

THE DEVELOPMENT OF GOVERNMENT POLICY ON TECHNICAL
EDUCATION IN NIGERIA, 1960-1980

BY

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Chapter three delves into the moves made by the Nigerian Government to evolve a plan for action in the provision of technical education having now fully realised the shortcomings of the policy it had pursued up till the time of independence in 1960.

The fourth chapter examines the policy pursued by the government, on technical education between 1970 and 1980 in order to meet the manpower needs of Nigeria foreshadowed by Ashby. For the first time, a National Policy on education was produced by the government as a means of giving direction to educational development in the country.

In the next two chapters, an attempt is made to review and evaluate the practice of the policy maintained by the government by considering its implementation measures of the points highlighted in the policy statements enunciated during the period under study.

The concluding chapter summarizes the government's achievements and shortcomings in putting into practice its formulated policies on technical education.

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I encountered innumerable problems among which was access to materials on government policy statements and implementation measures taken since independence; but thanks to my friend, Mrs. O. Arowolo of the Oyo State Ministry of Education, Ibadan, for her assistance in connecting me with people such as Mr. Lajibutu of the same ministry who rendered selfless help in putting at my disposal as much information as he could on the subject.

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DEDICATION

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CERTIFICATION

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- LIST OF ABBREVIATIONS

- Cmd - Command paper
C.O. - Colonial Office
C.S.O. - Chief Secretary's Office
H.M.S.O. - Her Majesty's Stationery Office
I.U.L. - Ibadan University Library
J.H.S.N. - Journal of Historical Society of Nigeria
J.S.S. - Junior Secondary School
N.N.A. - Nigerian National Archive
W.A.J.E. - West African Journal of Education.

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Preface

Numerous studies have been carried out and several books have been written on the development of education in Nigeria. None, however, has so far considered the government policy on technical education in particular although references have been made to the efforts of various bodies over the years to provide technical education in the country. A few articles have also been written in the newspapers examining government policy generally on education prominent among which is Professor A.B. Fafunwa's "The Genesis of National Education Policy" in which the renowned historian reviewed the government policy on education since independence and the implementation measures taken ever since.

Even a major study carried out by E.C. Osuala: The Development of technical and vocational education in Nigeria with implications for meeting manpower needs only traces the development of technical education as regards the provision of vocational schools and trade centres in Nigeria for manpower needs at the middle level. Along similar lines is Messers W.L. Cottier and F. Counce's Report on the Development of Technical and Commercial Education below Professional Level in the Federation of Nigeria 1961-1976 which reviewed the needs for technical

and commercial education below professional level in the country and considered plans for developing these areas in the light of the Ashby Commission's Report.

F.O. Ogunlade's Yaba Higher College and the Formation of an Intellectual Élite gives an in-depth account of the seeds of government's attempt at providing an institution which was to give a form of education with technical bias in an attempt to evolve a policy on technical education for the country.

Fajana, in his Evolution of Educational Policy in Nigeria 1842-1939, the first work ever on government policy on education in Nigeria to the eve of World War II, besides L.J. Lewis's Educational Policy and Practice in British Tropical Areas which was not limited to Nigeria alone, has dealt exhaustively with the development of educational policy pursued generally in Nigeria while merely mentioning government policy on technical education.

This work, however, is intended to trace the evolution of the policy pursued by the government on technical education from the time of independence in 1960 to 1980 and also to assess its achievement in the implementation of the policy at various stages of development. This can best be studied in the context of the historical development of education, as it is

inextricably interwoven with the history of education itself, in Nigeria generally, although the historical aspects will not be allowed to overshadow the discussion of the policy and practice of the government during that period.

While the usual method of documentary research involving the examination of previous studies on the development of various aspects of education generally in Nigeria, official government documents, reports and other literary works were used for the study, other sources of information were derived from personal observations and newspaper articles to obtain up to date policy statements of the government and its implementation measures.

For the necessary background to this study involving a review of the development of policy on technical education from its early beginnings to the time of independence in 1960, the writer depended mainly on primary sources such as reports, journals and official documents while much use was made of secondary sources as books, newspapers and government policy documents and particularly relevant theses such as those of Fajana and Ogunlade which provided useful information on policy

and practice of education in Nigeria before independence.

It is intended to adopt the historical approach to the study of the development of government policy on technical education for the period under review.

