



THE GAINS AND PAINS OF PUTTING A
WATER LOOK ON THE FACE OF THE
DRYLANDS OF NIGERIA

**Documentation Unit
Bayero University Kano,**

**Professor Emmanuel Ajayi Olofin
B. A. (Ife), M. A. (Malaya), Ph.D. (ABU)**

Department of Geography
Bayero University
Kano

March 04, 1992

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EDUCATION IN THE NEW MILLENNIUM**

Professor Garba Dahuwa Azare, MNAE
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SUMMARY OF PRESENTER'S BIO-DATA

PERSONAL

NAME: Emmanuel Ajayi Olofin
DATE OF BIRTH: August 09, 1941
PLACE OF BIRTH: Idao-Ekiti, EKITI State, Nigeria
MARITAL STATUS: Married with Children



PRESENT POST: Professor of Geography

EDUCATION WITH QUALIFICATIONS OBTAINED

Ahmadu Bello University, Zaria, Feb 1976 - Apr 1981 Ph.D. Dec. 1981
Universiti Malaya, Kuala Lumpur, Oct. 1970 - Oct. 1973 M. A. Jun 1973
University of Nigeria University of Ife, Sept. 1963 - Jun 1967 B. A. 2/1 Honours
Geography
Private Studies, Jan. 1960 - Jan 1962 GCE OL(6); AL (1)
St. Peter's College, Akure, Jan 1956 - Dec 1959 Grade II Teachers' Cert.

WORK EXPERIENCE AFTER FIRST DEGREE

Professor of Geography, BUK October 1, 1988 to date
Reader Associate Professor, BUK October 1, 1984 to Sept. 30, 1988
Visiting Associate Professor, UNAAB November 1987 to October 1988
Snr. Lecturer, BUK October 1, 1980 to Sept. 30, 1984
Lecturer I, BUK October 1, 1976 to Sept. 30 1980
Lecturer II, BUK On appointment January 08, 1974 to September 30, 1976
Snr Geography Teacher, Oshogbo Grammar School, Jan 1973 to Dec. 1973
Part-time Tutor, Universiti Malaya May to October 1972
Geography Tutor, Annunciation College, Ikere Ekiti, Jan 1968 to October 1970
Geography Tutor, St. Joseph's Sec. School, Ondo, June 1967 to December 1978

He was the Head of Geography and Dean of Social and Management Sciences when he presented the lecture in 1992.

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The gains and pains of putting a water look on the face of the Nigerian drylands.

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1. INTRODUCTION

The main task before Man today remains the provision of sufficient food to feed the ever-increasing mouths, adequate shelter and good quality water for the use of the teeming billions. The Malthusian fear is as real today as it was when Malthus first expressed it. Other tasks such as maintaining the quality of the environment and ensuring a peaceful coexistence among the inhabitants of Planet Earth, though of great importance, are secondary to the primary ones. The need to provide food, water and shelter in sufficient and adequate quantity and quality has driven Man to areas of marginal climates (those with little, irregular and unreliable rainfall regime and high temperatures) characterized by delicate ecosystems such as the wet-and-dry and semi-arid parts of the globe. In these dry areas, Man's efforts are geared towards creating an artificial environment that is less dry than the natural one - putting a water-look, so to say, on the face of such dry environments in order to increase the cultivated area and the frequency of cultivation.

The most significant approach to creating this wet-look, artificial environment is to build dams to conserve water for irrigation, among other purposes. Irrigating dry lands such as in Mesopotamia, Egypt, China, Pakistan and Mali (to mention a few) have been with us for a long time. In recent decades, and following the Sahelian drought of 1968-73, the Sudano-Sahelian areas of Africa (that of Nigeria inclusive) have come heavily under dam-construction and borehole-drilling for irrigation and other purposes. The resultant networks of reservoirs, overnight or standby storages, main and field canals and the accompanying greenery have put a waterlook on the face of such tracts beyond any doubt.

Of course, this preoccupation with putting a water look on a dry surface is not an easy task. Apart from the heavy financial investment it involves, there is the cost to socio-political set-ups and to the environment, particularly where dams are built. In other words, there are both gains (such as increased hectareage of farmland and increased crop production) and pains (such as displacement and resettlement problems and environmental degradation). It is felt that these gains and pains must be put in proper perspectives if the efforts expended on putting a water look on drylands would be efficiently applied.

This lecture, which summarizes the speaker's work in this important field of environmental impact assessment, examines these gains and pains in the Nigerian drylands since the 1970s, and offers suggestions on how to consolidate the gains and eliminate, or reduce the pains. To this end, we are going to delineate and characterize the

Nigerian dry-lands, summarize the efforts made to splash some water on these lands, describe the gains and pains, weigh the two sides of this delicate coin and recommend strategies for enhancing the gains and suppressing the pains.

2. THE DRYLANDS OF NIGERIA

The drylands of Nigeria may be taken as the Sudano-Sahelian zone which is wet for a fairly short period during the year (Olofin, 1985). UNSO (1990) has described a sub-zone of this area as those places characterized by a mean annual rainfall of between 400 and 600 mm while the Sahel zone proper is believed to be characterized by an annual rainfall of 200 - 400 mm. However, in view of the difficulties involved in identifying a sub-zone, because of the wide variations in annual rainfall and the recent increasing aridity in the Savanna biome, we shall consider the northern Guinea, Sudan, and the Sahel areas of the country as the drylands (Fig. 1). Of all the climatic elements, it is the interplay between the rainfall and evapotranspiration that renders the zone largely dry, even in normal years.

The amount and duration of rainfall decreases from the south to the north, whereas the amount of potential evapotranspiration increases in that direction. Table 1 describes the average rainfall and pan evaporation of stations arranged in their latitudinal positions from the south (Bida) to the north (Kano), but only stations from Kaduna northwards belong to the drylands of our description. Table 2 compares the rainfall amounts with those of evaporation at the Kano Airport station, a station that represents an average condition for the Nigerian drylands. Thus, the average rainfall ranges from about 1200 mm in the humid south to about 500 mm in the drier north, and between 200 mm to 600% of this annual rainfall may be evaporated, if water were available on the surface (as it does in reservoirs behind dams). The dry zone, according to Ayoade & Oyebande (1983) is an area where the mean annual water deficit is greater than 500 mm and the mean annual water surplus (during the wet season only) is less than 250 mm. The potential evapotranspiration in such areas is between 1500 and 1800 mm. On the average, months with rainfall of 75 mm and above are five in the south and three in the north, while those with less than 25 mm are five and seven, respectively, under normal conditions.

Table 1: Pan Evaporation at some stations in the Savanna

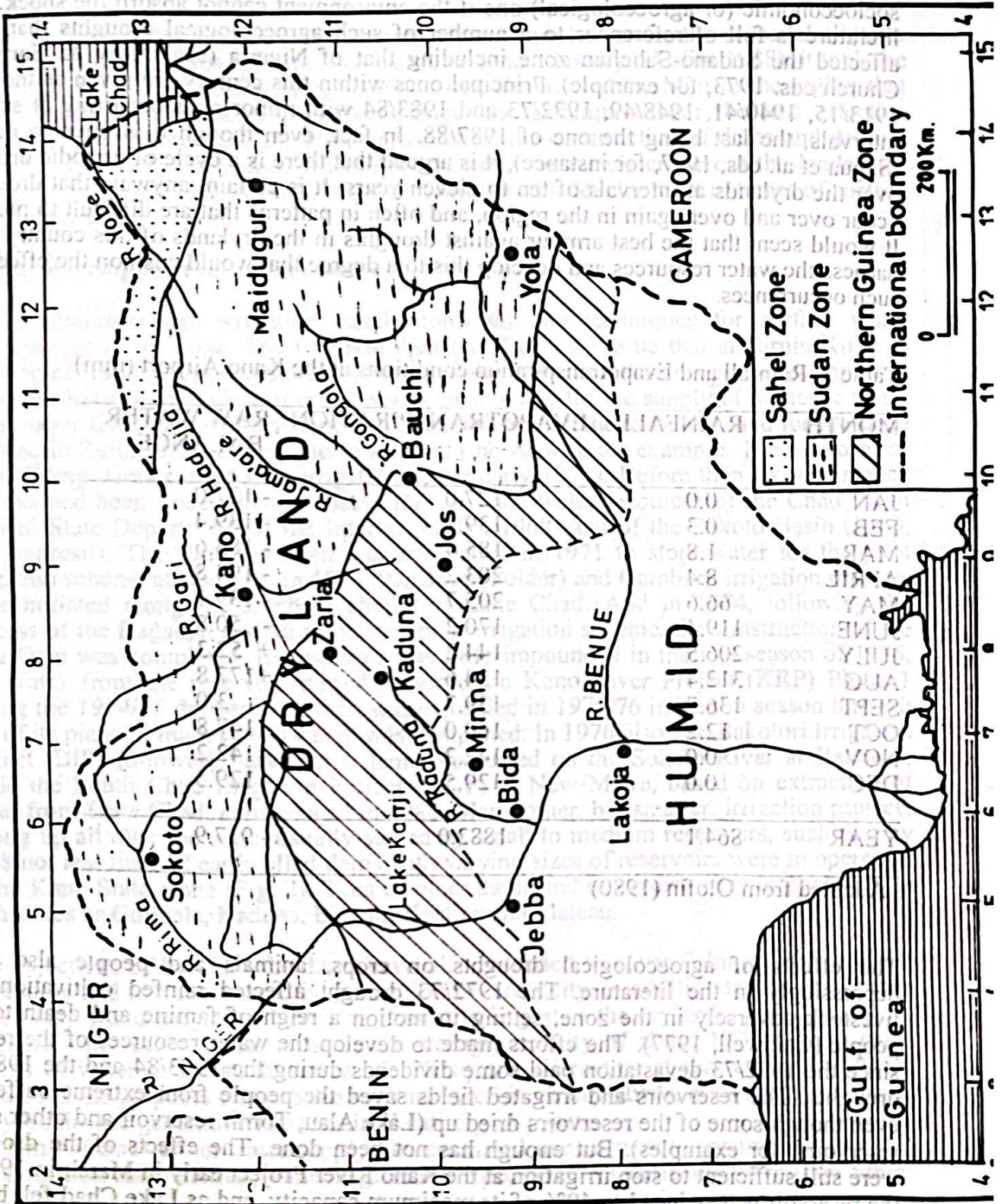
Station	Mean of Case A Pan (mm)	% of annual rainfall	Mean of Sunken Pan (mm)	% of annual rainfall
Kano	3511	406	2538	294
Maiduguri	4047	621	2862	440
Samaru	2714	245	2022	183
Jos	3058	214	2459	172
Yola	2971	300	2278	230
Bida *	2720	221	2102	171

* Estimate Adapted from Olofin (1985)

However, normal conditions are becoming increasingly rare (Allan, 1973) and of the three regimes identified for the Savanna by Olofin (1985), the dry regime is the most

Figure 1 here

Fig1: Location of Humid and Drylands of Nigeria



commonly encountered in recent years. During such dry regimes, a station may receive less than 50% of its normal long-term mean rainfall, and the duration may be cut by as much as 60%. When two consecutive years are of the dry regime (as it is very common in recent decades) a climatological drought is had which may be turned into a socioeconomic (or agroecological) one if the environment cannot absorb the shock. The literature is full of references to a number of such agroecological droughts that have affected the Sudano-Sahelian zone including that of Nigeria (see Dalby & Harrison-Church eds. 1973, for example). Principal ones within this century are given as those of 1913/15, 1940/41, 1948/49, 1972/73 and 1983/84 with minor ones occurring at shorter intervals, the last being the one of 1987/88. In fact, even though it is open to debate (Sagua et al. eds, 1987, for instance), it is argued that there is a cycle of periodic drought over the drylands at intervals of ten to eleven years. It is certain, anyway, that droughts occur over and over again in the region, and often in patterns that are difficult to predict. It would seem that the best armour against droughts in the drylands of this country is to harness the water resources and develop this to a degree that would cushion the effects of such occurrences.

