 changed so radically from the situation in 1938 to warrant state intervention and compulsion? If not, was this intervention to be understood as a consequence of the 'developmentalist' drive of the post-war years? If the answer to the first question is yes, we must explain why farmers who farmed in a sensible way for centuries suddenly departed from the tried and tested practices that had stood them in good stead. Might this departure be as a result of the political, departmental, commercial, and demographic pressures unleashed on the peasantry since 1903?

It is possible that farming conditions by 1950 were quite different, in their consequences, to those of the 1930s. The soil conservation report for Kano in 1952 pointed out incidences of both wind and sheet erosion, suggesting that 'soil exhaustion, caused through several factors ... and the vulnerability of the particular area...' were the primary reasons (MinAgric, 2702). Another report also suggested that groundnut cultivation was largely to blame for loosening the soil through intensive digging and weeding, and consequently laying the land bare, bereft of all cover in the face of wind and water erosion. It concluded: 'The writer was most struck by the rapid recovery of the tree vegetation in the areas utilised for crops other than groundnuts' (KANPROF, 4048).

However, the most obvious reason why official thinking in 1950 was so different from that in 1938 was the importation to West Africa, from Southern and East Africa, of the obsessive concern with soil conservation, which had such destructive social, ecological and political consequences (Thrupp 1987; Beinart, 1988). The grip of interventionism on the colonial imagination in this period was aptly illustrated by the Colonial Agricultural Conference of 1950, at which the concern was whether to use 'compulsion' or not in enforcing soil conservation measures; not whether these measures themselves made any sense. Implicit in all this was a new drive to re-order and re-shape rural life in the colonies; a process sometimes referred to as the 'second colonial occupation'.

The peasantry was now cast in a different light. Said in 1953 of the peasantry in neighbouring Katsina:

The most recalcitrant factor ... (in soil erosion) is a conservative peasantry who have during the last ten years done well for themselves by the very system of soil mining that it is necessary to halt, and who have not the knowledge or ability to understand the need for change (MinAgric, 29543).

Late colonial developmentalism, or the second colonial occupation, therefore sought to change the behaviour of this 'conservative' and 'ignorant' peasantry. In the mid-1950s, in keeping with this changed view of the peasantry, erosion treatment and soil conservation programmes became prominent aspects of the colonial agenda, especially in eastern Kano Emirate (MinAgric, 7637). The work done was often of a debatable quality. In 1944, an Agricultural Engineer, G. Browne, had cause to criticise the conservation work being done by officers in Zaria Province:

It seems to me that many of them are on the wrong lines themselves and in no position to advise their local farmers on this work. It cannot be too strongly emphasised that it is better to leave things as they are until tackled properly unless the work to be done is on the right lines (MinAgric, 9500).

And in 1951, the Regional Director of Agriculture wrote of the 'bitter experience' of the colonial staff at conservation work: 'We have learnt from bitter experience that conservation without *first* (emphasis in the original) providing a safe discharge for storm water has resulted in gullyng...' (MinAgric, 9508 Vol. I). Commenting on some of the conservation work being done in Kano Emirate in 1956, the Regional Director of Agriculture told the officers on the ground in Kano that 'I am in some doubt of the methods you are adopting.' (MinAgric, 7637). All told, it is not clear whether colonial conservation work in Northern Nigeria treated or caused erosion! Meanwhile, containing erosion provided another justification for late colonial interventionism.

The work of the Soil Conservation Department was not without its own tensions. Predictably, one was with the Sleeping Sickness Department, while another was connected to the 'Burning Question' (Jeffreys, 1945) of grass-burning. As pointed out earlier, the SS Department cleared forests which the Forestry and Soil Conservation Departments wanted to maintain. From the point of view of the Soil Conservation Department, these clearances were bound to lead to erosion and soil degradation. In 1945, a SS Department official sought to refute the alleged connection between forest clearance and soil erosion:

Clearing reveals ... gullies which are frequently wrongly attributed to the clearing, ..., instead of the loose nature of the soil which wears away just as badly on uncleared as on cleared streams (MinAgric, 9500).

The conflicting interpretation of the activities of the SS Department continued and in 1949, Gilbert Browne, Agricultural Engineer, called for 'some form of compromise (MinAgric, 9500)' between both parties. Subsequently, 'The Erosion Experiment' was launched in June 1949 by the Institute for Trypanosomiasis Research, Kaduna, on a site on the Kaduna-Zaria road. The expressed aim of this research was to find out if anti-sleeping sickness stream clearance led to any erosion problems. Though it was stressed that the research effort was inter-departmental, the influence of the SS Department was clearly enormous:

The representatives wished it to be recorded that they were very impressed at the amount of erosion already occurring on this uncleared stream, where man's activities are almost non-existent (MinAgric, 9500).

In the climate of opinion at that time, there was little chance that the SS Department would be forced from its commitment to vegetation clearance.

The second source of tension was over legislation against grass-burning. Frequently, Nigerian Government circulars went out condemning the impact of the burning of grass on five crucial aspects of the environment: on the vegetation in general; on the grass itself; on the soil; on rainfall; and on erosion (Jeffreys, 1945). These warnings were often given legal teeth through Native Authority Ordinances; in Kano, the *Early Burning and Anti Erosion Order* was issued in 1950 (MinAgric, 9500 Vol. III). These measures were debated on the pages of the influential colonial journal, *Farm and Forest*. Echoing the government position, J.L. Stewart (1944) asserted that 'The question of soil erosion is bound up with fire control. Sweeping grass-fires are undoubtedly one of the main causes of this evil'. This view was forcefully challenged

by Jeffreys (1945), who argued that there was no empirical basis for the suggested connection between grass-burning and soil erosion. In this, as in many other aspects of colonial science, practice was frequently dogged by controversy.

3.3 Marketing and development boards

The fourth and final manifestation of late colonial developmentalism in the Kano region came with the establishment of marketing and development boards in the post-war years. A fuller examination of the development of the market in the region will be undertaken in a subsequent section. In this section, we only aim to point out changes to the extant marketing system established in the early colonial period. As pointed out earlier, the early colonial period was characterised by a relatively free market in groundnuts, albeit under the domination of a few European commercial firms. Grain marketing, on the other hand, was characterised by direct extra-economic requisitioning by the colonial state for the military and the mines. In the early colonial period, therefore, it could be argued that groundnut was in the sphere of the market and grains, in the sphere of the state. The establishment of the marketing and development boards marked an end to this bifurcated marketing strategy, with the state increasingly intervening in the marketing of groundnut.

Until 1939, the marketing of groundnuts was under the relatively free market of the early colonial period. As Helleiner rightly pointed out (1966: 153), a few European firms had a stranglehold on both the exports and the imports, trading through a network of agents that tied the remotest village to the commodity markets of London and New York. He also points out that 'This market power was a matter of which the peasant farmers were very much aware'. Things changed in 1939 because of developments in the cocoa economies of southern Ghana and south-western Nigeria, and because of the wartime needs of the British Ministry of Food. Helleiner outlines the stages of the transformation of the marketing system. Unrest amongst cocoa farmers against the monopsonistic practices of the leading European firms led to the Gold Coast cocoa hold-up of 1937. This led to the establishment of the Nowell Commission which argued for changes in the structure of marketing. These changes were then speeded up by the outbreak of war and the needs of the Ministry of Food. In the 1939-40 season, faced with the prospect that, for lack of shipping space, there would be no market for cocoa, the Ministry agreed to buy all the cocoa crop at a fixed price. The European firms were obliged to sell to only the Ministry. Under this system, the Ministry assumed the obligation to return any extra profits to the producer, while bearing the cost of any losses. At the end of the 1939-40 season, this arrangement had been formalised with the establishment of the West African Cocoa Control Board (Deutsch, 1989: 1990).

The fall of British Far Eastern territories in 1942, and the loss of south-east Asian supplies of vegetable oils, prompted the inclusion of groundnuts and oil-palm under the control scheme. This resulted in the creation of the West African Produce Control Board, responsible for the three commodities. During the war the colonial Government discovered the virtues of being able to buy produce cheaply and sell it dear. Cocoa, in particular, generated large trading surpluses which were invested in London. Low producer prices, and the wider effects of this on the Nigerian economy depressed demand for scarce, and rationed, imported goods. Nigerian exports earned dollars for the sterling area which were not balanced by imports from North America. In 1947, cocoa was separated from the other two crops with the formation of the Nigeria Cocoa

Marketing Board. After 1946, the price paid to producers of groundnuts fell well below the world market price. However, the fear of inflation meant that low producer prices were maintained for tropical export crops, the balance being held in reserves in London. In the case of groundnuts, this was despite the post-war scarcity of vegetable oils. The accumulation of the reserve was justified as a means to provide for stabilisation of prices in bad years. In reality, the argument about stabilisation was basically a justification of a policy of massive transfers from the peasantry (Bauer, 1954: 1955; Williams, 1985).

From 1947, therefore, we begin to see the accumulation of surpluses from the groundnut trade by the colonial state (Helleiner, 1966: 152-7). In 1949, the Nigeria Groundnut Marketing Board was established. In 1954, when the three regions became self-governing, the national commodity boards were regionalised, leading to the establishment of the Northern Nigeria Marketing Board with responsibility for groundnuts, cotton and other crops meant for export. Once the marketing of groundnuts fell under the control of the state, two things were of crucial importance as far as the peasant was concerned. First was the setting of prices by the boards to enable them to accumulate trading surpluses. Second, there was also the question of what the revenues of the boards were ultimately used for.

Between 1947 and 1954, the Groundnut Marketing Board benefited from the Korean War boom and its monopsony capacity to fix prices. It accumulated trading surpluses of £30,535,300 (Helleiner, 1966: 161). From 1947 to 1954, 40 percent of potential producer incomes were withdrawn through the Board. But the Marketing Board was not the only institution created in this period. After 1946, British colonial policy swung decidedly in favour of promoting development and welfare in the colonies. In 1946, the Nigeria Local Development Board was established. By 1949, regional development boards were created. These development boards were to promote public works, public utilities, urban and village planning, the development of village crafts, industrial development, land settlement, forest reserves, research and development and 'public value' (Helleiner, 1966: 245). Marketing Board surpluses were diverted to fund the activities of the development board. Though some development projects were executed at the village level, the marketing and development boards increasingly diverted their revenue towards the aspiring nationalist bourgeoisie class that was coming to prominence in this terminal colonial period. This aspect of late colonial developmentalism was therefore a project in class and state formation, underwritten by the peasantry. This fiscal dependence of the state, its bureaucracies and their associated classes on peasant surpluses would only be broken after the 1970 oil boom.

4 'POST-COLONIAL' INTERVENTION, 1954-1970

Self-rule in 1954 brought the conservative Northern People's Congress (NPC), dominated by the local aristocracy, into power at the regional level. The charismatic scion of the Sokoto Ruling Dynasty, Sir Ahmadu Bello, the Sardauna of Sokoto, became Leader of government business, further cementing the erstwhile alliance between British colonial administrators and the local aristocracy. The developmentalist impulse of the late colonial period was given added fillip by a local political leadership anxious to recapture the past glory of the Sokoto Caliphate, albeit in alliance with

British officials. Surpluses from groundnut exports remained central to the state's strategy. Ninety-six percent of all government funds for 'development' between 1946 and 1962 came from the marketing boards (Helleiner, 1966: 248). From 1954 to 1961, when world prices fell, producer prices were not stabilised in favour of the peasantry. Instead, the percentage of the income from sales taken by the Marketing Board as profit dropped from the 40 percent of the period 1947-54, to 15 percent (Helleiner, 1966: 163).