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CHAPTER ONE

INTRODUCTION

1.1 The Antecedents:

Pre-Missionary and Missionary Era (Early Beginnings 1472 - 1882)

If "technical education" embraces activities such as are carried out by the individual for acquiring skills to make him a useful member of his society, then the skills imparted by traditional education in Nigeria before the introduction of formal education fell within that category. During the missionary era, however, such activities were referred to as "industrial education" which was expected to lead to "the acquisition of practice and applied skills"¹, while, in modern times, when more skills have become technically oriented, it is intended to lead to "basic scientific knowledge"².

Although no laid out policy guided educational activities in Nigeria before the coming of the missionaries, the principles underlying the acquisition of

1. Nigeria: Federal Ministry of Information, National Policy on Education 1977 Lagos, Printing Division, 1977, p. 19.
2. Ibid. Loc. cit.

those skills seemed to conform to a policy which was not documented but was firmly entrenched in the society. Nigerian traditional education was informal and diffused in nature, but it was abundantly clear that an effective policy existed. Every section of the society co-operated in carrying out the policy which was directed towards producing good and useful members of the community.

The ultimate goal of producing good and useful members was aimed at by every member of the community because, then, there was no special body such as the Local Schools Board or the Ministry of Education mainly concerned with education.

Emphasis was on learning by doing through the apprenticeship system to ensure thoroughness in the acquisition of the necessary skills. The whole community was involved, each person acting as an agent of policy at one time or another. In that system, each person understood clearly what duties he should perform and how he would go about them. Each person was aware of the consequences of failure to perform his duties effectively.

On the advent of the missionaries, however, a formalised and "literary" type of education evolved in an attempt to achieve the primary objective of winning

converts. Thus, education was provided only as it became necessary for the task in hand. As Abernerthy (1969) rightly observed,

Christianity is a religion of the book particularly in its protestant forms, which emphasize the unique role of the Bible in revealing the Word of God.¹

A Methodist report of 1920 represented the view of other denominations as well when it asserted that "the uneducated are always a danger to the whole church"². In prosecuting the task of evangelisation, therefore, it was essential to educate the people. One could not blame the missionaries for the type of education introduced into Nigeria because it was what they knew. They were ignorant of the real needs of the country as regards the right educational principles to be applied to the Nigerian situation. As Henry Townsend, one of the leading missionaries at that time, admitted,

it appears that there is a growing impression that children by our system of teaching are not made useful members of society.... Some of us thought that industrial schools were the best but it was too expensive for us to have the industrial education of the country on our shoulders.³

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1. Abernerthy, B. David. The Political dilemma of popular education, Stanford University Press, 1969 p. 31.
 2. Ibid, loc. cit.
 3. Ajayi, J.F. Ade. The development of secondary grammar school education in Nigeria. Journal of the Historical Society of Nigeria. (Ibadan), 2(4); 517.

This was actually the crux of the matter, that it needed more than the selfless efforts of missionaries who depended largely on meagre financial resources gleaned from the home missions and the contributions of church members, to embark upon a project so enormous as the provision of technical education.

During this period, however, a lot of efforts were made by the missionaries and especially by a few Nigerian individuals such as Reverend Allukurah Sharpe to establish training institutions. There were also merchants who felt so much concern for the provision of technical education because they believed that "an industrial school is one of the best and strongest levers by which Africa shall be raised¹."

Hitherto, trading of some sort had been going on between the Africans generally and the Europeans as far back as the fourteenth century. One would have expected that there would be reciprocity in the relationship which existed then between the Europeans and the Africans because while the Europeans got slaves from Africa they gave nothing in return, not even technology which they had and from which Africans could have

1. Ibid. p. 520.

derived some benefits.

The situation which existed at that time led to a loss of development opportunity for Africans because there was no incentive to produce more than could be made by hand. Hence, there was "technological arrest and stagnation"¹.

The advent of the missionaries marked the beginning of attempts at improving the situation which had existed hitherto. The primary aim of the missionaries was to win converts, although they provided education as it became necessary for the task on hand. There were efforts to put an end to the slave trade by people like Buxton who propounded a theory in his book, The African Slave Trade and its Remedy, (1940) that "christianity and commerce operating together would destroy the slave trade and civilize Africa"².

By Buxton's theory, settlements were to be made along the West Coast and inland to provide security and a market for African cultivators. Model farms were to be established to demonstrate and teach agricultural skills

1. Walter, Rodney. How Europe underdeveloped Africa: technological stagnation and distortion of the African economy in the pre-colonial epoch. Surrey, Love & Malcomson (1972) p. 118.
2. Webster, J.B. The Bible and the plough. Journal of the Historical Society of Nigeria. (Ibadan), 2(4); 418, 1963.

so that educated Africans were to be technical and agricultural agents who were expected to help in facilitating the task of reforming African attitudes to slavery. This plan which symbolized Buxton's Charter for Africa became popularly labelled "the Bible and the Plough"¹.