Table 2: Rainfall and Evapotranspiration conditions at the Kano Airport (mm)

MONTH	RAINFALL	EVAPOTRANSPIRATION	RAW WATER BALANCE
JAN	0.0	127.0	- 127.0
FEB	0.3	139.7	- 139.4
MAR	1.8	185.4	- 183.6
APRIL	8.4	203.2	- 194.8
MAY	66.6	205.7	- 139.1
JUNE	119.4	170.2	- 50.8
JULY	206.5	144.2	+ 52.3
AUG	312.4	134.6	+177.8
SEPT	136.7	139.7	- 3.0
OCT	12.2	160.0	- 147.8
NOV	0.0	142.2	- 142.2
DEC	0.0	129.5	- 129.5
YEAR	864.1	1882.0	- 917.9

Adapted from Olofin (1980)

The effects of agroecological droughts on crops, animals and people also echo depressingly in the literature. The 1972/73 drought affected rainfed cultivation and livestock adversely in the zone, setting in motion a reign of famine and death to the people (Caldwell, 1977). The efforts made to develop the water resources of the region since the 1972/73 devastation paid some dividends during the 1983/84 and the 1987/88 droughts. The reservoirs and irrigated fields saved the people from extreme suffering, even though some of the reservoirs dried up (Lake Alau, Tomir reservoir and other small reservoirs, for examples). But enough has not been done. The effects of the droughts were still sufficient to stop irrigation at the Kano River Project early in March in 1984 as the reservoir was reduced to 40% of its maximum capacity, and as Lake Chad fell below the intake canal level, the irrigation at New Matre was grounded completely (Olofin,

1987b). We shall now examine how much water-look has been put on the face of these drylands in Nigeria.

3. WATER RESOURCE DEVELOPMENT SINCE 1970

Although the development of water resources to sustain life under the seasonal climatic variations in the Nigerian drylands dates back to distant history (Olofin, 1988), it took the dryness of the 1972/73 devastating drought cited above to show Man in the region that more needed to be done. He had to change his techniques from the less effective traditional ones to the more effective ones such as the construction of dams and drilling of boreholes. Today, numerous reservoirs and irrigation canals crisscross the landscape, changing the face of the drylands. We shall consider this development in terms of surface and ground water.

3.1 The development of surface water

Dams, reservoirs and irrigation canals constitute the techniques for surface water development in the zone. The first real dam could be said to be that at Birnin Kudu in Kano State¹ (now in Jigawa State), constructed in 1969, even though several attempts are known to have been made earlier. This was constructed for the supply of domestic water to the town. Other small dams came into existence around the same time and for the same purpose in Zaria (the Kubani) and in Katsina (the Ajiwa), for example. The purpose for constructing dams extended to irrigation in the early 1970s. Before then reconnaissance surveys had been undertaken to assess the land and water resources of the Chad Basin (United State Department of the Interior, USDI, 1968) and of the Sokoto Basin (FAO, and Impresit). The Bagauda Dam was completed in 1971 to store water for the pilot irrigation scheme at Kadawa. In 1973, the Baga (Polder) and Gamboru irrigation projects were initiated along the southern shores of Lake Chad. And in 1974, following the success of the Bagauda and its associated pilot irrigation scheme, the construction of the Tiga Dam was completed. Its reservoir was fully impounded in the wet season of 1975, and water from the reservoir started to serve the Kano River Project (KRP) Phase 1 during the 1974/75 dry season which was expanded in 1975/76 irrigation season through one of its planned main canals which was completed. In 1976 also, the Bakolori Irrigation Project (BIP) followed, based on a dam constructed on the Sokoto River at Bakolori, while the South Chad Irrigation Project (SCIP) at New Matre, based on extraction of water from Lake Chad, commenced in 1980. Many other, but smaller, irrigation projects sprang up all over the zone, usually served by small to medium reservoirs, such that by 1988 not less than 22 earth-filled dams with varying sizes of reservoirs were in operation in the Kano State alone (Fig. 2). Tens of other dams and reservoirs were in operation in such states as Gongola, Kaduna, Bauchi, Katsina and Plateau.

The objectives of building the dams have also extended to cover fishing, flood control, recreation, and in a few cases, the generation of electricity, in addition to rural and urban water supply and irrigation. The Tiga Dam, the largest in the drylands, provides a good example. The reservoir has a maximum storage capacity of about 1970 million cubic metres of water and a surface area of 178 square kilometres at that capacity (Olofin, 1980). All the purposes cited above were included in its objectives, even though the issue of hydroelectric generation has remained entirely on paper.

In terms of rural urban water supply, the estimated annual water consumption is put at 70.05 million cubic metres, while irrigation is expected to consume 464.94 million cubic

¹ Our research had been completed before the Kano State of our reference was split into Kano and Jigawa States. Thus, reference to Kano State in this discourse combines the new Kano and Jigawa states. The same is true of other states recently split or created.

metres for crop production and 149.06 million cubic metres for storage in canals when the two phases are in operation to irrigate 62 000 ha (USD1, 1968).

Another example and the second largest operating reservoir in the zone is the Bakolori in Talata Mafara area of the Sokoto-Rima River Basin. It has a capacity of 314 million cubic metres with a surface area of approximately 40 square kilometres. It is designed to irrigate about 30,000 ha (Adams, 1985). Finally, when completed, the Chalawa Gorge Dam and reservoir will be second only to the Tiga and will enhance the completion of the KRP Phase 2.

In these projects, the management of reservoir water is varied. In many cases water is not discharged into the natural channels, resulting in grave environmental consequences as shall be shown later. The management of the Tiga reservoir is an exception to this practice. Here, an initial mean discharge of 9.6 cumecs was maintained in the natural channel and this was later increased to 13.00 cumecs in order to satisfy an agreed mean discharge of 15.00 cumecs mandated in 1982. Inclement weather conditions and unauthorized water extraction from the reservoir have not enabled the authority to match the mandated volume. It should be stressed that the discharge into the natural channel in this case is dictated by economic and socio-political considerations. Water for Metropolitan Kano is pumped from the natural channel 56 km downstream from the Tiga Dam, while irrigation and other water-based projects in Hadejia and parts of Borno State (now Borno and Yobe States) further downstream depend on the discharge. What is more, the discharge is regulated such that the difference between the wet and dry season volumes is not wide, particularly between the dam and the Kano-Chalawa confluence over which the dam has about 95% control. Olofin (several publications) has always stressed that it is this management that has enhanced the positive changes in the Kano River channel between the dam and the cited confluence, the types that are absent in other projects, and even downstream of the said confluence.

3.2 The development of groundwater

For a long period of time the development of groundwater in the region was limited to harvesting water from the channel sands through small water holes and shaduf pits in the floodplains, and though relatively shallow wells to tap the top aquifer in other facets of the land. For example Kano City was supplied 4.5 million litres per day from the Chalawa channel in 1950 (Kulatunga et al. 1977). However, the dependence on water in the channel sands and the shallow, usually unconfined, aquifers is affected by the variations in weather conditions and by seepage. Such sources failed woefully during the 1972/73 drought, leading to the introduction of boreholes where dams are found unsuitable, particularly in sedimentary basins.

Today, boreholes are common all over the Sudano-Sahelian zone, and even all over the country. Water from such boreholes is used for both urban/rural and irrigation purposes in the drylands. The attention paid to boreholes in recent years is illustrated by comparing the estimate of 467 boreholes for the entire country in 1976 (Ayoade & Oyebande, 1983) with that of 518 for Kano State alone in 1984 (Umar, et al., 1985). From these boreholes in Kano approximately 33.77 million cubic metres of water was discharged in that year. Since the 1980s, a new dimension has emerged in the development of groundwater in the drylands. Tubewells (shallow boreholes) and washbores have become popular on the

floodplains downstream of major dams. Such tubewells are used for improved *fadama* irrigation under the Kano State Agricultural and Rural Development Authority (KNARDA), a variety of the ADPs, particularly in the Hadejia floodplains which has been left high and dry by the Tiga Dam project. Other ADPs in the dry region, particularly those in Bauchi, Kaduna, Katsina and Sokoto states, pursue the same policy. The number of tubewells and washbores in the region runs into multiple thousands.

4. THE GAINS OF WATER RESOURCE DEVELOPMENT IN THE DRYLANDS OF NIGERIA.

That the drylands of this country has achieved some of the expected benefits from the development of water resources is not in doubt. However, the degree of success varies spatially, with the Kano State recording the highest. The gains are considered below, using the Kano State as an example.

4.1 Improved urban and rural water supply

Many water supply schemes are now based on reservoirs, boreholes, or a combination of both which are recently established in the region. For example, and as mentioned earlier, 70.05 million cubic metres of water is drawn annually from the Tiga Reservoir for urban and rural use. Smaller reservoirs serve such towns as Kazaure, Dambatta, Karaye, Birnin Kudu, and so on, all situated in the Basement Complex section of the state. Where reservoirs are ineffective, such as in Gumel and Hadejia, boreholes are extensively (and intensively) used. The same pattern is found in other states. Water supply from reservoirs predominate in Bauchi, Kaduna, Katsina and Plateau states, whereas boreholes predominate in Borno State and both reservoirs and boreholes are used as appropriate in Sokoto State.

As a result of these gains in water resources development, the effects of the 1983/84 and 1987/88 droughts were very limited on water supply for human consumption throughout the zone. It is for the same reason that the water supply status of Kano Metropolis is about the most reliable among all Nigerian cities, in spite of its location in the heart of the drylands.

4.2 Increased agricultural production

Agricultural production has increased in recent years in terms of hectareage, variety of crops, frequency of cropping per year, and gross weight of produce. The increase has been achieved through newly established large- medium- and small- scale irrigation projects, some of which have been mentioned above. It must be noted, however, that some of the projects (e.g. the SCIP) have not recorded appreciable increase in agricultural production.

4.2.1 Increased Hectareage

In the Kano State, for example, there were not less than six medium- to large- scale irrigation projects cultivating more than 25 000 ha in 1986, out of the approximately 100,000 ha already prepared. The KRP (in two phases 22,000 and 40,000 ha) is the largest scheme and 12 000 ha of the first phase was cultivated in 1986 (field enquiry). The Hadejia Valley Project (HVP), for which 25,000 ha is projected, is the second largest, but only a small fraction of it was irrigated in 1986. Another 50,000 ha is earmarked for other parts of the state which include Kazaure, Tomir and other schemes. About 10,000 ha was under irrigation in these scattered parts in 1986. It must be recorded

that governmental emphasis on wheat production and the accompanying incentives open more hectares up for irrigation in the 1987/88 and 1988/89 irrigation seasons, and an estimate of about 40,000 ha was under medium- to large- scale irrigation during the 1989/90 season. It is believed that all the projected hectareage would be put under irrigation when the Chalawa Gorge Dam becomes operational. In addition, some 6,000 to 10,000 ha of land was under small-scale irrigation through either individual initiative, or under the KNARDA-assisted scheme. It is envisaged that 20,000 ha will eventually be irrigated under the small-scale scheme (Umar, et al., 1985).