In 1962-63, government withdrawals from producers' incomes were an estimated 20 percent and in 1967-68, the figure was put at 25 percent (Hill, 1972: 290). This constant haemorrhage could have been justified if the resultant surpluses were actually put to the use of the peasantry. Instead the trading surpluses were increasingly committed to 'development'. In 1962, the Northern Nigerian Government formally committed itself to this switch in purpose (Helleiner, 1966: 172) and the groundnut-producing peasantry became the milch cow for the Regional Government and its burgeoning bureaucracy. In 1955-56, 48 percent of all Northern Regional Marketing Board groundnut purchases came from Kano Province; the figure for 1960-61 was 45 percent (Helleiner, 1966: 111).

What if these vast sums were not taken in taxes and had been returned to the peasantry? Would that have made any difference? We may never know. Some suggest that most of it would have disappeared in consumption, giving rise to a more contented peasantry but no long-term accumulation. On the other hand, it could be argued that increased spending by peasants would have increased demand for manufactured goods, encouraging the production of import-substituting consumer goods - i.e., that Kano's Civil War (1967-70) industrial boom would have begun earlier and on a sounder basis. Helleiner (1966: 182-3) also suggests that fragmentary evidence points in the direction of increased income leading to some savings by peasants. A study in neighbouring Zaria Province in this period also showed that after a certain level of income, more productive expenditures like the hiring of more labour, the building of new housing, and other such investments took place.

The emergent African ruling elite also maintained the colonial policy on the nationalisation of land. In 1958, proposals were advanced for the relaxation of some aspects of the colonial land tenure system. In particular, it was suggested that the ceiling of 1,200 acres imposed on agricultural holdings by the *Land and Native Rights Ordinance* be repealed. In a report on the suggested amendments, C.W. Cole, Senior Resident, Special Duties, poured scorn on the proposed reforms:

I very strongly recommend that this legal limit be retained. If it is abolished then the door is left gaping wide open for the re-formation of the old estates and the dispossession of the peasant occupiers (MinAgric, 6151. Emphasis in the original).

For good measure, Cole denounced modern plantation schemes such as the Niger Scheme at Mokwa. Another British official, Mr Chambers, Permanent Secretary, Ministry of Agriculture, Northern Region, was however of a different mind. He minuted to his African Minister that sales and mortgages, contrary to both the Ordinance and Maliki laws, were rampant anyway, and should be legally recognised, as '... this legal revolution is already a fairly common practice... (MinAgric, 6151).' Chambers

continued:

I fully realise that the right to buy and sell land will give rise in the course of time to a landless proletariat which will be the source of political and social pressures. My answer to that is that the process will come about anyway and is in fact already happening (MinAgric, 6151).

The African Minister decided to reject Chambers' advice, taking sides instead with Cole's hard-line position. Chambers was told that 'This is a tough minute. I do not think it is high time to do (sic) such rules but it may be possible to adopt it by future generations (MinAgric, 6151).' The old fiction of the nationalisation of all lands in Northern Nigeria survived this late colonial onslaught, and was embraced by the post-colonial state under military tutelage through the *Land Use Decree (Act)* of 1978, which extended the Northern tenure system to the rest of Nigeria by fiat. Nevertheless, land nationalisation remains what it has always been, an administrative fiction, though one which can be selectively upheld. It is, primarily, the cloak for the forcible acquisition of peasant lands for the purposes of 'development' projects and for re-allocation to others. Poor urban communities on coveted pieces of land, like the Maroko community in Lagos, have also been displaced through the Decree.

Nigeria became independent in 1960, with the Northern Region maintaining the two basic pillars of colonial agrarian policy, viz, the marketing board and the nationalisation of land. Policies during this period basically refined and entrenched the model developed under late colonial developmentalism. This period was the high point of the groundnut economy of the Kano region, made famous by the groundnut pyramids waiting to be transported to the seaports. Between 1961 and 1964, the volume of groundnuts harvested reached new peaks. Nigeria was the world's largest exporter of groundnuts and Kano was at the heart of Nigerian production. Real producer prices in this period were also about 50 percent higher than those that obtained in the 1948-1952 period; rising to an index of 158 compared to 111. The real income of farmers also improved; from an index of 93 in the 1948-1952 period, to one of 365 in the 1961 to 1964 period. In all cases, the index stood at 100 in 1948. (Helleiner, 1966: 116-7).

The major preoccupation of the state in the early 1960s was ensuring its own share of peasant incomes through the marketing boards. The Second National Development Plan, 1962 to 1968, devoted only N183 million¹ (91.5 million pounds sterling) to agricultural development in the whole country (Gusau, 1998: 131). Only N53 million (26.5 million pounds) was devoted to capital expenditure (Alkali, 1997: 91). Worse still, there was no organising strategy behind this derisory allocation of resources.

The policy environment was, however, not static. There has been a long-standing political commitment to irrigation by the colonial and NA administrations in the Sokoto River valley since the 1930s (Swainson, 1938; Palmer-Jones, 1987). With Ahmadu Bello at the head of the Regional Government from 1954, there was renewed interest in irrigation. In the 1960-61 period, the Sardauna actively promoted this long-standing interest in irrigation. Regional civil servants advised that irrigated wheat production should proceed on an experimental basis. Their major objection was the high cost of

¹ N = Naira: Nigerian currency from 1972. For most of the 1970s and early 1980s, it was valued at N2 to £1 Sterling. In December 2000, the exchange rate is N167 to £1.

domestic wheat production. They were over-ruled by the Sardauna who insisted that the full programme be implemented; in 1961 the decision was taken to support the price of local wheat production and provide subsidised inputs (Palmer-Jones, 1987: 158-9). The Bakura pilot project, started in 1961, was to become part of the much larger Bakolori project ten years later. By the late 1960s, the UNDP, FAO and USAID were also encouraging the development of large dams for water storage and irrigation.

In 1966, the first coup removed the civilian governments at the Federal and Regional levels and a civil war followed in 1967 between secessionist Biafra and the Federal side. This war came to an end in 1970 with a Federal victory. The end of the war also marked the beginning of the oil boom, which provided the financial muscle for state intervention and state centralisation in many aspects of Nigerian life. The regions were broken up into states in 1967, with Kano State emerging in place of Kano Province in the old Northern Region. Henceforth, the erstwhile evil of powerful regions constraining the proper functioning of the federal centre was replaced by that of weak states, hamstrung by an enhanced and interventionist federal centre.

There were also political changes at the grass-roots level. The new military Government sought to reform the NA system which was seen as not reflecting popular aspirations. The first initiative in local government reform under the military was in February 1966, when the NA *alkali* courts were brought under the control of the Chief Justice of the Federation. The NA police were brought under the Inspector-General of Police at the Federal level and the NA Prisons were transferred to the Federal Government. The old NA structure, well integrated as it was into the colonial and the immediate post-colonial state structures, was now being systematically stripped of its instruments of power and authority. In 1968, the Kano State Government decided to replace the NAs with Local Government Authorities (LGAs), such that the Kano Emirate NA became the Kano Emirate LGA. The area covered by the LGA was further subdivided into independent Administrative Area Councils (AACs), whose main functions were the maintenance of markets, feeder roads, and motor parks. Membership of the AACs were thrown open to erstwhile opponents of the NA system. District and Village Councils, where they existed, were expected to continue as before. The mid-1960s therefore saw a fundamental shift in power relations at all levels of the Nigerian state.

By 1967, the new military rulers had bought into the vision of agrarian transformation through large dams and irrigation which had gathered pace under the Sardauna. Studies were commissioned for three projects including the Kano River Project (KRP) (Palmer-Jones, 1987). This long-term shift in the direction of irrigation was given a particular fillip in Kano State where the Military Governor (1967-75), Alhaji Audu Bako, was a very enthusiastic farmer. He also had a close friendly connection with the top echelons of the Sokoto aristocracy. Irrigation development in the Kano region, from the late 1960s, would be associated with the zest of Audu Bako. Between 1969 and 1978, 14 dams were built in Kano State, many of them in the immediate Kano region. Between 1979 and 1980, another five were built and in the 1990s, the Challawa Gorge Dam was completed (WRECA archives, Kano).

The period 1960 to 1970 can rightly be seen as the high-water mark of the old colonial political economy structured around groundnut production. Political shocks to the system led to the abolition of the Regional Government, and the gradual demolition of the Native Authorities. Henceforth, policy would be guided by a Kano State

Government whose authority – and finances – were increasingly reliant on the Federal Government. With the oil boom after 1970, this Federal might would be increasingly felt. These political shifts were matched by the gradual shift in the direction of dams and irrigation. Irrigation schemes provided Government with a way of committing burgeoning oil revenues. The Sahel Drought of 1972-74 was to reinforce this by encouraging a ‘drought psychosis’. And in 1975, infestation by rosette disease virtually wiped out the groundnut crop in the Kano region, completing the shift away from groundnut cultivation as the major focus for agrarian production. From the early 1970s, therefore, a new agrarian dynamic was beginning to unfold in the Kano region.

5 THE OIL BOOM PERIOD, 1970-1985

This is a most active and intensely studied period in Nigerian agrarian history. Focusing on the Kano region, we delineate three important areas of inquiry: the changing local political context during this period, the macro-agrarian context; and the actual policies pursued.

5.1 The changing political context

As noted earlier, reforms of the old NA model started in earnest after the military take-over of power in 1966. Various state governments tinkered with the reform of local government, leading in 1976 to a comprehensive national programme of local government reform, indicative of the increasing powers of the Federal Government over local matters. This Federal effort was a fundamental reform which, for the first time, defined local government as an autonomous third tier of government, theoretically independent of the Federal and State governments. It also aimed at enhancing representation and participation. From 1976, the centre of local political gravity would shift in the direction of the LGA, even though the old aristocracy still had a high visibility and presence. Indeed, a kind of ‘dual power’ scenario was obtained in rural Kano in this period. First, in matters considered to be ‘official’, the chain of information and administrative instruction was from the State Government, to the LGA chairmen, to district heads, to village heads, to ward heads and finally to the population in that descending order. Second, in matters considered to be ‘traditional’, the instructions went from the State Government, to the Emir, and then to the district heads downwards. Both the aristocracy and the LGA were increasingly dominated by the State Government, which was itself increasingly dominated by the Federal Government. This centralisation of power was to have implications for agrarian policy as the Federal Government assumed a commanding position in this sphere.

Initiatives for agrarian-related policies moved from the NA to the new Kano State Government. It was the State Government that spear-headed the spate of dam building from 1969. The centre-piece of the Kano River Project, the Tiga Dam, was started in 1971 and completed in 1976. This is further discussed below. In 1976, the State Government also created a Rural Development Agency, whose task was to improve rural water supply and feeder roads. The Water Resources and Engineering Construction Agency (WRECA) was created in 1968, and this parastatal was subsequently charged with rural water supply and road construction. Between 1968 and 1979, 202 well-sinking teams were dispatched into rural Kano (WRECA, 1979). The

State Ministry of Agriculture engaged in tractor hire services and extension. From 1976, LGAs also gave loans in cash and kind to farmers. They also provided extension and the running of tree nurseries.

A second important political development in rural Kano in this period was the coming to power of the populist radical and anti-aristocratic political movement which had been associated with Malam Aminu Kano and the Northern Elements Progressive Union (NEPU) since the 1940s, and with the People's Redemption Party (PRP) from 1978. The historical *raison d'être* of this political movement was to challenge the political hold of the NA aristocracy over the peasantry. With the return to civilian rule in 1979, elections in Kano State were decisively won by the PRP. The PRP had two major political objectives in Kano. First, it sought to 'redeem' the 'people' from aristocratic privileges. Towards this end, LGA chairmen were prohibited from attending meetings of the Emirate Council in Kano, thereby severing the remaining links between the erstwhile centre of emirate power and the rural political structure. The political and institutional drift away from the aristocracy, initiated with the coup in 1966, was now virtually completed. Second, the PRP in Kano, associated with the person of Governor Abubakar Rimi, initiated a raft of populist socio-economic programmes with direct relevance to our inquiry. *Haraji* (poll tax), that hated symbol of colonial and NA power in the countryside, was abolished, bringing to an end the major source of aristocratic power. This would lead to what Jane Guyer (1994) referred to elsewhere in rural Nigeria as 'representation without taxation' as the rural electorate was now freed from financing the governments they voted into office. The perverse political result was the intensification of the distributive logic of the state, particularly under oil boom conditions.