Henry Venn was to champion the cause of Buxton's theory because he believed that,

a new economic order would produce middle class... who may become founders of a kingdom which shall render incalculable benefits to Africa².

Venn was also of the opinion that any training given to Africans to cultivate and export crops would help to achieve the goal of the missionaries who found it necessary to provide industrial education,

not only to enable Africans to handle the export crop for the European market but also to train the skilled artisans upon which a middle class depended for commercial and political support³.

As a result, Venn's influence extended beyond the confines of the Church Missionary Society to which he belonged into the midst of the educated Africans whose

1. Ibid., loc. cit.
2. Ibid., loc. cit.
3. Ibid., loc. cit.

aspirations his ideas seemed to have reflected. Venn, however, experienced opposition from the British Government who regarded him as being pro-negro because of the identity of his ideas with the African's aspirations and feelings.

This seemed to set the pace for the policy which the missionaries pursued in an attempt to provide a form of education which was relevant to the needs of the people and at the same time aimed at pacifying the Africans, if only temporarily, who agitated for this type of education. Various attempts were made at Abeokuta in 1851¹ and at Agbowa Industrial Mission² 1895 to put the theory of "the Bible and the Plough" into practice. There were disappointments as the schemes were not as successful as anticipated³.

The Agege attempt, however, proved more successful than the earlier ones because it was originally a purely economic enterprise based on the planting of a new crop, cocoa, which seemed to have yielded much revenue. Although the scheme lasted for only three decades, it was more

1. Ibid., loc. cit.

2. Ibid., loc. cit.

3. Webster, J.B. (1963) op. cit. p. 520.

successful in terms of the economic benefits derived from it. The proceeds from Agege were used to finance the spread of a church. They also served as the basis for the modern economy of the old Western Nigeria, now Oyo, Ogun and Ondo States. Above all, the Agege scheme was a lasting testimony of the success of Buxton's theory¹.

However, the missionaries provided the form of education they could afford. There has always been the awareness that the best form of education was that which combined agricultural and technical education for the majority of the people and "literary" education for the few only². This policy of education was not really pursued because "technology, agriculture and other practical subjects, particularly at the sub-professional level, have not been popular"³ among the people themselves. Those who were to be educated looked down on an education that would mean a return to the land as inferior to the grammar-school type of education which was beginning to gain grounds at that time, following the establishment of the Lagos Anglican Grammar School in 1859. The type

1. Ibid. p. 433.

2. Ajayi, J.F. Ade (1963). op cit., p. 517

3. Ibid. p. 520

of education provided by the grammar schools became "indelible symbols of prestige in Nigeria"¹. Ikejiani (1964) aptly summed up the people's attitude in his assessment of the situation that,

to push a pen behind an office desk is the dream of an educated Nigerian. Anything less is held to be derogatory and below his dignity².

Although a definite policy seemed to be evolving in the modest attempts of the missionaries at providing training institutions, they lacked the technical competence to establish schools of technology or of tropical agriculture. In 1852, the Church Missionary Society laid the foundation of primary education at Abeokuta and also intended to open a Training Institution which was to be self-supporting "combining literary with industrial, or what we would now call technical education"³.

In addition to establishing training institutions, the Church Missionary Society sent some students abroad for technical education in courses such as brick-and-

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1. Ikejiani, O. Nigerian Education, Lagos, Longmans of Nigeria, 1964, p. 8.
 2. Ibid. p. 8.
 3. Ajayi, J.F. Ade (1963) op. cit. p. 519.

tile-making, navigation, horticulture and industrial management¹. One such institution set up at Abeokuta was established in 1856². At this institution, cotton was collected and cleaned for export. Brick making, carpentry and printing were also taught there. Another was established at Bonny³ in the 1890s while the Hussey Charity Training Institute was founded in Lagos in 1890⁴ for industrial and general education. In addition, the Roman Catholic Mission established a boys' and girls' Industrial and reformatory school at Topo in 1876, a settlement principally meant for slave children, where instruction in household duties, sewing, cooking, and horticulture were given⁵. All these institutions, however, were too few to effect the rapid development which was much needed in the country.