4.22 Changes in variety of crops and gross produce

Maize, wheat, soybean and a few other exotic irrigated crops have been added to the traditional ones such as tomatoes, rice, onions, sugar-cane, peppers, and son on. The traditional crops have also been improved through cross-breeding and introduction of exotic species. Tomato is one example and it dominated the earlier days of irrigation in the drylands. The gross produce of the crop increased so much in the KRP in 1984 that Air Force planes were used to evacuate it to other parts of the country to prevent rotting, and a tomato canning factory easily came to prominence. In the following years, the hectareage for tomato was controlled as it became compulsory for each participant to reserve a specific proportion of his holdings for wheat production. Wheat itself shot into prominence in the 1986/87 irrigation season for reasons given earlier. The harvest that season is estimated to be 285 000 tonnes (Radio news), and wheat became *the thing* during the 1988/89 irrigation season which yielded an estimated 500 000 tonnes. Even the small-scale *fadama* cultivator participated in the wheat-growing exercise. Increases in the gross produce of other crops have been recorded, but they have not been researched by this author.

4.23 Increase in number of cropping

Under normal climatic conditions only a single cropping per year is possible in the drylands under rainfed cultivation. The only exception is the traditional *fadama* cultivation that thrives during the dry season. Even then areas used for this type of dry-season farming were too waterlogged during the wet season to be of any use. Thus, it may be said that all over the drylands during the pre-development period only one single cropping was possible per year. The development of water resources that has enhanced irrigation of the upland tracts has allowed for at least two croppings per year in affected areas. In some cases three croppings are possible. Thus, even without any addition to the cultivable land in absolute terms, the hectareage under production has increased by the magnitude of the irrigated fields through double and/or tripple cropping.

Finally, the possibility of supplementary irrigation within the areas of the projects during the wet season, provides a safety valve against climatological droughts, which is not available in non-irrigated areas.

4.3 Creation of additional cultivable land

In addition to increasing the hectareage under crop-production through double or tripple cropping identified above, water development projects, such as the construction of dams, have brought into cultivation tracts not cultivable in predam period. This is without prejudice to the fact that more land is drowned under reservoirs than are released elsewhere. However, dams help to regulate the normal flash flow of rivers in the drylands, thereby controlling the annual floods in downstream reaches. The areas

normally under floods in predam period become drained and available for rainfed cultivation during the wet season, and also for irrigation during the dry season. The Hadejia and Gashua areas downstream of the Tiga provide two good examples. Vast tracts of land were waterlogged in these areas predam, a small fraction of which was cultivated using the residual moisture irrigation technique. The Tiga has set the vast land free, and the 25 000 ha HVP cited earlier is based on this regained land. It is noted, however, that the need to change the technique for cultivating this land, and the lack of a previous enlightenment on this need created dissatisfaction among the inhabitants of this area during the first ten years after Tiga.

Secondly, dams can create cultivable land through channel metamorphosis. Predam channels in the drylands are storm channels which are wide, sandy and unstable (Olofin. 1980). Stream regulation through dams enhances the development of much narrower postdam channels, leaving extensive portions of the predam channels as new overbank zones on which silt+clay material may be deposited and vegetation established. This process has occurred in the case of River Kano channel between the Tiga Dam and the Kano-Chalawa confluence (Table 3). In this reach, a new farmland approximately 1200 ha has been created from the predam wasteland. What is more, its characteristics, such as a top silt+clay layer of about 18 cm, organic matter content of 1.6% by weight, a pH-rating of 7.1, cation exchange capacity of 9.4 me/100gm, show that it is more fertile than the upland land. Other enhancing characteristics include total potash of 866 ppm, total phosphates of 1939 ppm, available phosphates of 8 ppm, available potassium of 198 ppm, available calcium oxide of 4852 ppm and available magnesium oxide of 810 ppm.

In the case under review, it is the maintenance of an optimum perennial discharge in the natural channel that has prompted the positive transformation. In projects where no perennial flow has been maintained (e.g. Chalawa channel), or where such flow is inadequate (Hadejia River channel downstream of Kano-Chalawa confluence) no positive change has taken place as shown in Figure 3. In the Jakara basin, for example, a loss of actively cultivated predam *fadama* has been reported (Nichol, 1991).

4.4 Check to processes of desertification

Although it is known that desertification is caused by both natural and human factors, it is known that the process is more common in areas of delicate climate such as the drylands. It is contended that the presence of water in reservoirs, canals and natural channels all the year round have cushioned such areas against climatological droughts. So have the increase in soil moisture in irrigated lands and in channels downstream of dams (even without perennial flow); and the establishment of both cultural and natural vegetation. All these are made possible through the development of water resources in the drylands of this country. These conditions have increased the carrying capacity of such areas and, through such conditions, stem the processes of desertification. As hinted earlier, the irrigated zones in Kano were still able to produce two crops in 1983 and 1987 when non-irrigated areas failed to produce a good crop (Field observations).

Further, more equable micro-weather conditions tend to develop near medium to large reservoirs. Although this phenomenon has not been researched in the case under study, weather reports published by KNARDA suggest that Tundun Wada area, which situates around the Tiga Reservoir, now receives more rains, earlier and longer than it did in predam period.

Table 3: Changes in channel variables consequent on dam construction in a savanna area

(a) Effective channel							
	Width (m)		Depth (m)		S + C (%)	OM (%)	V (code)
	i	ii	i	ii	i	i	i
Kano							
Mean	294.0	33.7	2.01	1.44	5.4	0.12	0
s.d.	80.2	8.4	0.32	0.31	1.9	0.06	0
CV%	32.2	24.8	15.9	21.50	36.1	50.00	0
Chalawa							
Mean	251.0	183.0	2.20	1.15	11.4	0.03	0
s.d.	52.9	20.8	0.32	0.08	1.02	0.01	0
CV%	21.0	11.4	14.32	7.00	8.9	33.30	0

(b) Evolved Overbank zone					
	Width (m)	S + C (%)		OM (%)	V (code)
	ii	ii	ii	ii	ii
Kano					
Mean	206.3		63.6	1.57	3.4
s.d.	74.2		10.3	0.42	0.45
CV%	36.0		16.2	26.80	13.2
Chalawa					
Mean	68.4		46.9	NR	1.5
s.d.	34.7		3.0	NR	0.5
CV%	50.8		6.4	NR	36.0

Notes i indicates predam data and ii postdam
W is channel width; D is depth S + C is silt + clay
OM is organic matter; V is vegetation coded from 0 = bare to 4 = thick.
NR is not researched.

SOURCE: Olofin (1987a)

4.5 Comment

We have used Kano State experience as example here. It should be stressed that what has been described is true to a large extent of other states in the dry zone, even though the degree of success may not be as high as that of Kano State. For example, it was reported on radio (April 26, 1988) that the Sokoto-Rima RBDA was planning to irrigate about 100 000 ha of wheat during the 1988/89 irrigation season from which to expect a harvest of 200 000 tonnes. While one suspects exaggeration and inaccuracies in such statements, it nonetheless shows that some efforts were being made. In another direction, the vegetation earlier established along the canals and within the abandoned irrigated fields in the SCIP

Figure 3 here

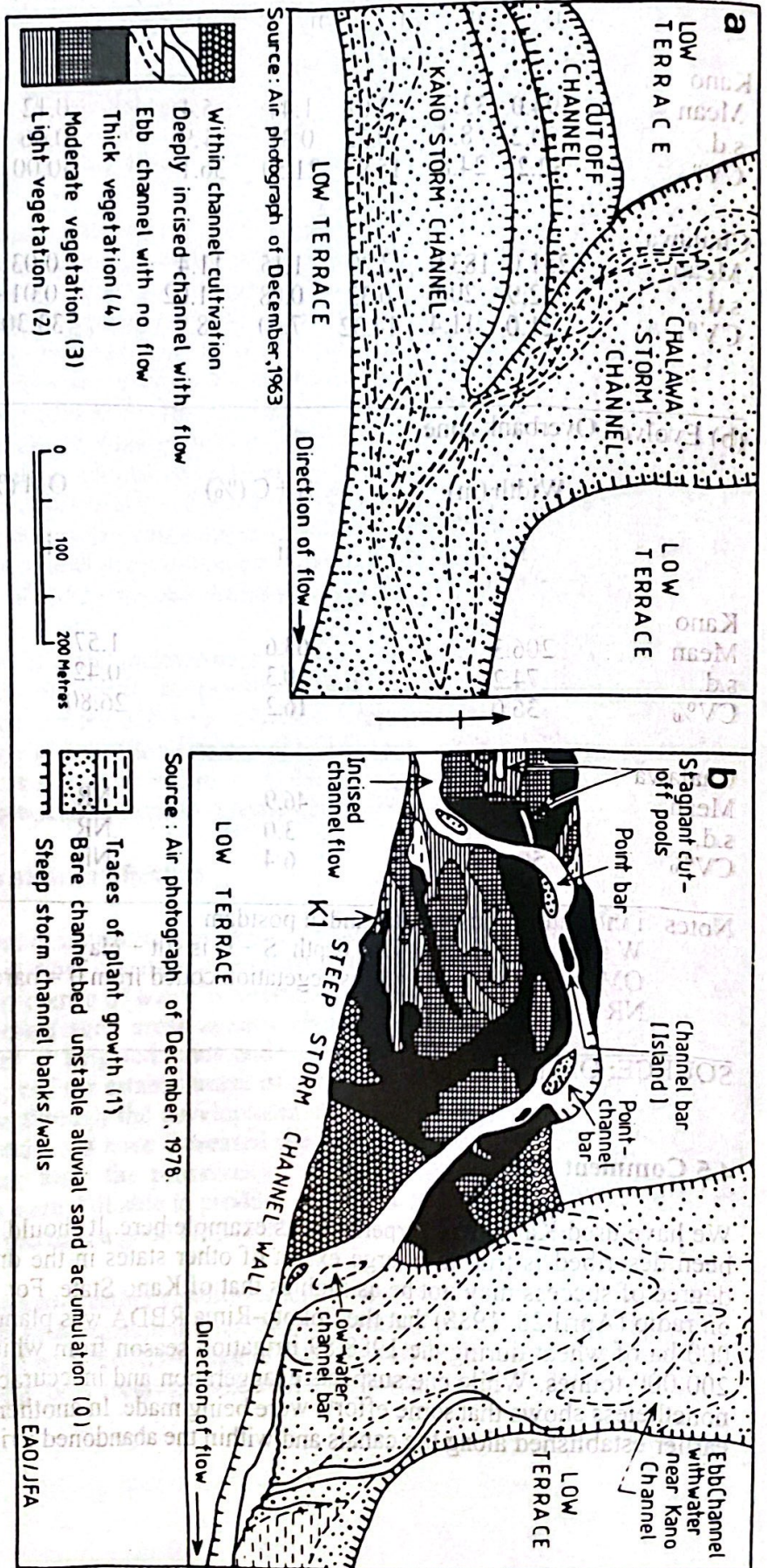


Figure 3 Some channel characteristics at Kano-Chalawa confluence: (a) before streamflow control, (b) after Tiga Dam controls Kano River flow.

at New Matre provided significant checks to the process of desertification during the very dry years, 1983/84 and 1987/88.

Finally, the target of 250 000 ha of irrigated land set for the drylands of this country (NTA, Newsweek, May 16, 1988) is based on the expected (or assumed) success of water resources development in the region.

5. THE PAINS OF WATER RESOURCES DEVELOPMENT IN THE REGION

The pains of the development of water resources in the dry-lands of this country can be considered under **physical and socioeconomic** types. These are set out below.