This period of radical-populist ascendancy in rural Kano had a tremendous impact on the quality of life of the average peasant. Before 1979, fewer than 10 towns in the whole of Kano State had electricity. Between 1980 and 1983, this facility had been extended to nearly 100 small towns, many of which were in the Kano region. In the same period, the number of towns connected to the national grid went from three to 30 (interviews in Kano). There was a similar expansion of water provision. Up to the late 1960s, lack of water in the dry season was causing extreme hardship to many rural communities in the Kano region; 'people used to migrate from their villages to places where they could get water down south' (WRECA, 1983). Between 1979 and 1983, the water supply network around Kano was extended from 900 kilometres to 1500 kilometres in length. According to WRECA (1983: 5) 'This enabled us to supply water to about 500,000 more people living in about 112 Hamlets, villages or Towns. About 15,000 new water connections were made and 1600 standpipes were erected'. The Semi Urban Water Supply Unit also expanded its activities from 51 towns and villages in 1979 to 110 completed schemes in 1983; and 450 boreholes were constructed in more rural areas. A study that looked at the impact of this water provision in 1982 noted that 'there is a continuous population drift towards the areas supplied by pipe borne water' (Hettiartchi, 1982). This changing political configuration at the local level in Kano had a bearing not only on peasant livelihoods, but also on the direction of subsequent policies.

5.2 The macro-agrarian context

The second major element explaining the nature of agrarian policies in this period was the pervasive feeling at the time that the country was on the cusp of an 'agrarian crisis'.

The most direct evidence for this was the rise in the quantity of food imports, and the share of food imports in total imports, during the 1970s. Food, as a percentage of total imports, went from 7.6 percent in 1970 to 19.8 percent by 1983. In actual monetary terms, this was a rise from about US \$130 million in 1971 to about US \$1.794 billion in 1981 (Watts, 1987: 72). The major contributions to this increase were wheat, rice, maize, and day-old chicks for the burgeoning poultry industry. Consumers were turning to higher-value and more convenient grains. Between 1970 and 1980, annual consumption of rice went from 2.9 kg to 7.8 kg per capita. Between 1972 and 1980, urban minimum wages went up by 435 percent in Kano, while aggregate rural wages in the north of Nigeria went up by 444 percent (Watts, 1987: 31). It is quite possible that rural wages in the Kano region went up even more quickly.

Official statistics, of dubious provenance, suggested that total food production fell between 1970 and 1980 (Williams, 1981). Hence the need for Government to encourage food production to address the crisis. This perceived crisis has been disputed by a number of scholars. The decline in agricultural exports, the increase in agricultural imports, and rising domestic prices have often been cited as proof of the 'agrarian crisis' in this period. However, Beckman (1987: 110) argues that underlying these statistics was a process of increased commercialisation and re-orientation towards the internal market; the situation was one of transformation, rather than of crisis. Forrest (1993) supports Beckman, arguing that food production expanded rapidly, leading to rural-rural migration to food producing areas:

The picture of crisis depends crucially on what happened to output. Most writers, and the World Bank until recently, have claimed that there was a sharp reduction in growth of agricultural output. Agricultural growth was held to be negative or well below 1 percent. In a remarkable revision of its estimates, the World Bank in 1985 estimated agricultural growth at 2.7 percent per annum...in the period 1970-1982 and admitted that total production of staple crops had probably kept pace with population growth. Although these figures are still arbitrary, they are more consistent with my view of agricultural growth.

... Data have been used in Nigeria on several occasions to 'project' large food deficits. A target is set for food self-sufficiency within four or five years. The air is then filled with the agitated rhetoric of food crisis, and the government justifies all its activities and expenditures in terms of a drive to food self-sufficiency. For example, both the International Food Policy Research Institute (1977) and the World Bank Food Strategies Mission of 1980 forecast large deficits. The latter study forecast a deficit of 6.6 million metric tons of cereal equivalent by 1985. Nigerian farmers were to confound these experts and undermine their scientific pretensions (Forrest, 1993: 184-5).

A closer look at changes in agriculture in rural Kano in this period supports the arguments put forward by Beckman and Forrest. At least some of the apparent collapse in production was due to a reorientation of production toward food crops, and a reorientation of markets toward an expanding parallel market trade with Niger Republic to the north. Groundnuts, the main export crop, had moved back and forth across the Nigeria-Niger border since early colonial times, depending on how fiscal policy and buying arrangements on either side of the border affected the relative profitability of parallel market prices (Collins, 1984). But the parallel market was not enough to sustain production incentives in Nigeria,

particularly after the elimination of French price support in 1967. Nigerian groundnut production collapsed in 1975, under the weight of low marketing board prices exacerbated by poor international prices, drought and the outbreak of rosette disease (Mustapha, 1990: 173). The rising profitability of grain from the early 1970s provided an alternative to groundnut production. Food crops became increasingly profitable as a result of expanding demand for food and increased food prices in Nigeria. The doubling of public sector wages in 1974 stimulated demand. The absence of food crop marketing boards prior to 1977, and their limited role in supporting prices for those with access to them after 1977, allowed food prices to rise in accordance with demand. Millet and sorghum, ranked by Matlon's study of rural Kano in 1974 as among the least profitable crops, were among the most profitable by the early 1980s, and have replaced export crops as the main cash crops of the Nigerian savannah (Matlon, 1979: 90; Longhurst, 1985: 57-8).

In addition to rising food prices within the country, the market for Nigerian grain was also expanding into Niger Republic from the late 1960s. While grain smuggling between the two countries had existed since the marking of the colonial border, the direction of grain flows had previously been from Niger into Nigeria. This was largely the result of the expanding market for grain in Nigeria created by the colonial groundnut economy and rising urban demand (Watts, 1983: 222). Grain from Niger was also attracted by the high parallel market value of the Nigerian Pound against the CFA Franc, owing to the more liberal import policies pursued by the British colonial regime (Igue, 1985: 22). Luning's study of Katsina Province notes that, as late as 1960, the 22 percent grain deficit in the extreme north of the Province was supplied largely by smuggling from Niger, an activity that was illegal on the Niger side of the border, but not on the Nigerian side (Luning, 1961: 88-91; Collins, 1974: 36).

This trend was reversed in the late 1960s, again by a combination of factors. Among the most central were the intensification of import controls after Nigerian independence, the collapse of groundnut production and the de-linking of the Nigerian Pound from the Pound Sterling in 1968, which precipitated a collapse in the parallel value of the Nigerian Pound as shown in Table 1. The result was a reversal of the relative price advantage of the informal grain trade. The shift in the direction of the grain trade dramatically increased the profitability of grain production in Nigeria. As Table 1 also shows, the gap between the official and the parallel market prices of the Naira showed the extent of its over-valuation in this period. This created a paradoxical situation in which the official exchange rate was used to maintain a policy of cheap grain imports, while the parallel exchange rate encouraged increasing flows of informal grain exports.

However misleading the official representation of agricultural production may have been, the state, concerned with declining official exports and rising food prices, decided not just to intervene in agriculture, but to do so in a fundamental and decisive way. The post-civil war Nigerian state was increasingly centralised. It had ambitions to build a coherent and integrated national space with its oil boom petro-dollars. This ambition was reflected in the roads, universities and television stations built. This urban-centred infrastructural boom, along with the civil war before it, pulled labour away from agriculture, raising rural labour costs.

Table 1: Parallel exchange rate of Nigerian currency at the Niger border, 1966-1984 (rates in FCFA)

Year	Official Rate	Parallel Market Rate	% Difference
1966	691	650	-6
1968	691	400	-57
1972*	389	200	-49
1976	383	250	-35
1978	354	201	-43
1980	387	228	-41
1982	486	291	-40
1984	572	129	-77

Source: IMF/IBRD, *Direction of Trade*, 3, 1961-65 and 8, 1968-72; IMF, *International Financial Statistics*, 29(12), 1976 and 37(2), 1984; Collins, 1984; Igue, 1977; Igue, 1985.
 * In 1972, Nigeria changed its currency from the Pound to the Naira, at a conversion rate of 2 Naira to the Nigerian Pound.

In agriculture, the ambitious state would aim at nothing less than the complete overhaul of the agrarian system of peasant smallholder production. As Wallace rightly points out, the dominant official attitude was that ‘the best way to improve productivity and relieve poverty is to bring modern technology and skilled advisers into the rural areas’ (1986: 283). The capitalist transformation of Nigerian agriculture, rejected in the early colonial period, was now on the cards. The story of agrarian public policy in this period is the story of the *failure* of this second ‘great transformation’. The policies pursued in the agrarian sector must also be understood against the wider context of a state-led strategy of import-substituting industrialisation.

5.3 Actual policies

As pointed out earlier, Kano State under Audu Bako was already getting involved in irrigation in the late 1960s. Increasingly, this initiative fell under the control of the Federal Government, and to understand the policy dynamic of the period, we need to look at Federal policy. The first point of note is the increased level of state investment in agriculture, as shown by Table 2.

Table 2: Public capital expenditure in agriculture, 1962-1985 (N’000)

Year	Federal	State	Total
1962-68	10,961	41,596	52,557
1970-74	34,023	93,263	127,286
1975-74	1,112,598	1,188,582	2,301,180
1981-85	5,400,000	3,427,531	8,827,531

Source: Alkali, 1997,92.

In 1972, partly in response to drought in the north of Nigeria, the Federal Government launched the National Accelerated Food Production Programme (NAFPP). This programme was contracted out to the International Institute for Tropical Agriculture (IITA) which was to provide research, service development and input delivery. Funded by the Federal and state governments and the World Bank, the programme was implemented by various ministries of agriculture and the personnel of three research institutes (Gusau, 1998: 133). Also in 1972, the Agricultural Credit Guarantee Scheme Fund (ACGSF) was established under the Central Bank with the hope of increasing the capitalisation of agriculture. For much of the 1970s, and the first half of the 1980s, more than 50 percent of the loans guaranteed went to poultry production, an agrarian sector dominated by urban based 'new breed' (i.e. capitalist and modern) farmers. The Nigerian Agriculture and Co-operative Bank (NACB) was set up in 1972. As far as the Government was concerned, what was needed to contain the 'crisis' in the agricultural sector was the infusion of technology (through the IITA) and capital (through the banking institutions). Though official rhetoric focused on the peasant smallholder, actual practice pointed in the reverse direction: between 1973 and 1992, the NACB gave only 15 percent of its loans to smallholders (Mustapha, 1998).

By the mid 1970s, the Nigerian state was intervening in agricultural markets in quite new ways. In the early colonial period, food marketing had been subject to requisitioning. From the late 1940s, a free market in food prevailed, based on complex market networks linking southern and northern Nigeria together, and involving numerous cross-border dimensions. In 1975, the Nigerian state set up state supply companies to import and sell meat and rice in response to the 'food crisis'. Between 1975 and 1985, Nigeria imported an annual average of 748,420 tonnes of wheat, 97 percent of which came from the USA (Durojaiye, 1998: 247). The other major grains imported were maize, with imports of 347,300 tonnes in 1982, and rice, with 539,400 tonnes in the same year (Durojaiye, 1998: 253). This indirect intervention helped to dampen food price inflation. In 1978, the state reversed its previous role in the marketing of export crops. The regional marketing boards, symbols of regional power and autonomy, were disbanded and replaced with national commodity boards, more in keeping with the totalling vision of the state. Out of the seven commodity boards that controlled export crops, six consistently recorded losses. The only profit-making board, responsible for cocoa, was beset by enormous problems. There were also price incentive schemes for agricultural producers, guaranteed minimum prices and the removal of some taxes. In effect, in complete reversal of Bates' (1981) thesis on states and agricultural markets in tropical Africa, the Nigerian state was now formally subsidising export crop producers.