One thing distinguished the efforts of the Christian Missions since their advent in Nigeria and that was the

1. Onabamiro, O: Education: The Junior Secondary Project. Daily Times (Lagos) 10 November, 1981: 3
2. Ibid., loc. cit
3. Ibid., loc. cit.
4. Adetunji, E.O. Lord Lugard's Educational Policies in Nigeria, 1900-1918. Unpublished Ph.D. Thesis, University of Ibadan, 1973 p. 106.
5. Ibid., loc. cit.

persistence and expanding nature in the establishment of schools which promoted the training of teachers and clergymen for the church. However, these initial attempts were to serve as the basis for subsequent developments in the provision of education since the situation that existed highlighted the inadequacies of the policy maintained by the missions in the provision of education for the people under the pretext of financial constraints.

Education during this period was characterised by lack of co-ordination; the different mission groups made policies which were suitable and convenient to them. For example, there was no generally accepted curriculum and no uniformity in matters affecting the schools as well as qualifications and salaries of teachers.

This situation persisted until the time of Lugard's educational policy in the country and the publication of the Phelps-Stokes Report in 1925. This was to have far-reaching effects on the development of education in Africa generally and in Nigeria in particular as it prompted the Colonial Government to act swiftly in providing order and direction for the administration and control of education in the country in the years that preceded independence.

1.2 Beginnings of Government Participation and continued Missionary Efforts in the evolution of policy on technical education 1882-1929.

During the period 1842 to 1882, the missionaries were solely responsible for providing "literary" education in Nigeria. All that the government did was to give small grants to Christian Missions for educational work. Consequently, the missionaries were in control of educational policy, although they did not have any definite one until 1882 when the first Education Ordinance, which marked the beginning of government intervention, was enacted for all English-speaking West African countries.

However, what was clear in the activities of the missionaries was that although the different missionary bodies the Methodists, the Church Missionary Society, the Baptists and the Roman Catholics - had points of differences, they all agreed that "literary" education was an essential part of their work, which was attested to by the speed with which schools were opened as soon as the missions themselves were established.

Another aspect of the missionary educational policy was that education should aim at converting children to christianity while it was also aimed at imparting secular knowledge to enable them become useful members of the

community. One other common policy of education, prevalent among the different missionary bodies, was character training of the individual. A child's behaviour was carefully observed from the day he came to school. Usually, strict rules were drawn up for the child to keep while violation of such rules was promptly dealt with. Such was the framework within which the missionaries operated.

However, the 1882 Education Ordinance, passed by the Colonial Government, was to change the course of events as the government became increasingly involved in the provision and control of education. It is within the context of the development of education generally in Nigeria that the development of technical education can be discussed since only garbled efforts were made for the provision of this type of education before the Ordinance.

While, by the Ordinance, a Board of Education was established, the financing of education by the government was also partially assured, since the government then built schools of its own, fully maintained by itself while giving assistance to some other schools.

As far as the provision of technical education was concerned during this period, a few training institutions were established by the missionaries. The Colonial Government showed little concern because the situation in Britain itself was not better.

The social and economic thought in contemporary Britain witnessed domination by the "laissez-faire", "free enterprise", doctrine. For a greater part of the nineteenth century, emphasis was placed on the virtues of private enterprise in all facets of life¹.

It is understandable then that education was the monopoly of the Christian Missions. As far as the Colonial Government was concerned, education was not a priority. Freeman, Governor of Lagos Colony from 1862-1863, enumerated some of the top priorities as follows:

roads must be made, swamps filled up ... An hospital must be erected ... and eventually we shall need some barracks for the police. Nothing has yet been undertaken by the government in the way of education (talk less of technical education) owing to the want of necessary funds².

Tyrrell Burgess and John Pratt observed that

"as with all education in England technical education began as a consequence of private initiatives"³.

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1. Burgess Tyrrell and John Pratt. Policy and Practice: The Colleges of Advanced Technology. London. The Penguin Press. 1970. p. 9.
 2. C.O. 147/6. Conference Despatch; Freeman to Rt. Hon. Edward Cardwell 4/7/1864. Bluebook for Lagos, (1863), in Fajana, A. WAJE 14(2), June 1970 p. 101.
 3. Burgess, Tyrrell and John Pratt, (1970) op. cit. oc. cit.

The situation in the colonies was similar to that of Britain. In the colonies, therefore, the initiative was made by individuals who were interested in contributing to the education of the people.

Towards the end of the Nineteenth Century, a few influential businessmen in Lagos who had benefited from the little industrial education the missionaries offered, were anxious to promote similar education for the industrial and technical development of the country if the African was ever going to compete effectively with the whiteman. The richest of them, R.B. Blaize, gave £1,000 (₦2,000) to the Anglican Native Pastorate in 1895¹ to start an industrial school in Lagos. When the school failed to take off after ten years, he withdrew the money, but left £3,000 in his will to the Egba United Government to start the Abeokuta Industrial Institute in 1908².