5.1 Physical (or natural) pains

The physical pains of water resources development in the drylands of Nigeria are in two dimensions. First are the effects of water projects on the environment as exemplified by the works of Olofin (1980, 1984, and 1987a), Adams (1985), and Nichol (in press), for instance. Secondly, there are the constraints the environment itself imposes on water resources development in the region as shown by Olofin (1985 and 1987b). We shall look at both dimensions simultaneously.

It is now clear that channel and valley-side slope erosion occurred in reaches downstream of dams in the basins of Rivers Kano, Chalawa, Sokoto, Jama'are, and other Sudano-Sahelian channels (Olofin, 1980; Adams, 1985, among others). In the case of the Kano River channel incision attained a depth of 1.44 m and valley-side gullymouths incised by over 60 cm before stabilization set in through the establishment of vegetation both on the new overbank zone of the channel and at the gullymouths (Olofin 1980). But in the case of the Chalawa River where perennial discharge has not been maintained downstream of the dam, channel incision had attained a depth of 1.50 m and gullymouths incision was over one metre by 1988 without any signs of stabilization. Conditions similar to that of the Chalawa case are true of other affected channels without perennial flow in natural channels.

Further, dams prevent floodwater with its associated rich silt load from reaching the low terrace depressions which constitute the traditional *fadama* lands. The effect of this condition was very devastation in the Hadejia area for the first ten years after Tiga, more so because the farmers were not taught the need and how to adopt rainfed cultivation techniques. Hundreds of thousands hectares of land was lost to *fadama* cultivation in the area. Adams (1985) has reported similar losses downstream of the Bakolori Dam of at least 5000 ha and the loss to *fadama* downstream of the Jakara has been put at 656 ha (Nichol, in press). More losses would occur should a dam fail, as the Bagauda did in 1988. Since the dams in the drylands are earth-zone filled types whose maintenance is suspect (Abdulkadir & Usman, 1989), there is always the fear of a failure which portends great physical destruction in downstream reaches. For example, the flood flow that was generated by the failure of the Bagauda Dam wiped off all the deposits on the downstream channel, breached a road and obliterated the positive transformation of the nearby Kano channel several kilometres downstream of the Kano-Bagauda confluence. In place of the nutrient-rich silt+clay, vegetated overbank zone described above (which was stripped off by the failure-induced flood), there was the deposition of the rubbles and infertile sand derived from the dam and upper reaches of the tributary. If such a havoc was wreaked by the Bagauda Reservoir, which is less than 5% of the Tiga Reservoir, it is frightening to imagine what the failure of the Tiga Dam would do!

In terms of the environmental constraints on water development projects in the drylands of Nigeria, the seasonality, periodic droughts, high temperatures and intense wind and rainstorms constitute the greatest setbacks. These climatic conditions manifest themselves in several ways, not the least of which are: excessive evaporation from water surfaces; a tendency towards alkalinity and sodicity in irrigated fields; and siltation of reservoirs. When the climatic setbacks merge with semi-impervious surface materials (as they do in some irrigated fields) waterlogging becomes a problem.

The effects of evaporation on surface water, particularly in climatologically dry periods has been demonstrated by Grove (1973) in relation to Lake Chad which became a disconnected marshes during one of the earlier droughts of this century. Olofin (1987b) has also demonstrated that without any inflow into Lake Chad, less than four years would be required to evaporate every drop of water from the lake. It is also contended that it was the increase in evaporation occasioned by the 1983/84 drought that decreased the maximum volume of the Tiga Reservoir from 1720 million cubic metres in September 1981 to 1220 million cubic metres in September 1983 (Olofin 1985). It is estimated in the same work that evaporation from Tiga Reservoir at its full capacity of 1970 million cubic metres is about 451.8 million cubic metres per year, contrasting a total normal evaporation of 117.5 million cubic metres on the same area. This is when the water spreads over full reservoir area of 178 square kilometres.

Further, increasing salinity has been reported by researchers from some irrigated fields, even though levels cited are not yet critical. Such reports include those of Alonge (1985), Ogunrinde (1987) and Tssiet (in press) from the KRP Phase I, Daniel (1985) from the Dambatta project and Kodiya (1988) from the SCIP. In addition, Ogunrinde (1987) and Olofin (1987b) have shown that waterlogging was a problem in some parts of the KRP and SCIP fields respectively.

Not much seems to have been researched into the chemistry of discharged water from reservoirs and of reservoir water in the region. However, it is observed that salinity is on the increase in reservoir waters (Olofin, 1991), especially during the dry season. Also, Abdulkadir & Usman (1989) and Ahmed & Musa (in press) have reported on the problem of sedimentation of reservoirs, particularly the Bagauda Reservoir. Olofin (1988) has also observed that siltation of the Tiga Reservoir is becoming more rapid than it was earlier projected because of landuse changes and erosive rainstorms in the catchment area. Very recently it was discovered that the reservoir in Dustin-Ma, Katsina State, was filled more with sediments than with water, thereby impairing the water supply scheme in the area (Radio News, April 1991).

Finally, owing partially to the unconsolidated nature of the surface material in the Chad Formation zone of the Kano State resulting in excessive seepage, a lowering of watertable by as much as 27 m has been reported in the Hadejia area (Umar, et al., 1985).

Of course, the authors concede that the impoundment of reservoirs upstream, the resultant excessive pumping of groundwater, and some loss in transmission along the Basement Complex-Chad Formation discontinuity are contributive to the loss of head.

5.2 Socioeconomic pains

In all the water development projects in the zone, and particularly those associated with medium- to large-scale, the displacement of the peasants; poor resettlement management; inadequate, inappropriate and delayed compensation and social disruptions are some of the socioeconomic pains usually borne by the low-income group. Others are increasing incidence or fear of diseases, increased incidence and variety of pests and unacceptable

crops or farming practices. Of these pains, the issues of compensation and resettlement have left nasty tastes in the mouths of both the peasantry and the government, resulting in upheavals such as the peasant revolt and its forced suppression by armed police at Bakolori in 1980 (Jega, 1987). Even where it appears that compensation and resettlement have gone fairly satisfactorily, it is known that family ties have been disrupted, land speculation and outright sales of land to absentee "landowners" (by peasants who reject the new system of cultivation and/or new crops) have taken place (Voh & Atala, 1987).

However, it would seem that in terms of economic loss, it is in the off-site (downstream) locations that the negative effects of dam construction tell the saddest tales. For example, Adams (1985, pg 298) puts the loss in dry season *fadama* agricultural production downstream of the Bakolori Dam at #3.1 million to be replaced by an estimated (not actual) production of rice worth #2.0 million. Also, Wallace (1980) and Chapman (1984) have given similar losses downstream of the Tiga Dam in the Hadejia area. The pre-Bakolori fishing scenery in the Sokoto floodplain revealed that there were over 500 full-time fishermen in 15 villages and about 1000 part-time others, 86% of these practised dry season fishing in pools and channels and 43% engaged in wet season fishing (Adams, 1985: pg 297). In the postdam period fishing stopped entirely in five of the villages and declined widely in the others. In all, 67% of the predam fishermen had to migrate to other areas (*Ibid.*). Similarly, the fishing industry of Hadejia and Kaffin Hausa downstream of the Tiga Dam has been paralyzed following the establishment of the dam. In another dimension, the inadequate water supply to the SCIP between 1983 and 1987 resulted in a great deal of loss and hardship to the participants while the failure in 1988 of the Bagauda Dam and the dam built by Cameroon on River, Chari led to losses in crops, animals and infrastructure in downstream reaches.

Finally, it is feared that the incidence of certain diseases is on the increase as a result of the water resource projects in the drylands of Nigeria. Even though definite cases of schistosomiasis and onchocerciasis have not been reported, carrier snails of the former and the blackfly, vector of the latter, have been spotted in parts of the KRP area (Olofin, 1980). Salisu (1981) has reported increased incidence of malaria in Ajiwa area of Katsina State following the establishment of the Ajiwa Dam. In recent years *quela* birds and grasshoppers have multiplied geometrically to feed on crops and contribute to poor harvests, even in wet years in the drylands. It is believed that the availability of water throughout the year, by way of the projects cited, contributes to the breeding of these and other pests.

6. THE BALANCE SHEET

When the pains of medium- to large-scale water resources development projects are focussed, one may agree with writers such as Turner (1977), Adams (1985) and Matlock (1985), among others, who have questioned the rationale for such projects and advocated for small-scale ones. However, if we stand back and look at the balance sheet -- the bad and the good (Ruhe, 1971, pg 22); that is, the pains and the gains, we may well be satisfied. That is, considering the efforts made to put a water look on the face of the drylands of this country, there has been more of boom than doom. We may even go ahead to add that if the pains identified are contained (and this is possible) we can check the adverse effects of the frequent droughts and the process of desertification which are currently the bane of the drylands of this country.

7. STRATEGIES FOR THE FUTURE

In order to contain some of the pains identified above, certain steps need to be taken now and in the future. First, there must be a continuous monitoring of the effects of all water-based projects on Man and his environment so as to have accurate and qualified assessment of the positive and negative post-implementation impacts. Factors that yield specific effects should be carefully studied and the accrued knowledge utilized in future projects. Olofin (1988) has suggested a procedure for monitoring the impact of dams on downstream physical environment in the tropics, using the Kano experience as an example, while Nichol (in press) has shown the role of remotely sensed data in such monitoring exercise. A whole-basin approach is recommended for both physical and socioeconomic monitoring.

Investigations in the Kano area so far has shown that to avoid (or limit) undesirable effects in downstream channels of dam-affected rivers, perennial flow of an optimum quantity must be maintained in the natural channels downstream of such dams. The quantity that is optimum for a particular affected channel has to be determined through further investigations that could yield some regression equations relating x (the channel magnitude) to y (the regulated discharge). Also, surface reservoirs should gain depth and reduce in surface area to reduce the rate of reservoir evaporation which is area-related.

More efforts should be directed to small- and medium- scale projects rather than large ones. And some of the large-scale ones should be stepped down. Definitely, the SCIP should not go beyond the first phase, if environmental disaster is to be avoided. To avoid some of the social disruptions, there is a need for enlightening the people that a project would affect. The gains and pains should be presented to them fairly accurately. The people's perception of these gains and pains should also be determined. Persuasion rather than coercion should be adopted when there are conflicts in opinion of the planners and the target population. That the people's perception is important is clearly demonstrated in the case of resettlement programmes at New Bussa and the KRP. Participants rejected the houses in New Bussa because they were not previously consulted, whereas in the KRP where they were consulted, the type of houses built were acceptable. Again, if the people of Hadejia had been warned about the changes that would be required in the system of cultivation before the Tiga Dam was constructed, the hardship they experienced between 1975 (when their fadama holdings were left high and dry) and 1984 (when the new system of cultivation was sold to them) could have been avoided.

Further, the issue of compensation deserves a closer study. The mishandling of compensation has led to dissatisfaction among project participants, even when the gains of the project are very clear to see. Aspects of compensation that should be tackled are: the assessment, the rates for and range of variables to be compensated, the form compensation should take, and the timing. It is known that officials often deliberately under-assess some individuals' holdings while they over-assess those of others. In some cases, the owners are inaccurately identified and the rates are uneconomic. In short, the procedure for compensation leads to dispossession without replacement, turning landowners to tenants. There is a need to up-date the procedure to enhance accurate and economic compensation.

Finally, there is a need for a proper co-ordination of efforts among development and financial bodies. At the moment, there is a great deal of duplication of efforts. In some cases, the activities in one area of a river basin is counter-productive to activities in other parts. For example, it is believed that part of the failure of the SCIP can be traced to the impoundment of reservoirs in the headstreams of the rivers flowing into Lake Chad.