Another effort at intervening in the actual process of agrarian production was unfolded with elaborate fanfare in 1975. This was the Operation Feed the Nation (OFN). The basic thrust of this policy was 'mass exhortation' and mobilisation for food production. University students, most of whom had never worked on a farm and many of whom had never lived in the rural areas, were dispatched as 'experts' to the countryside to teach peasants how to use modern inputs and farming methods. As can be expected, the result was farcical; the programme was subsequently ridiculed as 'Operation Fool the Nation'. Still, the 'food crisis' attained a high profile in the country's consciousness. About the same time, the state established large-scale, capital intensive mechanised plantations: the National Grains Production Company (sorghum); the National Roots Production Company (cassava); the National Beverages Production Company (tea) and two sugar

estates (Forrest, 1993: 137). A Nation Grain Reserve Scheme was also put in place and silos built. In 1977, a National Seed Service was launched to ensure the supply of good quality seed, and tractor assembly plants, with major European investment, were opened in Kano, Bauchi and Anambra. In 1978, a National Accelerated Fish Production Programme was launched.

Also in 1978, the ambition to transform agrarian life was taken a step further when the Nigerian state purported to nationalise all lands under the Land Use Decree. In the Kano region, this was the fourth time the state (colonial and post-colonial) nationalised all lands, an indication of the ineffectiveness of the measure, in the past, as well as now. The Decree nevertheless set the stage for large-scale appropriations of peasant lands for the use of private individuals interested in 'capitalist' farming. There was a rash of large-scale farms in the Kano region in this period. We return later to aspects of this elite-driven 'capitalist agriculture'. Consequent on the sustained intervention of the state, Nigerian agriculture under the oil boom gradually developed a distinctly bi-modal structure, with the emergence of a relatively capitalised and technically modernised sub-sector, specialising largely in poultry and livestock, side-by-side with peasant production. However, this modernised sub-sector accounted for only five percent of total agricultural production, though it consumed a high percentage of government resources.

From the mid 1970s, pressure mounted for the conversion of reserved areas to agricultural and housing use. With the Sahelian Drought of the mid-1970s, it was suggested that a shelterbelt was needed right across northern Nigeria as a shield against the desert. From 1975, increasing funds were made available for environmental forestry in drought-prone areas and in 1979-84, the Arid Zone Afforestation Programme was launched to encourage farm forestry, and plantation and shelterbelt establishment (Cline-Cole, 1998). In 1979, the Federal Government launched an afforestation project known as Forestry I, covering the southern states of Enugu, Ogun and Ondo. However, none of the policies so far discussed were as far-reaching in their cost and effects as the River Basin Development Authorities (RBDA), the Agricultural Development Programmes (ADP) and the active promotion of large-scale capitalist farming.

The river basin development authorities (RBDAs)

The Kano River Project (KRP) was started on a pilot plot in Kadawa in 1970. By 1971, it had developed into a full project. It is a large-scale, capital-intensive irrigation project, initially designed to cover an area of 23,000 ha in the heart of the Kano region. It was hoped that this would be subsequently expanded to 59,000 ha (Wallace, 1986: 281). It is part of the Hadejia-Juma'are River Basin Development Authority (HJRBDAs). As a result of the Great Sahelian Drought of 1972-1974, similar large-scale irrigation projects were also initiated in the Sokoto and Chad basins in 1973. In June 1976, another eight RBDAs were created in Nigeria by decree; by 1984, the number stood at 18. Conceived in the tradition of the Tennessee Valley Authority, the RBDA had wide functions, including large-scale irrigation, flood control, watershed management, pollution control, fisheries and navigation, seed multiplication, livestock breeding and food processing. Some went into direct production and others were involved in land clearance and the provision of access to land for large-scale farmers and corporate bodies (Forrest, 1993).

The RBDAs were costly and inefficient. The Bakolori project of the Sokoto-Rima

RBDA was a complete fiasco, pitting the peasantry in open confrontation against the Nigerian state and the contractor, Fiat of Italy (Beckman, 1986). The Peremabiri Rice Project of the Niger Delta RBDA first produced rice nearly ten years after it was established, and at a cost of between N1,400 and N2,500 per bag of 70kg, while selling for N70; at that time, a 50kg bag of rice could be obtained on the international market, and at the official exchange rate, for about N30 (Toyo, 1986; Mustapha, 1993: 113). The estimated construction costs per hectare on the three initial RBDAs in Kano, Sokoto and South Chad were in the region of N25,000 to N35,000 (Andrae and Beckman, 1985). In the Lower Anambra Rice Project, the same cost was as high as N40,000. In 1982, despite their touted capacity to produce local wheat to replace imports, the three initial RBDAs produced only 8,000 tons of wheat, or 0.6 percent of Nigeria's wheat imports (Williams, 1988: 52). In allocating the Federal budget for agriculture in the same year, 50 percent was spent on these irrigation projects, 16 percent on large farms and large farm services and only 17 percent went to small-holder farms, including the ADPs (Scherr, 1989: 557). As far as the Kano region is concerned, the HJRBDA is the operative institution for carrying out the policy of large dams and irrigation. We take a closer look at the HJRBDA's Kano River Project in Section 5.4.

The agricultural development programmes (ADPs)

The second major policy in this period was that creating the Agricultural Development Programmes. The ADPs were presented as a project tailored to address the needs of the small-scale farmer. The first three ADPs were created in 1974 in areas of high agricultural potential in Funtua, Gusau and Gombe (outside Kano State). They concentrated on input delivery, based on farm service centres. They also provided rural infrastructure like roads, and extension services. The primary thrust was to raise productivity by providing high yielding varieties (HYVs) and chemical inputs, backed by extension services and infrastructure. Sprayers, riggers, planters, threshers, pumps and generators were all distributed at varying levels of subsidy; in the case of the most popular input, fertiliser, it is even claimed that it had a 90 percent subsidy in this period (Forrest, 1993: 189). Between 1974 and 1980, the number of ADPs expanded from three to nine. In 1981, ADPs were re-focused to cover whole states, rather than just project areas within a state; Bauchi and Kano States got the first State-wide ADPs. The Kano scheme was expected to cover 430,000 families, many of whom lived in the immediate Kano region. By 1987, political pressure from States not covered by the ADPs led to the creation of multi-state ADPs (Alkali, 1997). Between 1974 and 1983, the World Bank advanced several loans totalling US \$1,091.8 million for these ADPs. The Kano State ADP got a loan of US \$142 million in 1981 (Watts, 1987: 79). In 1984 the World Bank approved another loan of US \$250 million for fertiliser provision across the country.

The original ADPs were intended to increase the production of cotton and groundnuts through the increased used of chemical inputs and animal traction. It was also intended to introduce high-yielding varieties of yellow maize. Mixed cropping, prevalent in the areas, was to give way to sole cropping of HYVs. Hardly any attention was paid to the two major local staples, sorghum and millet (Williams, 1988: 47). Still, the ADPs did succeed in building rural roads, small dams, and service centres, distributing inputs and implements, and providing managerial support for large-scale farmers, extension services and home economics classes for better-off peasant households. The ADPs tended therefore to promote differentiation within the rural population. The 12 ADPs operating in Nigeria in 1986 are said to have built a total of 601 farm service centres,

constructed 5,494km of rural roads and maintained 3,755 km, constructed 101 dams, 3,632 boreholes, 1,661 wells and 910 others types of building (Alkali, 1997: 108). We look closer at the impact of the ADP in rural Kano in Section 5.4. However, despite their benign effects, the ADPs have been rightly criticised:

They started not from market demand but from the supply of biochemical technologies. They showed little respect for the knowledge of African farmers and for their proven capacities to expand and adapt production to meet changing market conditions – or for the varied ecologies of African countries. The World Bank directed and funded projects which made little contribution to agricultural production and increased government debts (Williams, 1999: 5).

Large-scale farming

Integral to public policy in this period was the quest to overcome the ‘peasant problem’ by creating large-scale capitalist production, ‘from above’ and ‘from below’. Most policies dealing with credit provision and land acquisition aided the emergence of a new class of agrarian capitalist ‘from above’, with their bases in urban professions; most were bureaucrats or military officers. Though many such farms were established, it was not entirely clear that their motivation was agrarian production. Some wanted the Certificate of Occupancy granted for land acquired through the state. This could then be used to secure loans for other purposes. Others wanted to carve out peri-urban land in expectation of future rises in land values. Those who actually wanted to farm, and there were many of these as well, relied heavily on access to subsidised inputs and credits. Only a few of these farms survived the economic crises of the mid-1980s.

By 1985, constraints on imports due to the worsening economic crisis led many industrial firms to consider farming directly for their inputs. Some of this ‘Industry goes Farming’ (cf. Andrea and Beckman, 1987), was also prompted by government pressure and a public relations strategy by some of the firms who wanted to be seen to be doing something about the ‘food crisis’ and the dearth of inputs. Though this recourse to plantation farming might have secured access to some needed raw material, notably cotton, the costs of production were prohibitively high. Like their private capitalist counterparts, industry-owned plantations had to contend with labour supply and control problems, a lack of market and physical infrastructure, heavy dependence on imports, rising interest rates and rising input prices. In a few incidents in the Kano region, particularly in the vicinity of the KRP, peasants tore down enclosures put up by wealthy city dwellers. Once the programme of public investment started to founder, the subsidies and cheap loans dried up, forcing many of these ‘new breed’ farms to the wall. A few did, however, survive and continue to operate.

5.4 Impact on rural Kano

What was the impact of these Federal-driven policies in the Kano region? Wallace (1986) gives an idea of life in parts of the Kano region covered by the Kano River Project. Crucial aspects of her analysis are the question of land tenure, and that of productivity and rural welfare. On the question of land, she points out that originally, the Dutch consultants to the project had wanted the Government to buy out the previous peasant occupants. New occupants would then be expected to be tenants to the project. State farms run with hired labour was also considered. Neither happened, and the owners continued to hold on to their

lands, less 10 percent for the construction of infrastructure. Though the peasants continued to hold the land, they were subject to pressure from the project management when it came to the provision of water and inputs and access to marketing structures. Sorghum, the local staple which the farmers most wanted to grow, was frowned upon by the Project management because it conflicted with wheat, the preferred crop. Increasingly many peasants found it difficult to obtain inputs, either because of cost inflation, or because of bureaucratic tardiness and corruption. Many rented out their fields to wealthy and well-connected 'capitalist' farmers from urban Kano who had the political resources to lever subsidised and timely support from the project management. According to Wallace (1986: 289), in 1977, 33 percent of peasants with irrigated land on the project rented it out to wealthier men. But worse was the fate of 13,000 households whose lands were inundated to create the reservoir. They were moved to less fertile areas and got inadequate compensation.