Besides the businessmen, a few administrators in the British Colonial regime such as Sir William Macdonald, who were eager to see this type of education established, gave financial assistance to the Presbyterians who founded Hope Waddell Institute at Calabar in 1895³ where apprentices

1. Ajayi, J.F. Ade (1963). op. cit. p. 524.

2. Ibid. p. 525

3. Ibid. p. 526

were trained in a number of trades such as printing and carpentry. The government subsidy given to this Institute gave encouragement which made the trade section flourish.

Incidentally, the demand at this time was for clerks in the administration and commercial houses and not for literate carpenters, masons or printers. The country had not been all that technologically oriented and the money was not there to make provision for technical education. The government's main preoccupation, from the onset, was with sustaining the administration and expanding import-export trade. What were needed for these were clerks, sales assistants, account clerks, who were in such a great demand that, as Ajayi pointed out,

parents frequently removed children from school to seek employment before they were properly trained¹.

The British Colonial Government's attitude was that:

the provision of technical education for Nigeria (beyond very limited artisan training for governmental departments) was neither necessary nor feasible².

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1. Ajayi, J.F. Ade (1963). op. cit. p. 527.
 2. Report of the Commission on Higher Education in West Africa (Elliot Commission) Cmd 6655 (London, H.M.S.O., 1945) p. 33.

This attitude prevailed for a long time although with slight modifications well until the time of independence when concerted efforts were made to improve the situation.

In the closing years of the nineteenth century and in the early years of the twentieth, however, Henry Carr and Frederick Lugard were to exert tremendous influence on the policy which the government and the missions pursued in the provision of education in the country, and their contributions were to have far-reaching effects on the evolution of the Nigerian Education Policy generally.

The period 1892 to 1914 witnessed immense contribution of Henry Carr to education policy in Nigeria. He was closely associated with the policy in his capacity first as the sub-inspector of Schools and Chief Clerk of the Secretariat, and thereafter at the time when he was seconded to the political service in 1918. Between 1892 and 1903, he was almost entirely in charge of educational matters, suggesting lines of policy to the Education Board and, at the same time, carrying out policies laid down by it.

Henry Carr made useful suggestions for effecting changes in the curriculum of the schools so that the children were taught what was relevant while emphasizing the need to gear subject-matter and teaching methods to produce useful members of the society.

All these ideas emanated from his philosophy of education by which he advocated a utilitarian philosophy which sought orientation in education to suit different environments. He felt, for example, that it was undesirable that the system of education at Lagos be introduced into the rural areas. By this system, the three Rs-Reading, Writing, and Arithmetic - practised in the vernacular, seemed to suffice in the rural areas while more attention was to be paid to manual and industrial training suitable to the different localities.

On the other hand, an education that was more appropriate to the environment in Lagos should be provided since there was beginning to be a great demand for people who could serve in the administration and in the commercial houses¹.

By the views which Carr held, he was being ahead of his time as he was quite aware that society was not static and therefore curriculum should change with it. He felt that it was not sufficient for education to be for winning converts alone as the missionaries had hoped for helping the individual adapt to his environment. He was said to have humorously argued that the missions

1. Ajayi, J.F. Ade (1963) op. cit. p.522.

should not forget that the children whom they were training to live in heaven had first to get through the world¹.

Lugard was to champion this cause even further during the period of his tenure of office between 1914 and 1919 on the conviction that education could not be regarded merely as an important aspect of government activity but as one which must determine the development of the country. He proposed a detailed educational policy which was later embodied in an Ordinance which finally became law in 1916².

He was greatly concerned with ensuring co-operation between government and missions as no one arm could provide everything, and harmony between the government and the people as a means of upholding better understanding which was to give greater control to the government.

While Lugard advocated continuity in the good aspects of the policy pursued by the missions, he proposed a distinction between urban and rural education, just as Henry Carr, because he believed that education should make

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1. I.U.L. Carr, H. Special Report on the schools in southern Nigeria, p. 7. in Fajana, A. The Evolution of educational policy in Nigeria 1842-1939. Unpublished Ph.D. Thesis, University of Ibadan, 1969.p. 165.
 2. Fafunwa, A.B. History of Education in Nigeria. London. George Allen & Unwin, 1974, p.111.

it possible for the individual to adapt himself to his environment. Lugard, thus, proposed secondary schools to produce clerks and technicians for towns while rural schools catered for other areas.