Similarly, increased agricultural and urban activities in the catchment of reservoirs only lead to accelerated reservoir siltation. It is also known that there are cases of unhealthy rivalry among some agencies, and between states. This wrangling should be stopped while a whole-basin approach is adopted.

In short, we may state that in the case of dam construction, in particular, and all land projects in general, the checklist traced to the International Dams Newsletter by Newson (1987) provides a useful starting point in determining whether or not a project should be supported. To this end, a project may be supported if:

- (a) it provides food crops for the local population as a first priority;
- (b) it emphasizes local employment;
- (c) it recognizes the rights of displaced persons to land, including communally held land;
- (d) it does not contribute to the destruction of an indigenous culture;
- (e) it does not adversely affect the environment in terms of flora and fauna;
- (f) it has a lifetime span of over 50 years;
- (g) it does not cause the spread of waterborne (and other) diseases (and pests);
- (h) its failure through accident, sabotage and so on, would not result in the devastation of population; and
- (i) it does not foreclose the investment in long-term sustainable development, such as watershed restoration, or soil desalinization.

We may conclude that if these precautions and similar ones can be taken, more water should be splashed on the face of the drylands of this country; and the lands will be the better for it.

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**BASIC CONCERNS; REVITALIZING NIGERIA'S PRIMARY
EDUCATION IN THE NEW MILLENNIUM
(INAUGURAL LECTURE)**

**Professor Garba Dahuwa Azare, MNAE
B.A. (Ed) (ABU); M.Ed. (BUK); Ph.D. (Wales); PDRS (West Virginia)**

**Department of Education
Bayero University
Kano**

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SUMMARY OF PRESENTER'S BIO-DATA

1. PERSONAL

Name: Garba Dahuwa Azare
Date of Birth: 1952
Place of Birth: Azare, BAUCHI State, Nigeria
Nationality: Nigerian
Marital Status: Married with Children

2. POST-PRIMARY EDUCATION WITH QUALIFICATIONS OBTAINED

<u>Institution</u>	<u>Period</u>	<u>Qualifications</u>
West Virginia University, USA	1986 - 1987	PDRS
University of Wales, UK	1980 - 1982	Ph. D.
Bayero University, Kano	1978 - 1980	M. Ed.
Ahmadu Bello University, Zaria	1972 - 1976	B. A. (Ed.)
Bauchi Teachers' College, Baushi	1966 - 1970	Teachers' Grade II Cert.

3. WORK EXPERIENCE SINCE FIRST DEGREE

Deputy Vice Chancellor	August 1999 to date	BUK
Professor	Oct. 1, 1995 to date	BUK
Reader (Assoc. Prof.)	Oct. 1, 1992 - Sept. 30, 1995	BUK
Senior Lecturer	Oct. 1, 1987 - Sept. 30, 1992	BUK
Also, Visiting Senior Lecturer, West Virginia University, USA, 1986/87		
Lecturer I	Oct. 1, 1984 - Sept. 30, 1987	BUK
Lecturer II	Oct. 1, 1982 - Sept. 30, 1984	BUK
Assistant Lecturer	Oct. 1, 1979 - Sept. 30, 1982	BUK
Graduate Assistant	1978 - Sept. 30, 1979	BUK
Education Officer, Bauchi State	1977/1978	Bauchi
NYSC Primary Assingment	1976/1977	

He is currently the Deputy Vice-Chancellor (Administration). He has served and is serving on many University and government committees.

Basic Concerns: Revitalizing Nigeria's Primary Education in the New Millennium

ABSTRACT

Primary Education in Nigeria is in need of some basic radical changes. These changes will inevitably come, but only through re-engineering. Re-engineering is about providing better quality education in a changing environment. Re-engineering is more than tinkering with structures. It involves taking a bold step towards meeting the challenges ahead. The challenges, as summarized in this paper, include funding, participation, coordination, legislation, and more importantly enrolment. The paper discusses these in some detail taking into account historical antecedents. Suggestions and recommendations have been proffered as areas to be reckoned with in any meaningful attempt to revitalize primary education in the new millennium.

1. INTRODUCTION

As Nigeria has just inaugurated yet another democratic leadership, many Nigerians seem to have received this development with hopes and nostalgia. The hopes border mostly on this civilian administration being the nucleus for democratic governance, rule of law, respect for people's and human rights, and a true end to military intrusion in the political leadership of the nation. The nostalgia is precipitated by some nagging questions about the future of education in the present dispensation, especially as we enter the twenty-first century. Scholars of education are most pre-occupied with what the Fourth Republic and generally democracy may hold for the educational sector in the prime time of the new millennium. Will democratic leadership pave way for a meaningful educational expansion? What role can education generally play in ensuring political stability and genuine democracy? And numerous other similar questions are begging for answers.

A study was conducted on the conditions that give rise to democracy and political stability (Harris, 1979). Part of the conclusion of the study was that countries with high per capita incomes would naturally have a good chance for establishing a viable political institution. This may hold true for many nations. What may appear aberrant is the erroneous idea, which attributes political stability to the economic factor alone; meaning poor countries will always find difficulty in maintaining political stability. The idea is erroneous because there are other possible indicators of ascertaining political stability. Education as a measure of social, economic and political reconstruction is believed to be foremost. At least the National Policy on Education hereafter NPE (1981) attests to this fact where it states that "education is the most important way of achieving national objectives". This means that neglecting the educational sector in terms of policies, funding, legislation, participation and coordination could breed economic problems and give rise to political and social instability. This, in other words, means that social, economic and political problems are consequences of inappropriate education, improper planning, meagre funding, poor administration and inadequate prioritization of educational needs as well as lack of sustainable participation and coordination at various levels.

It is against this backdrop that this paper attempts to first, review the historical past and the present educational practice in Nigeria. This will serve as a basis for the discussion of issues of enrolment, funding, legislation and general management of

primary schools as some of the major challenges to beface educational delivery in this new century. The paper will then proffer some suggestions and recommendations for revitalizing primary education in order to keep up with those challenges, especially in a democratic kind of government.

1.1 The Historical Past

It was the Missionaries that brought the western-type of education, often referred to as "modern education", to Nigeria. The historicity of this fact is unquestionable. It is equally an acknowledged fact that the Missionary contact with Nigeria, which dated as far back as 1842 marked the beginning of western education in Nigeria. The first school was said to have been established at Badagry in Lagos (Fafunwa, 1974). It was in 1877 that the imperial government made a provision for education. The year 1886 marked the beginning of a purely government involvement in education when Nigeria Education Ordinance was enacted. It was not until over 70 years later that a more determined effort was made to popularize this system of education in the northern part of Nigeria. That was when the government attempted in 1909 to establish schools in some places including Nassarawa in Kano, (Onwuha & Enemu, 1994).

Prior to 1966 there was no centralised or national planning for education. Educational planning was based on the three major regional divisions. Each region planned and executed its own educational programmes with little or no consultation with one another or the Federal Government. As a result, as Omeniyi (1998) puts it, regional differences seemed prominent in the structure and management of the educational system, the provision of educational facilities, students' enrolment and so on. Education was grossly a private affair with little or no government involvement. It was soon after the Nigerian civil war that many states and indeed the Federal Government took control and ownership of education at all levels, perhaps borrowing from East Central State which was said to have initiated the move. This change was undoubtedly considered as a milestone in the historical development of education in Nigeria because it gave the impetus to the promulgation of a national policy on education in 1977.

For well over 400 years before the colonial period, Northern Nigeria was dominated by a primarily Muslim oriented feudalism, whereas the Southern part of Nigeria was comprised mainly of clan societies and linkage kingdoms, (Lubbeck, 1987). So even before the arrival of the Missionaries together with their education system, what today constitutes some parts of Northern Nigeria had an education system that was Islamic in scope, content and practice and which was an all-encompassing one. The Islamic system of scholarship was so diverse that not only Arabic and Islamic Studies were taught. Given prominence in the overall curricula offerings were also areas and disciplines such as Arts and Architecture; Astronomy and other natural sciences; History, agriculture and Irrigation systems; Mathematics and General Medicine. It was this system of Islamic education that gave prestige to Islam and also contributed to world civilization and culture. Through the system of intellectual and material culture, Islam opened new horizons which gave the Muslims superiority over the pagans and others (Trimingham, 1959).

Desire for knowledge was an important factor in Islam, but today unfortunately, this desire is mainly directed into other channels. We often hear of educational imbalance between Northern and Southern parts of Nigeria. It actually exists as reflected in a

number of indices and parameters. But the bottom line is this, people that lived in the Muslim dominated North had an exposure to all academic disciplines and areas of knowledge, hundreds of years before their Southern counterparts. But a number of things happened along the line. First, the introduction of the "Missionary" education which transformed the educational system from Arabic to English-based curriculum; and from semi-formal to fully formalised system which left the Muslim dominated areas of the North largely at a disadvantage. Secondly, for one to understand this historical antecedent one has to, not only read the written documentation of Northern Nigerian literary and academic traditions, but also transport oneself into the mind-sets of the principal actors. The principal actors, mainly the Christian Missionaries, had one basic objective – that was to use the school as a means for converting animists and Muslims to Christianity (Fafunwa, 1974). Consequently, "Muslim education in Nigeria started witnessing some retardation not because of what many today consider as "Muslims unprogressive posture"; but chiefly because the earliest Christian "Missionary schools in Nigeria were adjuncts of the Church".

1.2 Education Today

The situation in the educational sector may be appropriated as the direct consequences of what Aminu (1985) described as a "crisis model". Education in Nigeria is bedevilled by this crisis-model made up of inappropriate education, irrelevant curriculum, excessive demands from individual and interest groups, politically motivated expansion, and more extensive demands due to population explosion, and so on. The NPE (1981) has not made any satisfactory plans for identifying, mobilising and deploying total national manpower. The schools, at all levels, are starved of funds such that only those pupils that the economy would be able to support go to schools. Enrolment and transition rates from one level of education to another are alarmingly falling. More importantly, irrelevant military decrees were more of a hiccup than any meaningful attempt to revamp the system.

From the social and individual point of view, education in Nigeria is usually looked upon from the angle of personal benefits. It is, therefore, recognised as a "meal ticket" for securing jobs and other material gains. Since education is in high demand for these and numerous other reasons, it becomes the subject of competition among power seekers, hence the politicization and to some extent abuse of the opportunities it exudes. The government itself has been seen on several occasions as trying to directly or indirectly increase and over-stretch the tasks of education without a corresponding increase in the attention given to it. Nigeria, for example, has a history of populist political programmes and slogans that have educational undertones and implications, (Filson, 1991). In the late 70s it was Operation Feed the Nation. In the early 80s it was Ethical and Green Revolution. In the mid 80s it was War Against Indiscipline. Subsequent "First Ladies" in the successive military regimes since 1985 had also introduced similar political programmes such as Better Life Programme for Rural Women; Family Support Programme; and Family Economic Advancement Programme. In spite of the programmes super-structural and financial foundations in well thought-out slogans and propaganda machinery, they were all incapable of producing the designed practical results. The main reasons being that first, there have not been any satisfactory plans for identifying and using educational programmes at the formal and informal levels

- as channels through which the intended target group can be sensitized to avail themselves of the opportunities provided by such programmes. Secondly, even though those programmes had educational implications, there has not been any deliberate attempt to expand the financial and manpower bases of the educational sector at the formal or informal levels.

The NPE (1981) is the most valuable educational document today. The promises, pledges and ambitious provisions contained in the policy document leaves much to be desired. The document with its far-reaching recommendations as set out in its twelve sections was intended to set the machinery in motion for the radical transformation of all aspects of Nigeria's life. A laudable intention indeed. But has that objective been achieved?