On the question of productivity and welfare, Wallace argues that the project had made double cropping (in a year) possible, and inputs had raised productivity. But this was at enormous cost, and the productivity gains were far less than had been promised in the consultancy studies: yields of 1.9 tonnes per hectare, instead of the four tonnes predicted. Many farmers downstream from the project bore hidden costs as the drop in water level destroyed their fertile valley bottom *fadama* farms. Those wishing to continue fishing now had to migrate to the dam area. Migrant Fulani herders suddenly found themselves shut out of areas where they had previously had dry season grazing rights. Commenting on the productivity level on the KRP, Palmer-Jones (1987: 161) pointed out that:

No attempt was made to recover capital costs or costs for agricultural extension; water, mechanical cultivation, fertiliser, and agro-chemicals were highly subsidised. The price of wheat remained generally above the import price....93 percent of farmers in 1975-76 had cash losses (i.e., excluding household labour charges). Partly as a consequence, huge arrears of credit repayments were approved. In the 1980-81 season N250,000 worth of inputs was distributed on credit, but only N50,000 had been recovered by February 1982.

While the project management blamed the farmers for this sorry state, the farmers on their part pinned the blame on managerial corruption and inefficiency.

The Kano State Agricultural Development Project (KNADP) was established in 1982 and later converted to the Kano State Agricultural and Rural Development Agency (KNARDA) with the objective of improving the livelihood and incomes of 430,000 farm families cultivating 900,000 hectares of upland areas and 40,000 hectares of *fadama* land. It was also expected to construct 1,440 km of feeder roads, drill 1,000 boreholes, and rehabilitate 1,000 open wells (KNARDA, 2000). By 1986, the ADP is said to have constructed 168 farm service centres, 12 development centres for teaching wider skills like home economics, bee-keeping etc., 751 km of rural roads, 1,216 boreholes, and 115 other buildings (Alkali, 1997: 108). KNARDA concentrated on production, in projects such as the *fadama* farming scheme which it launched in 1982. The project included the teaching of home economics, food preparation demonstration, water supply through 'washbores' (shallow wells in stream beds), tree seedling production and distribution, and the promotion of interaction between farmers, traders and transporters (Hill, 1985). The Kano Agricultural Supply Company (KASCO), which was established in 1982, concentrated on the input supply side of agrarian life; it ran the farm service centres. Both organisations,

and the various LGAs, distributed hardware such as grinding machines, ox-ploughs, planters and fertiliser appliers, irrigation pumps, and electricity generators.

Thanks to these organisations, chemical fertiliser became a crucial element in peasant production. Animal manure gradually lost ground, partly on account of its bulk and difficulty of transportation. Reflecting this transition from manure to an extensive use of fertilisers, the donkeys carrying manure to outlying fields were gradually replaced with carts (*kura*), and some of these were soon replaced by motor pick-ups, locally called *akwori kura*. HYVs of maize and cowpea were massively promoted, raising yields and changing local diets. Though the Federal Government continued to subsidise fertiliser prices, the KASCO price in rural Kano continued to rise: N2.5 for a bag of a major type in 1979, rising to N5 in 1983, and N10 in 1986. Complaints were rife that KASCO officials were channelling subsidised hardware and inputs to favourites, who then re-sold them at much higher prices on the open market. Peasant disaffection was palpable.

For reasons of access and price inflation, a majority of smallholders in rural Kano were in no position to take advantage of the upward trends in food prices and parallel trade in this period. On the internal front, smallholders were disadvantaged by the fact that despite rapid inflation, food prices remained below the increase in the cost of living and of production owing to 'cheap food' policies pursued by the Federal Government. The central instrument was not the marketing boards, but the massive importation of wheat and rice, fuelled by oil revenues. It was reckoned that by the early 1980s, liberal cereal import policies held food prices down to about 60 percent of what they would have been in the absence of imports (Watts, 1987: 75). As Table 3 indicates, by the early 1980s, smallholders were facing a serious cost-price squeeze.

Table 3: Agricultural terms of trade index, 1981/2-1984/5 (1980/1 = 100)

Year	Agricultural Commodity Price Index	Composite Consumer Price Index	Farm Inputs Price Index	Inputs/Price Ratio
1981/2	128.9	116.7	147.6	0.87
1982/3	118.3	131.2	166.5	0.71
1983/4	147.2	199.7	228.5	0.64
1984/5	140.5	274.3	358.4	0.39

Source: Wedderburn, 1988.

While smallholders suffered from declining terms of trade within Nigeria, few were in a position to take advantage of the opportunities created by cross-border trade with Niger Republic to the north. For one thing, smallholders were generally unable to meet the high transaction costs of this illegal trade, particularly after 1972 when the Nigerian authorities became increasingly vigilant in the face of increased crop smuggling (Collins, 1984: 210). This was compounded by the low resource position of smallholders, who were frequently forced by necessity to sell earlier and closer to home than would allow them to take advantage of cross-border market prices. It has been argued that even if smallholders could not themselves engage in cross-border trade, an efficient trading system would transmit the benefits of higher cross-border prices to them. However, in the semi-arid

agricultural conditions of rural Kano, the problem of deficit grain production prevalent among smallholders constitutes a decisive constraint on their ability to benefit from cross-border market prices, even in an efficient trading system.

‘Deficit grain production’ refers to the situation of farmers who produce less grain than they consume, or purchase more grain than they sell. In northern Nigeria, farmers in this situation are more hurt than helped by high grain prices, parallel or otherwise. Matlon’s (1977: 243) study in a grain surplus region of southern Kano State indicates that by the mid-1970s, high grain prices were already posing problems for grain deficit producers, who were found to constitute 20 percent of smallholders in the area. In the far north, the grain deficit situation was an even more serious impediment to the ability of smallholders to benefit from rising grain prices. While in the early 1960s deficit grain production in this region was largely a product of a concentration on groundnut production, by the late 1970s, declining annual rainfall, accelerating soil exhaustion and limited access to inputs combined to intensify deficit grain production among smallholders, even after the collapse of the groundnut economy.

On the other hand, wealthy or well-connected peasant households were able to take full advantage of rising prices to increase grain production. Many of them could withhold sales till the time of highest prices or even connect themselves into the parallel trade networks with Niger Republic. Increased production and commercialisation, however, went hand-in-hand with intensified poverty, threats to rural livelihoods and urban migration. Civil disturbances occurred including the bloody *Maitatsine* uprising in urban Kano, which has been blamed on the collapse of the ‘moral economy’ in rural areas (Lubeck, 1985, 1987). At the economic, agricultural, and social levels, therefore, the attempted ‘capitalist transformation’ of Nigerian agriculture was a failure. With structural adjustment in 1986, most of the policies would be drastically changed.

6 STRUCTURAL ADJUSTMENT, 1986-1992

6.1 Structural adjustment in Nigeria

By 1982, it was generally acknowledged that the Nigerian economy was in serious crisis. The first signs were beginning to be felt by 1978. In June 1986, the Structural Adjustment Programme (SAP) was launched. The stated aim of this liberalisation strategy was the elimination of administrative price distortions within the economy, and the reallocation of resources in favour of smallholder agriculture. The main policy initiatives employed to achieve these results were, initially, efforts to reduce public sector deficits and tighten monetary supply, to combat inflation. Trade and exchange policies were to be reformed, and bureaucratic controls reduced. There was also the floating of the Naira in June 1986, the suspension of the six commodity marketing boards, and (in June, 1986, preparatory to their final abolition in January, 1987), a commitment to liberalise agricultural input markets and to remove input subsidies, and to a limited liberalisation of interest rates. The RBDAs were reduced from 18 to 11, and oriented away from direct production.

Nigeria’s attempts to eliminate its 80 percent subsidy on fertiliser date back to an agreement in 1983 with the World Bank. The reaffirmation of that commitment within the

framework of structural adjustment came on top of a halving of the fertiliser subsidy between 1983 and 1986, which translated into a 250 percent increase in official fertiliser prices. Between 1986 and 1990, both official and market prices for fertiliser doubled again, representing a seven-fold increase since 1983. The impact of higher fertiliser prices has been worst on poorer smallholders, who are less able to defend themselves by buying from government sources, or by buying early when the price is lower. Removal of subsidies on pesticides took place in 1988. The progressive removal of subsidies on fertiliser continued with the doubling of the official price in 1992. The post-1986 slide in the exchange rate was not reflected in the fertiliser prices calculated in Naira, meaning that the level of subsidy often returned, regardless of the increase in local prices. Subsidy on fertiliser fell from 85 percent in 1983 to 71 percent in 1986. By 1988-89, it had risen again to 74 percent, and by 1990, it stood at 84 percent (Dike, 1998: 113).

The liberalisation of agricultural production was tempered by other less orthodox interventionist policies. The Directorate of Food, Roads, and Rural Infrastructure (DFRRI) was established by the Federal Government to improve living conditions and economic opportunities in the rural areas, while the Peoples' Bank and Community Banks were supposed to make cheap loans available to local farmers in the face of the deregulation of lending and interest rates. Some specialist programmes were also introduced to boost agrarian productivity; the National Agricultural Lands Development Authority (NALDA) was formed to encourage farm preparation and the introduction of intermediate technology, while the Fadama Farming Scheme aimed at encouraging valley-bottom irrigated farming, with the aid of small pumps. Other programmes included the Accelerated Food Production Programme and the Industrial Crop Programme, both of which received substantial grants in the 1992 budget. There were also the Accelerated Wheat Production Programme and the launching of the Better Life Programme for Rural Women (BLP). Bans were imposed on maize imports in 1985, on rice imports from 1985 to 1995, on wheat from late 1986 till 1992, and on barley in 1988.

A number of studies have looked at the impact of SAP on life in rural Nigeria. Olomola (1998) points out two major impacts: the decline in public expenditure on agriculture, and the rise in the relative importance of crops, compared to livestock and fisheries. He points out that Federal Government investments in agriculture in real terms were: N23 million in 1970, N122 million in 1972, N629 million in 1985 and 101 million in 1990. Average annual growth rates in the total public expenditure on agriculture were: 69.2 percent in 1970-74, -7.5 percent in 1975-80, 5.9 percent in 1981-85, and -27.5 percent in the SAP period of 1986-90 (p.155). The special favours bestowed on livestock and poultry during the oil boom period were also reversed under SAP, as the crop sector increased its share of agricultural GDP: 75.4 percent in 1970-74, 65.8 percent in 1975-80, 63.2 percent in 1981-85, and 79.6 percent in 1986-90 (p.154).

In another study, Dike (1998) argues that SAP has led to a process of agrarian decapitalisation in Nigeria. He suggests that agriculture's share of gross domestic investment was roughly 10 percent in 1972-80 and 1981-86. However, between 1987 and 1992, this declined to six percent (p.114). While the growth rate in capital stock in agriculture was 10.8 percent in 1980-86, it fell to -18 percent in the period 1987-92. Many ageing tractors and other equipment were not replaced under SAP. Funding for national agricultural research institutes in 1990 was 10 percent of what it was in 1970 in dollar terms (Vision 2010, 1997: 136).

Contrary to the theory of liberalisation, labour continued to move out of agriculture (Dike, 1998: 115: 122). The Abacha Government's Vision 2010 Committee, charged with drafting an economic agenda for Nigeria till the year 2010, points out with approval that deregulation of interest rates in 1988 did not create problems for agriculture. It argued that the total loan portfolio of the banks exceeded the prescribed minimum for the first time since 1980 (Vision 2010, 1997: 147: 148: 155). Contradicting this stance, Dike (1998: 145), suggests that the share of agriculture in the total credit to the economy was a derisory 14.7 percent in the best year under SAP. He suggests that structural issues like fair and timely access to inputs and credits had more impact on agrarian productivity than price. In 1985, the Agricultural Credit Guarantee Scheme Fund supported a total of 3,337 loans to the tune of N 44 million. By 1992, these had risen to a total of 21,206 loans, for a total sum of N88 million (Tahir, 1999). Dike also suggests that the desire for food security took precedence over the search for higher prices. Finally, the study of the welfare effects of SAP by two government parastatals, the Central Bank and the National Institute for Social and Economic Research (CBN/NISER, 1992), produced copious empirical evidence showing its consistently negative welfare effects right across the country.