In the rural schools, the objective was to improve the village craftsman and agriculturist and to raise the standard of life in the community. Since agriculture was the mainstay of the people, increase in the knowledge and improvement of agriculture was essential as it was expected that those so educated will be taught the value of crop rotation, use of manure, shifting cultivation and understanding methods of destroying pests and insects while also preparing produce for the export market.

There were proposals by Lugard for a Central Art and Craft School at Kano¹. A scheme whereby scholarships were made available for increase in output of clerical class and teachers was instituted. Lugard also proposed detailed re-organisation to increase the output of technicians, native foremen², surveyors, draughtsmen and

1. NNA CSO 1/34, 5: Conf. Desp. Lugard to Bonar Law 3/12/15. Reply to Conf. 'A' of 25/10/15 in Fajana, A. op. cit. p.287.

2. Fajana, A: (1969). Ibid. p. 301.

printers as such posts have had to be filled by expatriates who have been very expensive to employ.

The depression forced the Colonial Government to seek new alternatives in an attempt to avoid disruption of the administration of the country because it became increasingly difficult to pay the salaries of the expatriates employed in the various government departments¹.

To effect this re-organisation, he proposed that training should be conducted by the technical departments, and by his policy, for the first time, a really well organised technical training scheme was put forward, capable of producing really competent workers; because the apprenticeship system, which had hitherto been operated, was discouraged.

The technicians who were needed then by departments or firms such as the Nigerian Railway, John Holt, Public Works and Marine were trained solely to fill the vacant posts in those departments. The attempts of these departments or firms at establishing courses between 1908 and 1935 marked the beginning of organised technical education programmes in Nigeria.

1. Adetunji, E.O. (1973). op cit. p. 134-136.

This, however, did not meet the demands of the firms. For example, in the dockyards, the situation was so critical that lots of casual labour on daily pay had to be employed to get the job going because the dockyards provided limited amount of technical training. The government realised, for the first time, that "formal technical education was necessary to enable more Nigerians take up skilled jobs"¹, as the expansion of all government departments had led to an increase in demand for technicians.

Lugard's concern extended even to illiterate labourers employed in shops as he organised evening classes to upgrade their status and make skilled jobs attractive because Nigerians themselves were becoming reluctant to undergo non-literary professional training because their clerical counterparts were earning attractive salaries.

Thus, during the period 1882 to 1929, Carr and Lugard shaped the government policy on education generally while some of their ideas on the provision of technical education were to serve as the basis on which later developments in technical education programmes were to take off.

1. Nigeria: Annual Report on the Marine Department
Lagos, (Government Printer), 1923 p. 43.

In spite of the efforts of these administrators, the Phelps-Stokes Report of 1925 was to pass scathing remarks on the lukewarm attitude of the government in providing technical education for the people in the colonies. This led to the publication of "Memorandum on Educational Policy in British Tropical Africa in 1925"¹.

In the memorandum which the Colonial Government accepted as the basis of its own policy, the right to direct educational policy and to supervise all educational institutions by inspection or other means was reserved to the Government, whilst at the same time it was also laid down that voluntary effort be encouraged and Advisory Boards of Education should be set up to ensure active co-operation of all concerned².

This was the first educational memorandum by the government, one of the highlights of which was the insistence on adapting education to the needs of the people, a course which was championed by Carr and Lugard throughout their period of administration.

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1. Memorandum on Educational Policy in British Tropical Africa, Cmd 2374 (H.M.S.O., 1925).
 2. Lewis, L.J.: Society, Schools and Progress in Nigeria. London, Pergamon Press, 1965. pp. 35-36.

In addition, some of the recommendations focused attention on technical education on the grounds that:

Technical and vocational training should be carried out with the help of the government departments concerned and under supervision. The educational system should seek to establish the dignity of manual vocations and, to promote their equality with clerical service.

This memorandum was used, more than anything else, to shape the Nigerian educational policy and development from 1925 to 1945.

1. Fafunwa, A.B. (1974) op. cit. p. 125.

CHAPTER TWO

ACTIVE GOVERNMENT PARTICIPATION IN THE PROVISION OF
TECHNICAL EDUCATION 1930-1960

2.1 Yaba Higher College 1930-1948

2.1.1 The Antecedents

With the exit of Lugard from the Nigerian political and educational scene, following his retirement in 1918, Hugh Clifford, his successor, pushed further the work already begun by Lugard. Clifford's administration was to leave a mark on the educational policy pursued in subsequent years until 1929. During the period 1919 to 1929, events in the international scene were making their impact on the mode of thinking of the people in Nigeria. Several International Conferences held at that time provided avenues for exposing the plight of the Africans as regards the education hitherto provided for them generally while arousing the sympathy of Europeans for the yearnings of the Africans for meaningful education.