In terms of expansion, education has witnessed a tremendous lift. The increase, for example, in the number of universities from 5 in 1970 to 37 today is worthy of notice. The Universal Primary Education (UPE) introduced in 1976 was also another landmark, though with its far-reaching implications on the present conditions of education. Although the UPE dream later became utopian due to improper projection and weak planning, it still counts as part of the various expansion efforts.

Every few years in human history there occurs a sharp transformation. This is especially true in the present day Nigeria. Within a few short decades, society rearranges itself its world view, its basic values, its social and political structures and so on. (Drucker, 1993). Such transformation has a far-reaching implication on education. There must be a corresponding transformation in our educational system, especially at primary school level, in terms of funding and the laws governing its general conduct.

2.0 PRIMARY EDUCATION: SPECIFIC ANTECEDENTS

Primary education in Nigeria has over the years witnessed several changes especially in its provision and management. As mentioned earlier, primary education started with Christian Missionaries. As from 1955, regional governments started providing primary education alongside missionaries. This partnership was said to have continued until 1973 when the Federal Government decided that all primary schools should be handed over to local or state governments. (NPEC, 1999a).

2.1 Universal Primary Education (UPE)

Consequent upon its intention to move primary education forward by using either politically motivated slogans and policies or out of genuine concern for the deteriorating standards of education, or both, the Federal Government decided to make primary education free and universally available in 1976. The ultimate intention was to make it compulsory as soon as was practicable. But from 1981, the rather inadequate infrastructure became dilapidated. The quality of education especially at that level started dropping, as the most important personnel – teachers – were not paid salaries for months. The crises in primary education brought about mainly by the introduction of UPE were so enormous that even teachers and parents were no longer committed as they all seemed to have lost confidence in the school system. Enrolment also dropped significantly.

2.2 The National Policy on Education (NPE)

A policy on education, which was supposedly national, was promulgated in 1977. It was designed to, among other things, remove any existing contradictions, ambiguities and lack of uniformity in educational practices in the different parts of the federation, basically for the purpose of ensuring an even and orderly development of the country (NPE, 1981). The document made it explicitly clear that education was no more a private enterprise but a huge government venture and that the government would adopt education as an instrument par excellence for effecting national development. It is on the basis of this and perhaps several other considerations that the government clarified the philosophy and objectives that underlie its "current massive investment" in education and spelt out the policies that would guide governments' educational efforts. The NPE (1981) for example, clarified that Nigeria's philosophy of education was based on the integration of the individual into a sound and effective citizen and equal educational opportunities for all. This philosophy, as emphasized in the policy, was based on the five main national objectives as stated in the second national development plan. In order to harmonize and anchor the philosophy with the national objectives, it was specifically directed towards self-realisation, better human relationships, individual and national efficiency, effective citizenship, national consciousness, national unity, as well as towards social, cultural, economic, political, scientific and technological progress.

As for primary education, the policy enumerates seven objectives that were to form the basis of primary education in all the states of the federation. It was in pursuance of the objectives that primary education was made free and universal by implementing the UPE scheme in 1976. So many pledges have been made in the policy pertaining to primary education, including the provision for adequate educational services such as library services, basic health scheme, counseling services, audiovisual teaching materials and specialist teachers.

2.3 The National Primary Education Commission (NPEC)

The pre-NPEC primary school management dispensation can be divided into two categories: Local Education Authority (LEA) and the Local Education Department (LED) dispensations. The difference in the two management dispensations was more in the level of financial and administrative autonomy (Azare, 1996). While in the Northern parts of the country, the era of the two dispensations could be clearly demarcated, in most of the Southern parts, the mid-way course of Schools Management Boards either at Regional or State level were initiated to monitor and guide either the LEA's or the LED's. While the LEA dispensation which had its historical origins in the Oldman's Commission Report for the proposed Universal Primary Education (UPE) of the 60s in Northern Nigeria had a large measure of financial and administrative autonomy, the LED approach which was introduced by 1978 had comparably little or no such autonomy to augment whatever management initiatives or innovations the operators of the system could muster. Following such antecedents, a fresh outfit with the vision of rehabilitating primary education from over a decade of bastardization was mooted and put in place in 1986. The outfit was tagged the National Primary Education Commission (NPEC), (Azare, 1995, 1996).

It was in 1988 that the government decided to salvage the situation by establishing NPEC. It was established by Decree number 31 of 1988. Part of the

responsibilities of NPEC was to manage primary education in its totality. The Federal government took the responsibility of providing 65% of teachers' salaries while the local government councils provided the remaining 35% as well as the running costs of schools. With the eventful dissolution of NPEC in 1991 the gains made by the commission were lost. The government had to, however, intervene again. NPEC was re-established by Decree number 96 of 1993.

2.4 Enrolment: The Current Trends

So many events seem to be taking place now that have a direct implication on the provision and management of primary education in Nigeria. The rather threatening mysteries surrounding the existence of NPEC today is yet another political episode viewed with great concern. This singular action by the government leaves the fears of many concerned with primary education largely unalloyed. The recent reintroduction of Universal Primary Education under another guise, i.e. Universal Basic Education (UBE) is another recent, but important trend in the events happening in education at primary level. Even though, the details of UBE are yet to be made public, the hope is that Nigeria will be able to learn from history.

The gross primary school enrolment rate started falling by 1994. In 1992, it was 90.3% for boys and 71.9% for girls; in 1993, 93.6% for boys and 83.2% for girls. But since then, the rate started falling as in 1994 it was 89.4% for boys and 83.2% for girls; and in 1995, 85.5% for boys and 74.9% for girls. (NPC & UNCF, 1998). The year 1995 seemed to have recorded a great fall in the roll. According to this same document there was a total of 41,531 primary schools with a total enrolment of 15.7 million as of 1995. NPEC (1999a) statistics indicate that there were about 40,204 public primary schools with a total enrolment of 14,699,945 pupils as of 1996. There were also 8,220 private primary schools with a total enrolment of 1,965,517 pupils as at 1996. This indicates that in 1996 there was a total of 48,424 primary schools with a total enrolment of 16,645,462. It appears, therefore, encouraging to notice an increase in 1996 in the number of primary schools by 6.37% and in the enrolment by 16.60% - but it was never sustained. Even NPEC (1999b) confessed low enrolment. The 1997 enrolment figure was put at about 15.5 million. Going by the NPC & UNCF (1998) document the population of 6-11 year people (i.e. primary school age population) was about 19.3 million. NPEC (1999b) quoted the total number of primary school age children (6-12) at 19.5 million whichever figure one considers, it goes along to ascertain the fact that about 4 million primary school-age children are not in school. Remember, the enrolment figure is falling; the population is continuously growing at 2.83% annual rate; therefore the percentage of out-of-school primary school-age children is certainly alarmingly multiplying.

In terms of gender disparity in primary education enrolment the story is not any different. It has, however, been observed that gender disparity has been on the increase since 1995, though only marginally. The gross rate of enrolment is an indication of the system's total intake. In 1995 for example, for every 100 children aged 6 - 11, 80.6 were enrolled in primary school. Nearly 75 out of every 100 girls and 85.5 out of every 100 boys were enrolled in primary school. (Olalusi, 1997).

3.0 FUNDING

Funding may be one of the most pressing challenges in this Fourth Republic and is likely to be an up-hill task in this new century, as far as education is concerned. Most problems in education have been attributed to poor funding (Gordon, 1981). In many states of the Federation, the disturbing question is, why do the standards and conditions of education seem to be going down in spite of the year-by-year increase in the budgetary allocation to the sector? The expectation is that the standard and condition of our schools and generally the education sector should be improving at least at the same rate with the annual increase in the budgetary allocation. Or is it that the increase is so insignificant to cause a corresponding improvement in the educational standards and conditions? This mystery has not only cast doubts in the minds of parents and others concerned with education about the abilities of educational administrators today, but it equally removes any doubt about the idea that funding is not the only problem in the sector, (Kerry, 1999). Of course, funding may not be the only, but it remains the uppermost consideration in determining, controlling and maintaining quality in education. Two things are very clear. First, that there are apparent problems in our educational system that are taking toll on the quality and quantity of education. Two, that the funding profile of the government is low. Nigeria spends less than 10% of its GNP on education as against 15% recommended by the United Nations Educational, Scientific and Cultural Organization (UNICEF/FGN, 1993). In a situation where Nigeria could not make good its pledge of continuously rating education high (NPE, 1981, P.8) it is easy to see the string that attaches or links the deterioration in the educational sector with inadequate funding even without the necessary magnifying glasses of empiricism or academic theorization.

When people talk of funding in education, it is always in reference to the total amount usually accruing from Federal and/or State statutory allocation and other sources such as the "education tax" to the education sector. That means funding is essentially an issue of money. Money in the same vein is an issue of revenue. Revenue, being one of the most important indices of the total wealth of a nation, it is equally used as an index of determining whether the government is capable of shouldering certain financial responsibilities or not. With its 48.5% share from the total national revenue, the Federal Government stands a good chance of shouldering the financial responsibilities of the educational sector.

The main objectives to be achieved using government revenue as a tool include, among other things, paying for the integrity of the nation, maintaining and improving the structures of the society and financing development from source. To be able to achieve these objectives, the true national priorities must first be determined. True national priority to any serious-minded development initiative should, first and foremost, be seen to be located in education because education is the most important instrument of change. Any fundamental change in the intellectual, economic and social outlook of Nigeria has to be preceded by an educational revolution. In the 70s, priority was seen to be accorded education as indicated in the Federal budgetary allocations. In the early 80s, emphasis seemed to have shifted to agriculture. In the 90s, the Federal (Military) Government seemed to be considering security and defence as the most important true national priorities. In the year 1999 alone, which is reflective of several other previous years, over N22 billion was allocated to defence, and surprisingly education got a little over N19 billion. It is strongly believed that optimum realization of fiscal objectives in say,

agriculture or defence or even health services delivery, is dependent upon the type of educational and enlightenment programmes that are mounted, (Cresswell and Murphy, 1976). This implies that investment in education could be seen as an indirect way of investing in most other development sectors. Any developing nation, therefore that neglects education for other presumably "more important national priority" is not only wasting hard-earned precious resources, but is also toying with extinction. Education remains the lifeline of any society – especially the developing ones.

In a study aimed at identifying and analysing the strengths and weaknesses of primary education in relation to the cost and financing of primary education sub-sector between 1990 – 1996, NPEC (1999b) revealed that; 80% of primary schools were located in rural areas; the level of infrastructural dilapidation was very high; over 80% of the schools had no library facilities; instructional materials were grossly inadequate; less than 40% of pupils had basic textbooks and writing materials; teacher-pupil ration was 1:76 (as against the NPE (1981) approved 1:40); per pupil cost of education was escalating; and that funding was generally staggeringly inadequate. The Federal Government contributes an equivalence of N50.00 only from the national fund but per pupil cost per annum rose from an average of N891.00 in 1995 to about N1,030.40 in 1996.

4.0 LEGISLATION

Education has always been organized and controlled through laws. The maintenance of order and standards is usually achieved through the establishment of some standard patterns. These patterns are usually enforced and maintained through laws. The laws usually specify and define power, authority and their delegation. Sources of such laws all depend on the type of leadership – whether civilian democracy or military dictatorship. Education laws in military regimes, just like any other laws, usually come in decree forms. While in civilian democracy, laws are usually patterned out in form of acts. During the colonial period constitutional provisions were made for education. Such provisions were in form of Ordinances which were passed to facilitate the control and management of education. An example of such Ordinances is the 1948 Ordinance which consolidated several earlier sub-regional Ordinances into an all-Nigerian Ordinance. Towards the close end of the colonial rule, the 1951 Constitution made education a regional affair.