The unorthodox aspects of the SAP package also had an impact on the agrarian system. The ban on the importation of some grains forced up the price of food; between 1986 and 1992, the price of bread went up by 1,000 percent (Durojaiye, 1998: 248). This led to massive smuggling. Forrest (1993: 193) claims that about 300,000 tonnes of flour a year were involved. In response to the public outcry over escalating food prices, the Government sought to encourage local production through the Accelerated Wheat Production programme. This prompted state governments to inflate their production estimates in order to get federal grants. Though these states claimed they could produce 400,000 tonnes of wheat, in 1989 millers could only get 20,000 tonnes of 'high-cost wheat' (Forrest, 1993: 193). On the other hand, Durojaiye claims that wheat production increased under SAP from 132,000 tonnes in 1986 to 278,000 in 1991. He argues that the ban on grain imports had a similar positive effect on the production of other grains: maize increased by 86 percent during the period, rice by 214 percent, wheat by 739 percent, millet by 34 percent, and sorghum by eight percent (Durojaiye, 1998: 255-7). In terms of the welfare impact of the bans, Durojaiye argues (1998: 290):

When welfare effects are expressed in net terminal values as of 1992, the farmers gained N8,425 million while the grain buyers lost N10,280 million. The Nigerian taxpayers lost N2,440 million in the wheat flour market.... Given the fact that the wheat processing industry constitutes the major buyer of wheat in the country, the industry lost additional N1,790 million in the wheat market. Thus, the total welfare loss by the wheat processing industry was N4,230 million.

While we remain cautious about the validity of the data adduced by Durojaiye, we agree that flour millers were indeed disadvantaged by the bans and organised to campaign for their abrogation. And because most of these millers were in the south-west, while the farmers benefiting from the ban were in the north, the conflict over grain policy sometimes assumed an regional or ethnic character. The issue of wheat production was further politicised when states in the south of the country, clearly without the ability to produce wheat, started demanding their 'own share' of the programme grants. In 1992 the ban on wheat was reversed. When we consider the politics of fertiliser subsidy after 1999, we note the same convergence of regional interests behind particular agrarian policies.

Despite the negative consequences of SAP, it is important to keep in mind some of its positive impact. Particularly in the early period of the policy, SAP led to increased food production as shown by Table 4.

Table 4: Percentage Growth Rates of Total Food Production In Nigeria, 1970-1993

Period	% Growth	Period	% Growth
1970-1975	-1.74	1986-1990	14.55
1976-1980	- 4.41	1991-1993	5.71
1981-1985	9.3		

Source: Vision 2010, 1997: 132.

In 1988, the Federal Government launched Forestry II, covering nine states in the Sahelian far-north, with the objective of bringing the area under ‘good forest conservation from 10 percent to 20 percent’ (FORMECU, 1996). Between 1988 and the end of the project in 1996, 49 million seedlings were to be produced for shelterbelts, woodlots, roadside planting and farm forestry.

6.2 Structural adjustment in rural Kano

How did SAP affected agrarian production in the Kano region? The decline in public sector expenditure on agriculture and rural development generally led to the collapse of many farm service centres, development centres, water schemes and rural electrification projects. Rural hospitals ran skeletal services, often without drugs, leading to the proliferation of unlicensed ‘chemists’ in many rural areas. Water schemes foundered because there was no electricity to operate them, and vital spare parts were not available. Electricity could not be generated because of spiralling costs of diesel fuel and the inability of the state to supply it. The most distressing sight was to see some of the infrastructure being vandalised and stolen by thieves and ill-paid public sector workers. Many rural roads and wells fell into disrepair and were barely useable. The quality of rural infrastructure declined substantially in this period, despite the compensatory, but ill-funded and inefficient, activities of DFRRI. The Better Life for Rural Women hardly made a dent in this rising wave of rural decay; indeed, it was widely derided as ‘Better Life for Ruler Women’ on account of the highly fashionable tastes of the wives of the military elite who led it at all levels.

On the direct production front, we noted earlier that by 1985, farmers in the Kano region, as elsewhere in agrarian Nigeria, were facing a situation in which their production and reproduction costs were rising faster than the price of their produce. This tendency was doubly problematic for grain deficit producers, of whom there are many households in the Kano region. After the introduction of SAP in 1986, with its attendant inflationary spiral, the situation facing many farmers worsened. Rising prices of agricultural inputs and food forced more households into non-farm occupations to meet both production and reproduction costs. The use of fertilisers and the planting of the hybrid varieties introduced in the earlier period decreased substantially. This was particularly so for hybrid maize and cowpeas that had become very popular in the

earlier period. Farmers resorted to the planting of lower yielding local varieties that did not require the same levels of fertiliser or insecticide; while sorghum replaced maize.

During the 1970s, a division of land ownership vied with pressures towards concentration, because of the increased commercialisation of food crop farming and the desire of women and non-residents to maintain their legal entitlements to land (Ross, 1987; Mustapha and Meagher, 1992). The pressures of SAP appeared to tilt the balance in favour of increasing concentration of land ownership in the hands of large- and medium-scale farmers. Among poor farmers, there was an increasing incidence of mortgaging and sale of land, either for production capital or because of the inability to fund cultivation (Meagher, 1991; Swindell and Iliya, 1992). In some parts of rural Kano, the access of women to land, particularly amongst the non-Muslim Maguzawa, was not as badly affected as had been feared at the inception of SAP (Meagher, 2000). Increased commercialisation of labour and rising labour costs also hit all farmers hard. Among small-scale farmers, there was the tendency to cut down on ridging and weeding, because of the inability to afford the needed labour. The resulting decline in productivity further reinforced the dependence of small-scale farmers on non-farm incomes (Meagher, 1991).

It might be argued that small-scale farmers would be compensated for their losses through the higher wages they could earn from rising agricultural wages. In reality, these wage increases lagged behind the cost of living; farmers engaged in wage labouring also left their own farms untended at critical periods. The migration to urban areas continued in the face of this continuing squeeze on the livelihoods of the rural poor. The rising cost and scarcity of labour led to the increased use of female wage labour, particularly in harvesting and threshing; it has been suggested (Swindell and Iliya, 1992) that similar developments around Sokoto were leading to the weakening of female seclusion. Studies in Rogo, in south-western Kano, suggest that most female labour was drawn from women beyond child-bearing age and from pastoral Fulani women, neither of whom are subject to seclusion. There was also increased resort to social networks as a means of mobilising labour. Young children were increasingly used for light tasks like planting; among some poorer families, there was a return to labour pooling networks like *gayya* which had been weakening earlier (Mustapha and Meagher, 1992). Koranic scholars and local school teachers used their students on their farms, and wealthier farmers provided hostels for migrants to gain the first option on their labour. Some regressive credit systems in kind (*falle*), which had disappeared after the 1970s, made a comeback. These pressures were compounded by the drought of 1983, which also had the effect of forcing more cattle herders to move southwards with their herds.

KNARDA concentrated in the 1990s on the National Agricultural Technology Support Project (NATSP) and the National Fadama Development Project (NFDP). The NATSP sought to promote a farming systems approach to research and extension, promote animal traction, and integrate crops, livestock, fisheries, agro-forestry and land management. The NFDP sought to promote small-scale irrigation on *fadama* fields by using drilling technologies (washbores and boreholes), and low-cost petrol-driven water pumps. On 47 sites in Kano State, 7,000 ha were to be developed, using 7,000 tubewells and washbores. Other objectives were the construction of access roads, construction of storage and cooling facilities, and the construction of the Watari Irrigation Scheme (KNARDA, nd).

SAP had two primary impacts in rural Kano. Firstly, it led to a squeeze on livelihoods as rising crop prices failed to keep pace with rising input and consumption prices. Secondly, it led to increasing differentiation between wealthy peasant households who could take strategic advantage of new market opportunities, and the others, who could not. Both dynamics are evident in Table 5, which tells the story for the Rogo area in Kano Emirate. It should be pointed out that the Rogo area has better agricultural potential and less population pressure on resources than areas closer to Kano.

Table 5: Changes in input use, production levels and proportion of grain deficit households in Rogo village, between 1989-90 and 1992-3 (percent)

Farming Category	Fertiliser use	Pesticide use	Crop production	% Increase in grain deficit households
Small-scale	-25	-45	-28	17
Medium-scale	-26	-69	56	16
Large-scale	255	250	257	0
Average	68	-49	75	15

Source: Meagher and Mustapha: 1997: 71.

Many of the tendencies shown in the table took place within the context of continuing leakages and corruption within the Federal and State administrative machinery. SAP failed to stop corruption associated with centralised and subsidised fertiliser procurement and distribution. Lorry loads of fertiliser disappeared en route to states. As the influential *Guardian* pointed out in an editorial:

Cartels operate to dupe the government in importation. Mafias proliferate in the distribution channels, some linked to government houses and the management of the fertiliser plants. Tales of woe abound about how the farmers search in vain for the commodity, about how the big and mighty corner allocations to states, local governments, and how interest groups hoard them and later sell at prices that the small farmers, who constitute the preponderant majority, in the country, cannot afford (*Guardian*, Feb. 17: 2000).

The Kano State Government bought 30 combine harvesters in 1987 for the wheat production campaign, at a cost of N470,000 each. Six were idle by 1988, and those operational were stationary, the farmers harvesting the wheat in the traditional way with their sickles and then feeding it into the harvesters. Suggestions, from staff at the Food Crop Production Technology Transfer Station at Dan Hassan, that hand-pushed reaper-binders from China would be more appropriate, were rebuffed. The cost of one harvester could have paid for 20 reaper-binders (per. Communication, staff at Dan Hassan on the KRP). Also in its bid to promote wheat production, the Kano State Government decided in 1987 to buy up all the wheat in the market at N250 per 100 kg bag. This was then chemically treated for planting and resold to farmers at N50 per 100 kg bag. Soon, a lucrative racket developed in purchasing treated wheat, washing it to get rid of the chemicals, and then re-selling it to the Government at the higher price.

7 DEVELOPMENTS AFTER 1992

7.1 Policy change under the Abacha Government

By 1992, the shine of the SAP, as promoted by the Babangida Government, had dimmed. Widespread corruption, the near-collapse of all social institutions, and serious urban crises were the most pronounced results of the social and political misadventure embarked upon from 1986. Hitherto, the policy had been defended as bringing succour to rural areas, neglected and marginalised before. However, as Table 4 shows, aggregate growth in agriculture slowed drastically from 1991. Beyond this crisis in economic policy and its implementation, there was also a crisis of political transition, as Babangida sought to subvert his own Political Transition Programme. In June 1993, the programme ran aground, leading to his forced departure from office. He was replaced in August by the unelected Interim National Government (ING) which was in turn forced from office by Abacha in November (Mustapha, 1999). Abacha's junta faced serious popular opposition. As a result, he adopted populist, nationalist, and subsequently, draconian measures to contain the series of political and economic crises confronting the regime.

A populist move in 1995 was the lifting of the ban on rice and maize imports. This followed the lifting of the ban on wheat importation in 1992. These had negative effects on the price of local cereal grains because of declining industrial use of wheat and maize, and increasing competition for consumer markets. These cheap food policies came on the heels of an earlier setback for grain farmers caused by the devaluation of the CFA Franc in January, 1994. Nigerian grain prices became less attractive in CFA markets; exports to Niger Republic, usually in the region of 100,000 to 200,000 tonnes annually, fell in 1995 to 50,000 to 80,000 tonnes. In 1996, the tariff on imported rice was halved from 100 percent to 50 percent, undermining the market for locally produced rice.