The Conferences led to the setting up of Commissions by the British Government and agencies in the United States of America,

to discuss African education on a theoretical basis, to find by empirical study the inadequacies of African education and to present recommendations which were to influence the existing practice of education¹.

1. Fajana, A. (1969). op. cit, p. 367.

The report which ensued from one of the Commissions, the Phelps Stokes Commission, in 1925, led to the issue of the Memorandum on "Education in British Colonial Territories in 1925", the first paper to be issued on African education by the colonial government which was to guide Nigerian educational policy and development between 1925 and 1945.

The policy paper was a complete adoption of the many recommendations of the Phelps-Stokes Commission. One of the recommendations was the extension of existing educational facilities by raising government expenditure while ensuring continued co-operation between missions and government by setting up Advisory Boards of Education. The Report also highlighted the inadequacies of the education provided so far as the aims and objectives of education then were at variance with the realities of the African situation, a point which had characterised the policy of education provided during the previous years.

Lugard's efforts during his period of administration merely scratched the surface of the problem posed by the provision of education as education required money for expanding facilities to reach the masses. However, Lugard had earlier expressed feelings similar to those of the Commission and had made concerted efforts to see that his

lofty goals and objectives of education were reflected in the Ordinance which was passed in 1916 and which emphasized the adaptation of teaching to the needs of the pupils.

The 1925 Memorandum led to the enactment of the Education Ordinance of May 26, 1926, which resulted in the formation of a Board of Education which was a new development of policy. The Board became the adviser to government on educational matters; although this did not make it all-powerful as it was subject to government control even in its advisory capacity. The 1926 Ordinance marked a significant turning point in the development of education in Nigeria as it envisaged the rapid growth of secondary education, which was an advancement in the level of education provided so far.

The amalgamation of the Education Departments of Northern and Southern Nigeria, in 1929 did not bring the desired results, of a unified system of education; although the post of the first Director of Education for the whole of the country was conferred on Hussey. On his appointment, he attempted to take stock of the educational problem of the country as a whole. It became necessary to assess and compare the value of past efforts

in different parts of the country and prepare plans for developing a complete system of Nigerian education.

Hussey proposed three levels of education for the country. The first level was the six-year primary education course which hitherto had been eight-year course with the local language as the medium of instruction. The primary course emphasized agriculture, handicraft, hygiene and interest in the environment.

The second level was the intermediate stage which was a six-year course followed by the third stage lasting four years - the vocational higher education¹ - which later formed the nucleus on the establishment of the Yaba Higher College where it was hoped "that various vocational courses will be provided, the aim being to attain eventually to University rank²". He seemed to have foreshadowed the new National Policy on Education although the second stage was not divided into Junior and Senior Secondary Schools (See diagram of Hussey's proposal overleaf)³.

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1. Ogunlade, F.O.: Yaba Higher College and the formation of an intellectual elite. Unpublished M.A. Dissertation, University of Ibadan, 1970 p. 57.
 2. NNA. MN/HI. Sessional paper No. 31 of 1930, (Lagos 1930). NAI in Ogunlade (1970): Ibid p. 53.
 3. Diagram culled from Ogunlade, F.O. Ibid., loc. cit.

Diagram of existing & Hussey's new proposals on educational system for Nigeria.

EXISTING		HUSSEY'S NEW PROPOSALS (1930-1947)	
		Higher	4
		College	3
			2
			1
<hr/>			
4	Secondary School	Middle School Stage	6
3			5
2			4
1			
<hr/>			
		Higher Elementary Teacher Training	3
			2
			1
<hr/>			
6	Standard VI Examination		
5			
4			4
3	Primary Dept.	Elementary Stage	3
2			2
1			1
<hr/>			
2	Infant Dept.		2
1			1

To understand fully Hussey's reforms, it would be useful to study the diagram above.

After a careful consideration of all problems, Hussey produced a white paper entitled "A Policy of Education in Nigeria" in 1930¹ which he forwarded to the Secretary of State for comments and the advice of the Advisory Committee on Education in the Colonies. The Committee examined the paper carefully and accepted Hussey's proposals for Northern and Southern Nigeria, particularly

the proposed establishment in both North and South, of colleges for advanced instruction in art and technology which might develop into a University².