Some other education laws came by decrees. Examples of such include Decree No. 3 of 1991 (the Local Government Education Authority, etc. decree) which was repealed and replaced with Decree No. 96 of 1993 (which re-established the National Primary Education Commission – NPEC). A good number of educational parastatals were established by military decrees. Decree No. 7 of 1993 (Education Tax Decree) is another, but celebrated example of such education laws in the military era. The decree came by as a result of arduous search for alternative sources of funding for education. Nigeria for the first time has established an Education Tax Fund and legalised it with a decree. The history of the emergence and promulgation of this decree is never complete without acknowledging the struggle and patriotic efforts of the Academic Staff Union of Universities (ASUU). The tax chargeable on the assessable profit of companies registered in Nigeria is at the rate of 2%. It is generally for the rehabilitation, restoration and consolidation of education in Nigeria.

It is one thing to enact the laws and quite another to implement them to the letter. We shall take this Decree No. 7 of 1993 (Education Tax Decree) as an example. There is a sharing formula for the disbursement of the funds. The Education Tax Fund has it as a primary responsibility to pay more attention to the primary purpose of the money. Primarily, benefiting institutions are expected to use the funds for work centers and prototype development; staff development and conference attendance; library system at the different levels of education; research equipment, procurement and maintenance; higher education Book Development Fund; and redressing any imbalance in enrolment and execution of a nine-year compulsory education programme. It is in this vein that the Board of Trustees of the Education Tax Fund is continuously being called upon to set a machinery in motion which will, among other things, see to it that the benefiting institutions are utilizing and expending the funds judiciously and for the purposes they are meant for. After each and every disbursement, due processes of accountability should be observed before any other attempt is made to share any more amount. If institutions are allowed to do whatever they think fit with their allocations of the tax share, it is capable of opening room for abuse and misappropriation. An issue worth noting is that all the monies accruing to the Education Tax Fund are usually disbursed through Commissions and/or Boards. The allegations being labelled against all such Commissions are too strong to be swept under the carpet. Without promptly checking the excesses of such Commissions, institutions cannot be sure of getting a fair deal.

All these problems have to do with inadequate laws and the way and manner the military was churning out decrees without due regard to and consultation with the professionals and other stakeholders.

Provisions for education as contained in the 1999 Constitution clearly delineated on the educational objectives as follows:- that government shall direct its policy towards ensuring that there are equal and adequate educational opportunities at all levels; that government shall promote science and technology; that government shall strive to eradicate illiteracy; and to this end government shall as, and when practicable, provide: - free, compulsory and universal primary education; free secondary education; free university education; and free adult literacy programme.

The main challenge likely to beface our law-makers, i.e. the National Assembly, as far as education-related legislation is concerned, is the observance of the due process. Before passing any bill into law, it is imperative to accurately estimate the short and long term social and financial implications. This will enable the government to adequately rate its capacity to finance the programme. In other words the short and long-term benefits of any bill needs to be properly ascertained, vis-à-vis, cost implications.

5.0 TAKING THE TIDE AT THE FLOOD: REVITALIZING PRIMARY EDUCATION IN THE NEW MILLENNIUM

In the preceding paragraphs, the Nigeria's education system, especially at the primary school level has been x-rayed. All the problems raised have to do with inadequate and/or outdated laws; inadequate and/or archaic and over-ambitious policies; inadequate and/or vague constitutional provision that negates autonomy; and generally lack of political will to make bold our desire for the total revitalization of primary education. It is believed, as mentioned earlier, that after certain period of time in human

history there usually occurs a sharp transformation. As we have just celebrated the beginning of a new millennium, Nigeria must consider this period as the time for rearranging ourselves politically with considerable flexibility in our educational planning. We must rethink our primary education delivery system and we must devise a compliance mechanism that can address the primary education bug in the just emerging millennium.

5.1 National Policy on Education: Call of a Review

The NPE (1981) as an enunciation of intentions of the Federal Government, can only be described as just that intentions. The sectional policies and programmes as contained in the document, generally lack coherence which give room for unnecessary controversies. Fajana (1982), for example, observed that the NPE was laden with empty concepts such as "dignity", "freedom", "democracy", "egalitarian", "responsibility", etc., all without clear definition. These terms are central to the overall philosophy of education without which it becomes largely hollow and meaningless.

Moreover, in the introductory part of the NPE (1981) it was mentioned that "education is no more a private enterprise, but a huge government venture...". This really contradicts the practice today where education is largely a private enterprise and not a government venture anymore. Teaching and learning have really suffered in the hands of the military perhaps due to the fact that the more the education, the more the resistance to military dictatorship, and therefore the more the agitation for a civil rule. The politicians did not seem to be any better. The thinking was that, unlike building of roads etc., investment in education is not quantifiable in any concrete objective parameter, and is therefore not likely to earn the politician any political credit. So the political executive office holders, most often than not, prefer to go for projects that are physical, quantifiable and credit earning. Of course politicians do introduce educational policies and innovations, but the bug is most of such policies are politically motivated and usually mooted with little or no consultation with principal stakeholders and professionals.

The NPE was conceptualized to, among other things, realize government's wish of removing any existing contradictions, ambiguities and lack of uniformity in educational practices in different parts of the Federation. The policy did not, in any of its twelve sections, cite examples of the so-called contradictions, ambiguities and lack of uniformity. The policy is therefore ambiguous in this respect with contradictory intents and purposes. It represents a clear example of lack of uniformity between policy provisions and actual practice.

The present state of the nation, not only in terms of the chaotic ill-motivated ethnic agitations, but also in terms of the regional, educational and economic imbalances, is a potential source of anxiety. For any policy on education to be of any meaning to the people, it must take into cognisance, the diversities among the population. The last revision of NPE (1977) was in 1981. One of the ways out is to call for a **complete revision** of the policy. The revision of the policy must not be seen as prerogative of the Federal Ministry of Education or any group of the so-called professionals. A review committee should be set up drawing membership from all states of the Federation, the professionals and workers associations. To avoid sidelining any segment of the population in terms of imputing into the policy revision, each state of the Federation

should additionally be made to submit memoranda, which will describe its peculiarities, in terms of views, options, concerns, areas of emphasis and the like.

5.2 Funding: What Alternatives?

Many of the enumerated problems of primary education in Nigeria stem from the inadequacy of funding. The bulk of funding for primary education comes from the allocations of Local Government Councils. Federal and State Governments, NGOs, and host communities also do contribute. In spite of these diverse sources of funding, sufficient resources are still not being made available to build and maintain the necessary infrastructures, provide essential educational materials, or even to pay teachers. Although education has now in the year 2000 continued to attract huge share of the annual national budget, the percentage allocation had declined progressively with the lowest percentage figures recorded in the 1990s. This is, perhaps as a result of government's commitment to other social sectors as well as the dwindling revenue base. Apparently, government alone is unable to successfully bear the financial burden for all levels of education. The major problem, therefore, lies in funding and of course management of available resources.

Since government alone is incapable of adequately bearing the financial burden of primary education; since parents are primarily responsible for educating their wards; and in view of the fact that there are existing national and international philanthropic organizations, ready and willing to assist in the primary education project, community participation must be seen as an alternative. Community participation can be enhanced by, among other things, building capacities among Non-Governmental Organizations (NGOs), Community Based Organisations (CBOs) and Parent-Teacher Associations (PTAs). Machinery must be set in motion to plot such organisations where they do not exist. Such organisations must be involved in the entire management structures of primary education in their localities. The confidence of the international donor agencies such as the World Bank, must be restored and upheld by among other things adhering to all principles of accountability. The process of funds utilization should be made transparent. This is only possible when the management structure is modified in such a way that in the appointment to positions "god fatherism" and "political connections" must give way to professionalism, expertise and proven relevant experiences.

The issue, as far as funding education is concerned, is by far beyond how and where to get money. Alternative sources will always be available. The bug here is to do with how the money made available to education is being spent. Additional stringent measures must be taken to monitor expenditure on education, without which any allocations to the sector will only go down the drain through corrupt practices. Any presumed funding alternative would be a mere effort in futility, unless measures of accountability are enforced. The excesses of educational administrators, whose responsibility among others is to manage whatever resources are made available, must be curtailed and controlled (Baikie, 1999).

5.3 Legislation: What Laws?

There are four main levels of policy-making hierarchy as delineated in Okeke, (1997). They are the political, the executive, the administrative and the technical levels. These levels will be presumably more active in a democratic dispensation.

The political policy-making level: This is the level at which ideas are transformed into educational programmes. Such ideas can come from say, party general programmes, or even personal initiations of the political chief executive. Such programmes, whether designed out from the party programmes or mooted out of personal volition of some political pressure groups, are usually a translated effort towards fulfilling electioneering campaign promises. It may sometimes be in response to the collective social outcry or even in pursuance of pseudo-sectional-cum-ethnic and often selfish personal whims.

The executive policy-making level: This level consists of the cabinet policy. This is the level at which any such programmes are reduced into concrete and more practical objectives, after some series of deliberations.

The administrative policy-level: This is not a policy-making level per se but the beginning of implementation. The administrators at this level carry the executive decisions into operation. In education, this comprises of, for example, the ministry officials and other inspectorate divisions.

The Technical policy level: This is the level where day-to-day administrative policy is being worked out and implemented. This is the level at which the translated policies and programmes are actually being conveyed to the target. In education, this level consists mainly of teachers and other classroom operators.

Not all educational programmes may have to follow this pattern of policy-making hierarchy. Even those programmes that undergo this pattern may be constrained by the inadequacies of the entire procedure. The inadequacies of this policy-making hierarchy consist mainly of the absence of any provision to backup the conceptualization and implementation of the programme. Even though, at the executive level, such (education) policies and programmes are usually scrutinized to ascertain their worth vis-à-vis the financial implications, there is the need for legally ascertaining the procedure with adequate backing from the existing or new laws. To do this effectively, the legislature, as an arm of government must be seen to be up-and-coming in their responsibility as a law-making body.

The Legislature as a body of people with constitutional power to make and change laws, must realise that no law is sacrosanct if its objectives negate the collective social interests. It must be realized that no law will be adequate or have any relevance if the views of all stakeholders and other professionals are not considered. Educational Ordinances during the colonial government and military decrees were usually patterned out to suit the interests of the colonial masters and military dictators. Such laws often fail to evince any significant relevance to the public. Legislation in a democratic setting must be patterned out differently by consulting with all the categories of stakeholders. Democracy must be seen to be complementing education, as education is always the vehicle upon which democracy and good governance can flourish and succeed. It is quite in order at this juncture to call for the total review of all the obsolete laws and draconian decrees in education with a view to stamping out undesirable ones.

5.4 "Private" Primary Education: What Relevance?

It is perhaps the crises of confidence in the public schools that gave rise to the emergence, development and proliferation of private schools – schools that operate outside the fiscal control of the central government. While these private schools use

government approved guidelines as minimum standards, they, more often than not, go beyond these minimum standards and consequently achieve spectacular results impossible in the public schools.

Private schools may be a recent phenomenon in this part of the country - but not an entirely new educational strategy. Quintillian, a renowned ancient philosopher, believed that the reason for establishing private school arose as a dialectical opposition to Aristotellian perception of the values of private schools which Aristotle himself steeped in his political philosophy. Quintillian was after a simple, direct educational establishment away from government control, giving greater freedom to innovate and progress. Evolutionary societies have always recognized the need for private alternative to what is provided by the government. In Nigeria, the starting point for the issue is the comments the general public seems to be making about the quality of education provided by government. It is a known fact that there is a considerable lack of confidence in public schooling. The comments center around the issue of "falling standards of education". Accusing fingers point to the seeming indifference of the successive Federal regimes about the provision of quality education to people. The indifference is usually explained in terms of the attitude of government officials towards policies and finances of education - they are indifferent for the simple reason that their wards do not attend public schools, (Azare, 1998). This singularly accounts for the alleged lack of official attention to public schools.