On the input supply side, Abacha's Government harboured illusions about its capacity to control supply and demand. Under the Babangida Government, there had been moves to remove the subsidy on fertiliser. In 1992, the official price was doubled. This was repeated in 1993. Under Abacha, fertiliser imports were banned in 1995. In 1996, a new fertiliser policy was rolled out, restricting its sale to official channels through the local governments. The Minister of Agriculture, Gambo Jimeta, declared that 'Nobody or company has any business in fertiliser distribution arrangement except local governments' (*New Nigerian*, May 4, 1996, p.1). Under this policy, fertiliser was to be procured by the Federal Government, transported across the country from the depots by the states and distributed solely by local governments. Individuals caught with only a kg of fertiliser outside the official channel were arrested or harassed. The official price of a bag of fertiliser was fixed at N150 when the market price was at least six times that amount (*New Nigerian*, June 6, 1996, p.1). A fertiliser tribunal was to be set up to try all those involved in fertiliser racketeering (*New Nigerian*, May 11, 1996, p. 1). The junta also declared the intention to 'recapitalise' the RBDAs and Rural Development Authorities, which had been downsized and sidelined under SAP (*New Nigerian*, May 16, 1996, p.16). At the behest of Abacha's wife, the Family Economic Advancement Programme (FEAP) was unveiled to stimulate and finance micro-enterprises including cottage industries and agricultural processing. By 1998, FEAP pumped a total of N199 into Kano State (FEAP, 1999).

By 1997, the Abacha Government had dug in, in the face of international criticism of his thinly veiled attempt to rig his political transition programme in his own favour (Mustapha, 1999). The Vision 2010 Committee was to prepare a blueprint for Nigeria's economic transformation, expecting continuity in the regime. In the agricultural sector, bureaucrats and technocrats drew up elaborate plans encapsulated in two documents: *The Nigerian Agricultural Research Strategy Plan and extension delivery: policy concept and consensus to the Year 2010* (eds., Adedipe, Bakshi, and Aliyu, 1996); and *Nigeria: National Agricultural Research Strategy Plan 1996-2010* (eds., Shaib, Aliyu, and Bakshi, 1996). The Committee sought to package the technical outlook in a market-friendly framework (Vision 2010, 1997), more in keeping with the demands of the World Bank that fertiliser provision should be privatised, and government involvement in the provision of pesticides, livestock pharmaceuticals, equipment, land clearance services, credit and other inputs should be 'phased out' (*New Nigerian*, May 17 1996, p.3; Mustapha, 1999).

Table 6: Price indices for fertiliser, grains and the rural cost of living (CPI)(1991-95)(1985 = 100)

Year	Fertiliser (market price)	Maize	Sorghum	Rural CPI
1991	389	348	337	328
1992	767	563	524	471
1993	1,389	654	517	737
1994	1,333	578	512	1,154
1995	4,444	1,621	1,340	2,022

Sources: Unpublished grain price data (APMEU); Central Bank of Nigeria, *Annual Reports* 1988-92; Egg and Igue, 1993; KNARDA, *Quarterly and Annual Reports* 1990-92; Meagher, 1991.

The policy orientation of the junta was laid out in the *National Rolling Plan (1996-1998)*, Vol. I. This included the Food Crops Production Programme, using agencies like the RBDAs, ADPs, NALDA and the Federal Department of Agriculture (FDA). NALDA was to develop 20,000 ha of farmland over the plan period, while the ADPs were to produce over 3,000 tonnes of maize seeds and rehabilitate 4600 km of rural roads. Another programme in the Plan was the Cash Crops Rehabilitation Programme, which sought to rehabilitate tree crops and arable crops, including groundnuts. A third programme was the Farm Input Programme. N192 million was to be provided to facilitate farmers' access to seedlings, chemicals and credits. The supply of ox-drawn implements was also to be promoted. A fourth programme was Rural Infrastructural Development. Under this programme, the RBDAs were to construct 'small and large scale dams, irrigation channels, boreholes, weirs and dykes and flood and erosion control projects'. For livestock, the Plan concentrated on existing policies of disease control, veterinary public health promotion, pasture development and livestock production (Federal Republic of Nigeria, 1996). In May, 1999, the junta launched a N100 million animal traction programme in Kano, aimed at increasing small farmer productivity nation-wide (*Vanguard*, 13/5/99). Though fertiliser procurement and distribution were deregulated, tensions persisted between the market-friendly Vision 2010 Report, on the one hand, and the quasi-interventionist Rolling Plan on the other.

The worsening circumstances of grain farmers in this period, including those in the Kano region, are illustrated in Table 6. The fertiliser policy of 1996 made the situation drastically worse, leading to its abandonment in the following year. From 1997, fertiliser procurement and distribution were deregulated and the subsidies removed.

7.2 Political transition and agrarian policy under the Obasanjo Government

Abacha died on June 8, 1998 under suspicious circumstances and his death was followed a month later, on July 7, by the equally suspicious death of Abiola, the other leading protagonist in the intractable political crisis that had bedevilled the country since Babangida's annulment of the Presidential election of June, 1993. Recent revelations before Justice Oputa's Human Rights Violation Investigation Commission have confirmed the widely held suspicion that both men were actually murdered (*Guardian*, 16 December 2000; *Comet*, 16 December 2000). Abdusalami Abubakar became Head of State and carried out a hurried transition programme which ushered in Olusegun Obasanjo as elected President in May 1999 (Mustapha, 1999). In his previous incarnation as the military Head of State between 1975 and 1979, Obasanjo had been part of a very nationalistic nation-building team, responsible for extending the reach of the Federal centre. He was also noted for his concern about food security; he had introduced OFN along with other projects aimed at boosting the technical and capitalist transformation of Nigerian agriculture. When he retired from Government and military service in 1979, he moved to his Otta Farms outside Lagos, and cultivated the image of a 'progressive farmer' and statesman.

The return of Obasanjo to power in 1999 had the immediate effect of introducing considerable instability into an already confused field of agrarian policy. The first question over which confusion reigned was that of the subsidisation of fertiliser. The politics of fertiliser subsidy became one of the first tests of the new regime. The removal of subsidy, initiated by Babangida, and pursued by Abacha after the failure of his new fertiliser policy in 1996, drew the ire of Keynesian economists in the National Economic Intelligence Committee (NEIC, led by Sam Aluko). As far as the NEIC was concerned:

Subsidy to farmers is very important. In 1995, Japan spent over Y190 billion as subsidy to its farmers while in the United States farmers are even paid not to produce. The problem of subsidy in Nigeria is that it does not fully reach the farmer. This problem persisted because Government did not make example of any of those involved in denying farmers this benefit. NEIC did not agree with Government that the subsidy to farmers even of fertiliser should be removed (NEIC, 1999).

Though the NEIC had lost the argument with Abacha, their stance found fertile ground within the top echelons responsible for agrarian policy under the new civilian Government: the Presidential Adviser on Food Security, Ango Abdullahi; Minister of Agriculture, Sani Zangon-Daura; and President Obasanjo himself. Indeed, a month after assuming office, he bluntly told journalists that: 'I will make sure that fertiliser is subsidised.... I will make sure that the subsidy benefits get to the farmers (*Post Express*, 7 June 1999)'. A month later the Government introduced a subsidy of 25 percent on the 125,000 tonnes of fertiliser procured and distributed by the Federal Government (Reuters, 7 July 1999). However, the Government was silent over capping the price of

private suppliers. Government supplied fertiliser was to sell for N880 instead of the N1,350 on the open market (*Guardian*, 19 July 1999), and Zangon-Daura held out the prospects of more subsidies in future.

Attacks on the change in policy direction came from Francis Idachaba, a leading agricultural professor and Deputy Director, International Service for National Agricultural Research (ISNAR) at the Hague. He argued that since the first Obasanjo regime introduced Federally-funded fertiliser subsidies in 1976, nothing, other than 'mounting scandals', had been the result, despite frequent attempts to fine-tune the policy and its implementation. Finally, he warned of the 'dire consequences of the reintroduction of fertiliser subsidies' (*Guardian*, 29 January 2000). No doubt, additional pressure came from the World Bank and other foreign development agencies that have been playing increasingly prominent roles in the formulation of Obasanjo's economic and social policies.

By early 2000, Obasanjo was singing a different tune about subsidies; the Government announced the complete deregulation of agricultural input procurement and distribution (*Guardian*, 12 February 2000). His Government was now committed to helping farmers 'without the application of direct subsidies from which only middlemen and traders benefited in the past' (*Guardian*, 29 May 2000). Yet again, fertiliser procurement and distribution were to be deregulated and subsidies removed! This change in policy was rejected by the House of Representatives' Committee on Agriculture which requested, and later insisted, that a subsidy of 50 percent should apply to fertiliser and all other agricultural inputs. The new policy was also rejected by most, if not all, farmers' groups. Zangon-Daura, the Agriculture Minister, stopped short of attacking the new policy, pointing out the possibility of the 'undue exploitation' of farmers by private companies dealing in fertiliser. He also pointed out that the new policy was 'unpopular among farmers, especially those in the northern part of the country' (*Guardian*, 22 February 2000). This region is not only a crucial constituency of the ruling Peoples' Democratic Party (PDP) Government, it is also very restive on account of the so-called 'power shift' from the north to the south of Nigeria which accompanied the 1999 transition (Mustapha, 1999; forthcoming). Even in south-western Nigeria, which might be regarded as sympathetic to Obasanjo's presidency, the new policy was attacked equally vigorously by such groups as the Cocoa Association of Nigeria (CAN) and the Cocoa Exporters' Association of Nigeria (CEAN). Both organisations pointed out that:

the move was inconsistent with President Olusegun Obasanjo's campaign promise to farmers that his Government would import fertiliser massively and distribute to them (farmers) at highly subsidised rates (*Guardian*, 14 May 2000).

By June 2000, the Government seemed to be uncertain in its resolve to eliminate fertiliser subsidies: Ango Abdullahi pointed out that Government 'was rethinking' its stance. He pointed out that a policy of indirect subsidisation was in place, through the waiver of 100 percent of both custom duties on imported fertiliser and VAT. It is hoped that the elimination of these taxes will lead to reduced prices and easy accessibility for ordinary farmers. If this approach fails, the Government may 'go back to the old approach' (*Guardian*, 26 June 2000).

The politics of fertiliser subsidisation exposed the interventionist streak within a Government that is at the same time susceptible to considerable pressure from

international agencies committed to a more market-friendly policy regime. Secondly, it highlighted the fact that democracy need not necessarily lead to rational or consistent economic policy formulation. Finally, we can see why it is important to insulate the policy formulation framework from excessive politicisation.

The interventionist streak of the Government was also apparent in the suggested re-introduction of the marketing boards by Zangon-Daura (*Post Express*, 19 July 1999), and in the area of trade policy. Under the first Obasanjo regime, a National Strategic Grains Reserve was put in place, with inappropriate metal silos built across the country. This programme was sidelined under SAP. In December 1999, the second Obasanjo Government announced that it was reactivating the Grain Reserve Scheme. The aim this time was to buy 55,000 tonnes of grain for N1 billion in order to shore up the prices (*Guardian*, 14 December 1999: 12 January 2000). Responding to the agitation of grain farmers against falling prices, the Kano State Commissioner for Agriculture also advocated the re-imposition of the ban on wheat and rice (*Post Express*, 17 January 2000). In July 1999, the Federal Government banned the importation of all categories of frozen meat.

However, there have been some innovations, particularly in the linking of agrarian policy with poverty alleviation, the streamlining of 16 governmental agencies in both fields and the reorganisation of the financing and marketing of agriculture. FEAP, the Nigerian Agriculture and Co-operative Bank (NACB), and the People's Bank were merged to form the Nigeria Agricultural Co-operative and Rural Development Bank (NACRDB). This new bank was given a start-up grant of N10 billion (*Vanguard*, 5 May 2000; *Guardian*, 12 October 2000). The capital base of the Agricultural Credit Guarantee Scheme Fund (ACGSF) has also been raised from N100 million to N1 billion (*Vanguard*, 18 January 2000). From January 2001, a National Agricultural Development Fund (NADF) is to be launched, with a N8 billion take-off grant from the Government. The NADF is to provide reliable access to low interest loans for farmers, and provide grants for research and extension services. The Government is also to set up a National Crop Marketing Company (NCMC), with the Federal Government holding 40 percent of the equity (*Guardian*, 26 June 2000).

Both the NADF and the NCMC aim to achieve earlier interventionist ambitions, but this time round, using different instruments. The NADF is to be funded 'from the Federal Government, levies on imported commodities and the subsidy on fertiliser' In effect, the fund will be made up of government budgetary allocations, taxes on sugar imports, and the erstwhile subsidy on fertiliser. The NCMC, on the other hand, is a market-friendly version of the Marketing Board. However, it will not have a monopoly and Government's 40 percent share is to be sold off in due course. Presumably, 60 percent of the NCMC will be owned by the national farmers' organisations which the Government has been actively promoting. It is promised that both organisations will be 'farmer-owned and farmer-managed' (*Guardian*, 26 June 2000).

Monetary policy is aimed to achieve the same effect as the devaluation of the Naira; the Central Bank has allowed the exchange rate to slide (*Guardian*, 16 February 2000). Between May, 1999, when Obasanjo came into office, and December, 2000 the Naira has lost 45 percent of its value relative to the US dollar. Each of these developments have potentially serious implications for Nigerian agriculture.

At the infrastructural level, the Government announced plans to extend rural electrification to 300 rural communities nation-wide. Work was said to have started on the first 100 (*Guardian*, 2 July 2000). In the field of environmental protection, the Government's policy on afforestation was announced in February 2000 by the then Minister of Environment (currently Minister of Agriculture), Hassan Adamu. He stated that the Ministry's objective is 'to establish 1,000 hectares of plantation this year, followed by 3,000 hectares annually'. He justified these objectives on the grounds that Nigeria was losing 350,000 square miles of its landmass to desert encroachment annually. He announced that the Sahara is 'advancing southwards at an estimated rate of 0.6 km a year' (*Guardian*, 8 February 2000). Both the commitment to plantation forestry and its justification are very reminiscent of the situation under colonial developmentalism. The Speaker of the House of Representatives, Ghali Na'Abba has also stated that a Bill will soon be passed establishing the National Arid Land Development Authority with the aim of combating desertification (*Guardian*, 14 February 2000) An inter-ministerial committee has also recommended that N25.5 billion be spent over four years for afforestation (*Guardian*, 26 May 2000).

There has also been increased foreign interest in the development of Nigerian agriculture since the ending of the country's pariah status. In July 1999, Obasanjo met with FAO officials, and both agreed on a set of priorities for Nigerian agriculture in the next few years: food security, the rehabilitation of dams and irrigation systems, aquaculture, animal health, food preservation facilities and silos (*IRIN (Integrated Regional Information Network)*, 23 July 1999). Early in 2000, Nigeria established an Inter-Ministerial Committee with India, following a visit by Obasanjo. This committee is specifically to promote the production in Nigeria of agricultural tools and agro-processing facilities. At the same time, a Memorandum of Understanding was signed with Egypt, for the promotion of dam construction and irrigation in the north of Nigeria (*Guardian*, 2/2/00).

At the Kano state level, the Government announced plans of resuscitating its two fertiliser plants neglected under military rule. Plans were also announced for 'accelerated wheat production', the rehabilitation of groundnut seeds, and the establishment of an international livestock market at Dawakin Kudu to facilitate the access of local herders to the market (*Guardian*, 23 February 2000). Governor Kwankwaso also announced plans to complete 67 rural electrification projects, and rehabilitate 12 water projects and 2,420 schools (*Vanguard*, 25 November 2000).

It is as yet uncertain what the impact of these Federal and state initiatives will be on rural Kano. In the first place, the overarching policy on agricultural and rural development to weld these various initiatives together is still being worked out at the World Bank, with inputs from the Federal Ministry of Agriculture and various international aid agencies. Second, the political and security situation in the country has been very unstable. Third, there have been well-founded concerns expressed about the capacity of the Obasanjo Government to deliver needed reforms and changes in the face of the mounting problems in the country. Finally, the third tier of the Federal system, the Local Government Councils, which should ideally be instruments of local empowerment, have ill-defined constitutional powers. They also suffer from lack of capacity, interference from the state level, and corruption (*Post Express*, 18 June 1999; 10 July 2000).

8 RURAL KANO 100 YEARS ON

After a hundred years of socio-economic change in rural Kano, what is the net result? And what are the prospects for the future? Here, we intend to summarise the situation as it relates to the major programmes pursued over the past two decades. These summaries rely heavily on official data and analyses by the respective agencies; independent verification of some of the claims will be necessary before any firm conclusions can be drawn.

In a recent evaluation of the Kano River Project, the Hadejia Jama'are River Basin Development Authority (HJRBDA) argued that the project 'is one of the largest and most successful irrigation projects, not only in Nigeria, but in West Africa' (HJRBDA, 2000). Of the total irrigatable area of 22,000 ha, 15,000 have been irrigated by gravity irrigation; 816 km of service roads are said to have been built along with 16,000 field structures. The report suggests that yield/ha and returns/ha have been very good for farmers. But nothing is said about the cost of construction per hectare, so it is impossible to calculate the rate of return to public investment.

Clearly, some rethinking has gone into the KRP. First, the area targeted for irrigation has been reduced compared to 1971. Second, the management now limits itself to the provision of water for irrigation and for urban consumption; previously, it was also involved in direct food crop and livestock production. Its feed mills, rice mills, fish ponds, cold stores and livestock development centres were privatised in 1987. These developments may have improved the cost efficiency and long-term sustainability of the Project. Irrigated agriculture is clearly an established fact in rural Kano, but its cost effectiveness remains contentious.

KNARDA's evaluation of its work suggests that it has been successful in meeting its objectives as shown in Table 7:

Table 7: Project objectives and actual achievements for KNARDA, 1982-2000

Selected indicator	Target (1982)	Achievement (2000)
Farm families covered	430,000	805,000
Feeder roads constructed	1,440 km	806.5 km
Boreholes drilled	1,000	5,948
Open wells rehabilitated	1,000	1,302

Source: Adapted from KNARDA, 2000.

The report also claimed substantial achievements in areas not originally listed in the 1982 objectives. As in the assessment of the KRP, there was no calculation of the return on the investments made and the figures remain unverified.

The NFDP was also scored as a success (Table 8). Plans were also made to launch the NFDP Phase II, involving the irrigation of 14,000 ha with the aid of 12,000 water pumps. NFDP II will seek to establish a privately financed micro-credit fund, strengthen farmers' organisations, attain cost effectiveness in the delivery of services, and promote

environmental protection (KNARDA, 2000).

Table 8: Project objectives and actual achievements for Kano NFDP, 1992-2000

Selected Indicators	Target 1992	Achievement 2000
Well construction	7,000	6,685
Pump procurement	7,000	7,000
Pump distribution	7,000	4,513
Access roads construction (km)	90	89
<i>Fadama</i> users association formed (nos)	367	400
Underground water monitoring (wells) (%)	-	63
Soil and water analyses (hectares)	-	2,524
Loan repayment rate (%)	-	84.2

Source: Adapted from KNARDA, 2000.

KASCO has been very crucial as a source of modern inputs and hardware into the agricultural system in Kano State. However, its story has been one of consistent decline: starting with over 100 operational stores in 1982, it is now left with only 20, 50 percent of them in the Kano region (KASCO, pers. communication, July 2000).

The assessment of Forestry II in Kano in 1995 suggests that some progress was achieved in the field of forestry development. The Kano State Afforestation Project (KNAP), which is responsible for Forestry II in the State, reported the raising of 17.6 million seedlings, used to achieve a total of 198 km of shelterbelts, 995 ha of woodlots and orchards, 868 ha of natural regeneration, 1,795 km of roadside planting, 243 ha of marginal land development, and 32 ha of woodlots and orchards developed under the Women in Forestry programme. The Project is said to have achieved a total forest cover of 2,853 ha, compared to the initial target of 3,278 ha. Of the shelterbelt target of 292 km, 198 km were achieved. Seedling production is said to be 231 percent of the original target, and the participation of farming families in social forestry is put at 181 percent of the target set (KNAP, 1995). Most of the nurseries and shelterbelts are in the Kano region.

Between 1981 and its reorganisation in 2000, the Nigerian Agriculture and Co-operative Bank (NACB) gave N34 million as loans to small-scale farmers in the Kano region. In the same period, large-scale farmers got N144 million (Kano NACB records). The Bank was also supporting small farmers through the Animal Traction Programme initiated under the Abacha junta, and the Hand Tools Programme. The International Institute of Tropical Agriculture (IITA) now shares the remnant of the old colonial Agricultural Station with the Institute of Agricultural Research (IAR) of Ahmadu Bello University. Between them, these two research institutions concentrate on farming systems research and improved varieties of cowpeas. Sasakawa (2000) is also active in introducing improved, higher productivity seeds and farming implements into the area (SG, 2000; Valencia and Breth, 1999).

9 CONCLUSION

Public policy, particularly of the state, has shaped the society, agriculture, and environment of the Kano region over the hundred years under review. Apart from demography, climatic changes, and the dynamics of the global economy, public policy must be the most influential variable affecting the development of the region. The state, local, regional and Federal governments have always had their own ideas about how the development in the region should proceed. The knowledge base of this transformational ambition has often been shaky, but that has not deterred the controllers of state institutions from seeking to realise their developmental ambitions. The results, while being mixed, have never been according to plan. The state has been both a benign and a malignant force in the Kano countryside. The admixture of intended and unintended consequences of state action has produced a dynamic, yet fragile environment in which millions of Nigerians seek to realise their livelihood opportunities with varying degrees of success and adaptation (Mortimore, 1989, Mustapha and Meagher, 1992).

On the positive side, we can celebrate what Sasakawa (2000) called the hardworking and resourceful Nigerian farmers 'who have kept food production ahead of national population growth' (SG, 2000; Valencia and Breth, 1999) during the 1990s. It is also noteworthy that despite decades of alarms on the 'encroachment of the Sahara', the vegetation of the Kano region seems to be holding out well. The challenge of public policy is to link these positive traits into a wider strategy which binds the farmers dynamically into the national or global market, permitting sustained and sustainable agrarian accumulation. To date, the centralised ethos of the post-colonial state, and its still colonial developmentalist mind-set make this a daunting task.

On the negative side, it cannot be emphasised enough that time is running out. As pointed out earlier, the combination of demographic, ecological, and economic changes have already led to social explosions such as the *Maitatsine* uprisings of the 1980s. The underlying logic of aggravating poverty continues unabated; a third of Nigeria's poor are to be found in the three northern states of Sokoto, Kaduna and Kano. Kano, along with Sokoto and Bauchi States have a poverty rate of over 50 percent (World Bank, 1997?). The disaggregated human development index (HDI) for Nigeria also shows the former Kano State (including Jigawa State) lagging seriously behind in 1993; while the former Bendel State had an index of 0.63, Kano came 13th out of 19 with an index of 0.16 (UNDP, 1997). To this endemic poverty must be added the scourge of HIV/AIDS, which is said to be just as prevalent in rural, as in urban, areas. Raising the quality and delivery of public policy in the 21st century to meet these challenges is the central task of development in Nigeria.

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