This reasoning may be insufficient to explain the phenomenal rise in the number of private schools - but one cannot deny the deterioration of public education. The increasing number of pupils demanding education, even within retracting patterns, has always been too much for the government to bear alone.

Privatization and/or commercialization of government-owned companies, parastatals and utilities have in the recent past been subjected to public debate. The issue of privatization and commercialization is now real, its legitimacy or otherwise apart. The government has sanctioned the setting up of private schools at all levels, meaning that the last stitch in sewing the phenomenon of privatization and commercialization in education has been put in place. Prices, supposedly exorbitant for the self-respecting, honest Nigerian wage earner, are being charged at all levels, meaning that a full-scale commercialization of education is rightly on course.

The fears are that private schools are further dividing the rather fragile Nigerian society along the poverty line, (Azare, 1998). This is further justified by the behaviour of private schools who see themselves as purely money-making ventures, rather than educational alternatives meant to complement government efforts. Even though private schools are accorded official recognition to exist in order to complement efforts, there are many of such schools that do not deserve the recognition granted them. This is because of the sub-standard education they provide in a highly exploitative manner. Some of the get-rich-quick private schools come up with all sorts of culturally inappropriate, politically incorrect and emotionally exploitative curricula to lure parents. Agreed, the relationship between the private school and the parent (the client) is commercial. By bringing my ward to the private school I am entering a contractual agreement to pay certain fees for my ward to be educated. This is usually abused by private schools. They use it as a basis for exploitation by charging inordinately high fees or fobbing children with emotionally laden sub-standard curricula.

Some of the private schools are turning into breeding grounds for all sorts of anti-social activities. The pupils come to the schools with an apparent arrogant disregard for rules and regulations. Coming from a privileged background, some of the pupils believe that their parents' money should guarantee their successes without them making discernible efforts. It is not uncommon to see pupils going round with cellular (mobile) phones or wearing designer shoes and watches openly flashing their wealth and using the school as a waiting room for a more fanciful parent-backed future.

However, whatever misgiving one might nurse on or about private schooling, the fact is undeniable that their level of achievement, and academic performance and accountability is by far non-comparable to that of public schools. There are a number of propositions as measures of "dealing" with private schools. The propositions range from subtle ones such as banning all government officials from patronizing private schools to more extreme ones such as clamping down on all private schools. Any of such measures is retrogressive and counter-productive. All such measures will only amount to denying one the right to use one's money in order to get what one needs, i.e. (sound education). Such propositions are but declarations supported by weak government and its supposed agents who refuse to inject adequate funds in the educational sector or fail to enforce measures of accountability in the management of funds allocated to public education.

The proliferation of private schools is the resultant effect of government seeming neglect of its primary responsibility of providing funds and supporting public education. With adequate funding, enforcement of proper measures of accountability and strong political will on the part of the government, private schools will die a natural death.

5.5 Curriculum Review: The Options

Section 3 of the NPE (1981) on Primary Education contains the general objectives, which form the basis of primary education in all the states of the Federation.

The objectives were enumerated as follows:

- i) The inculcation of permanent literacy and numeracy, and the ability to communicate effectively.
- ii) The laying of sound basis for scientific and reflective thinking.
- iii) Citizenship education as a basis for effective participation in and contribution to the life of the society.
- iv) Character and moral training and the development of sound attitudes.
- v) Developing in the child the ability to adopt to his changing environment.
- vi) Giving the child opportunities for developing manipulative skills that will enable him to function effectively in the society within the limits of his capacity.
- vii) Providing basic tools for further educational advancement, including preparation for trades and crafts of the locality.

In pursuance of these objectives, the NPE (1981) has prescribed two main measures, one of which is a prescription of curricular activities. The prescribed curricular include:-

"... the inculcation of literacy and numeracy, the study of science, the study of the social norms and values of the local community and of the country as a whole through civics and social studies, the giving of health and physical education, moral and religious education, the encouragement of aesthetic,

creative and musical activities, the teaching of local crafts and domestic science and agriculture”.

There are a number of problems here. An outline of the objectives of primary education and its delivery channels as contained in NPE (1981) clearly indicates a separation between general education and technical and vocational education. Technical and vocational education has not been integrated into the curricular activities, neglecting not only its economic importance but also sidelining its cultural, social and political usefulness.

The benefits of integrating vocational and technical education into the primary school curricula activities are many, they include: extending their reach to a large number of primary school pupils presently excluded; it will assist in creating a synergistic relation between technical and vocational education and productivity; and it will also facilitate reaching the informal sector of the economy. To be able to reap maximum benefit from the introduction of technical and vocational education at primary school level, clear policies regarding both delivery and qualifications must be formulated in co-operation with the private sector. The factors of good governance, unrestricted access to education with multiple exit and re-entry points and autonomous planning are critical for success. These three critical factors for success are fundamental but cannot go anywhere with our present structure, which centralizes the planning, management and administration of primary education. Good governance seems to elude the management of primary education. That is not the root of the problem. The roots, as far as curriculum planning is concerned, seem to lie in the total lack of autonomy and freedom for the various culturally diverse nationalities within the Nigerian State to plan, organize and manage their primary education in accordance with their peculiar needs, aspirations and of course without prejudice to the collective and corporate existence of Nigeria as a country.

5.6 Universal Basic Education (UBE): How Viable?

In its broadest sense, education is both a goal and a development process whose foundation can only be laid at the primary school level. This is partly, the reason many consider as justification for the reintroduction of universal primary education. This time around the programme was introduced with another but similar nomenclature – the Universal Basic Education. This may be described as a step in the right direction especially in view of the constitutional provision, which emphasizes on the provision of equal and adequate educational opportunities. The Fundamental Objectives and Directive Principles of State Policy in the 1999 Constitution state clearly that the “Government shall direct its policy towards ensuring that there are equal and adequate educational opportunities at all levels”.

UBE programme may be quite laudable but only if its conceptualization and implementation modalities are well articulated. The government has already erred at the conceptualization stage by convening what the Federal Ministry of Education called a “mini summit” to draw the blueprint. Education is today a burning political issue in Nigeria for many reasons, and cannot therefore, be considered as an exclusive preserve of some few non-professional politically motivated Kitchen Cabinet Crew. Education, it must be understood touches the life of every living and those yet unborn, as such people have the exclusive right to be contacted during the conceptualization processes with a view to sampling opinions, views etc for likely incorporation into the blueprint.

Educational reforms just like any other reforms are normal processes in development. However, in a democratic society like Nigeria, such reforms must not only involve the people for whom the reforms were meant, but they must also be carried out within the framework of the constitution.

The Sokoto September 30, grand launch of the UBE obviously came without the government first putting in place an articulate blueprint. This, no doubt, points to the haphazard nature with which the programme was conceived in order to perhaps score a political point. This, however, can be corrected by requesting the various states of the Federation to submit which area of the curricula offering they want emphasized and funded for them in the UBE. To think about UBE programme and its contents without consideration of peculiarities of states will only amount to an imposition.

5.7 Girls and Primary Education: Closing the Gender Gap

In many developing countries, including Nigeria, girls are at a disadvantage in their access to education. Population Action International (1993) estimated the gender gap in 1991 at 76 million girls in the countries studied. The findings revealed that gender differences in school enrolment were greatest in South Asia, the Middle East and Africa. Even though the costs of expanding educational opportunities for girls are substantial, it is believed that government can make a difference.

The benefits of educating girls are enormous hence the need for government commitment. By empowering women within their families and communities, education enables women to achieve greater self-fulfillment and to contribute more fully to the social and economic development of their societies. A girl's education, therefore, is our investment in future generations. This means that the more educated a mother is, the more likely her children are to enroll in and stay in school.

In Nigeria, with its high rate of population growth, investment in education has not kept up with the rapidly increasing primary school-age population. Just like many other developing countries faced with declining terms of trade and economic recession, Nigeria had to cut social spending during the 1980s by introducing, among others, austerity measures. This shifted more responsibility to parents for financing schooling. Costs such as school fees, transportation, uniforms, and books and in some extreme cases classroom furniture, made it more difficult for poor families to get their children educated. Where resources of the family are limited, parents in some parts of Nigeria tended to give higher priority to boys, viewing girls' education with limited economic benefits. In many parts of Nigeria where the culture places high value on the chastity of girls, parents are usually reluctant to allow their daughters to go far away from home to schools.

Accordingly, efforts must be made to increase female enrollment. Such efforts must recognize the complex factors limiting educational opportunities for girls. Building more schools may be the idea, but only in terms of structural expansion. In terms of expanding educational opportunities for girls, more efficient use of existing resources for education could make possible the enrollment of more students, particularly girls.

Additional financial incentives such as provision of free or low-priced school supplies and uniforms must be considered in order to encourage parents and motivate especially the girl-child to patronize the schools.

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6.0 CONCLUSION

Wherever one looks about, it is not hard to find signs of neglected, sub-standard, ill-funded primary education – on the streets, in the homes, at the traffic lights and so on. This paper is to give educational policy makers, administrators, teachers and students new directions to view and to think about primary education. If the present trends continue Nigeria shall have the educational pattern which, in the words of Curle (1990) is most appropriate for a society immersed in the illusion that happiness is to be found in externals. These possibilities are profoundly disturbing, especially since the changes demanded by real development need the wholehearted cooperation of education especially at the primary level.

The paper has attempted to peek into the future of primary education as we begin the twenty-first century. To peer into the future with the methods of empirical science means extrapolation. Prediction based on extrapolation according to Galtung (1980) points to some kind of "catastrophe". That does not mean that everybody has to give in to facile pessimism. Much more challenging, important and perhaps difficult is the search for openings, for possibilities and for other avenues of transcending the trends in primary education.

The turn of this new century is the flood at which Nigeria has to take the tide of revitalising primary education. The revision of NPE; soliciting for funding alternatives; reviewing existing education laws and setting in motion the machinery for effective legislation in education; understanding the rather obscure relevance of private schooling; delineating options for total curriculum review; reconceptualizing the viability of UBE programme; closing the gender gap in primary education; and so on and so forth. These are all recommendations believed to be the bedrock upon which any meaningful revitalization of primary education in Nigeria must take cognizance of.

There is something fundamental which seems to elude many educational administrators and policy planners – and that is the actual delivery of the collective interests in primary education, which squarely rests on classroom teachers. Whatever educational planners, administrators and management experts conceived of pertaining primary education, it will ultimately have to rely on teachers for implementation. Any educational planning that does not focus on the classroom as its end-target is not worthwhile. The problem here is that teachers, especially at the primary school level, have been reduced to no more than destitutes. Teachers have to beg for their salaries and other entitlements to which all authorities seemed to have turned deaf ears. When teachers down their tools in protest to this seeming neglect and abuse, the selfish often ignorant members of the larger society and the self-dehumanizing non-compromising government officials scold them and call them names. The absurdity goes on and on to an amazing deterioration such as low motivation, lack of concern and lack of commitment to the teaching job – which are all taking their toll on the actual performance of children and generally on the quality of education at subsequent levels.

Primary education is the pivot upon which all other levels depend. Any amount of infrastructural revitalization without regard to teachers' welfare will definitely amount to efforts in futility.

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