The college in the South was to be a Higher College at Yaba and another in Zaria in the North. Hussey's proposals coincided with nationalists' agitation for higher education which had previously been highlighted in the British Colonial Government's Memorandum on Education issued in 1925.

The issue of Higher Education provoked much debate in the 1930s although there were other issues connected with it which had been foreshadowed in the early years

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1. The Nigerian Advocate 4/10/30, 'Director of Education, outlines scheme' in Ogunlade, F.O. (1970) Ibid. p. 59.
 2. NNA MN/HI. Sessional paper No. 31, Lagos, Government Printer, 1930 in Ogunlade, F.O. 1970 Ibid.loc. cit.

of the twentieth century. For example, Hope Waddell Training Institute Calabar (1895) was severely criticized by the Efiks who expressed dissatisfaction over the restriction of the curriculum and complained that after primary education, their children could not find any institution in their locality to pursue higher studies. They felt disgraced and displeased,

to see foreigners coming in and occupying the offices and the benefits of our country which should be our position had we better education from the missionaries since April 10, 1846, up to date¹.

The nationalists who proposed a University in Nigeria included James Johnson, Otunba Payne and J.S. Leigh, all members of the Lagos literary and Industrial Institute, a body aimed at promoting the intellectual life of Lagos. The scheme, however, failed for lack of financial support by government and nothing came out of it until Hussey came to pursue the question. Hussey felt that without local institutions of higher learning Nigeria had no definable political or economic future. This was the origin of the idea of the Higher Colleges at Yaba and Zaria.

1. Calprof 9/2 Vol. 2, Moor to Principal, Hope Waddell, 14/2/02; Encl. Chiefs of Creek to Moor 10/2/02 in Ogunlade, F.O. (1970). Ibid.p. 4.

Although provisions were made for overseas training by means of government scholarships, Hussey believed that the solution did not lie in sending people to Europe, but in immediate creation of one or more higher educational institutions. Training overseas featured prominently at this time as many Nigerian parents, particularly in Southern Nigeria, viewed education as the key to advancement and were determined to send their children to school at any cost whatsoever. There was intensive competition for higher education by various groups and individuals and private sponsorship played a very important role in the higher educational development before 1948 when the University College Ibadan was established.

Besides, there was persistent pressure for a technical college to provide recruits for the various technical departments¹ because the depression caused by the war had forced the colonial government to retrench a large number of its European officers to reduce administrative costs. The government trained personnel in the various government departments. One such training

1. CSO 26/2 File 18968. King's College; Expansion of: memorandum by Heads of Technical Departments through the Secretary, Southern Provinces to the Chief Secretary to the Government, 10/3/27, Lagos, in Ogunlade (1970), Ibid. p.41.

institution was the Government Survey School established in Lagos in 1908, while as early as 1901 the Nigerian Railway established a departmental training course. The same happened in the Marine department, all being efforts to sustain the administration.

The few people trained at these centres could not effect the much needed change which the country had to make towards development. By 1927, the demand for technicians came to a climax as the various departments jointly put forward a proposal for a technical college for the raising of "a skilled mechanic class"¹. At the same time, on the medical side, there were complaints for lack of various grades of health officers. The recommendation for a medical school was met by a mere additional class for medical students at King's College, Lagos, in 1928².

While the new class of medical students were settling down at King's College, Hussey arrived in 1929, bent on a thorough overhaul of the country's whole educational structure. He was particularly struck by the unemployment

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1. CSO 26/2 File 11962 (i) 'Text of memorandum by Head of Technical Departments submitted through Swanston, Ag. Director of Education to the Chief Secretary to the government, May 1927, Lagos, in Ogunlade F.O. (1970), Ibid p. 41
 2. KCI, File 4171 King's College Annual Reports, 1928.

which had resulted from the turn-out of standard six pupils, twenty five per cent of whom got jobs while the rest roamed the streets. He felt that education should be geared to productive labour and he was determined to make government assume full control over the direction of educational policy.

By 1930, Hussey set out to implement his policy to deal with the problem of over-production of standard six pupils¹ and stressed positive moves by emphasizing the prospects his scheme was to bring in terms of a University which, however, was surrounded by ambiguity with regard to the time it was to attain a University status. In October 1930, a motion to allocate a sum of £25,000 (₦50,000), to be spent during the financial year ending March 31st, 1931, for the preliminary expenditure in connection with the foundation of Higher Colleges at Zaria and Yaba, was passed². Thus the scheme which finally matured in the Yaba Higher College was proposed. This set the pace for government participation in the provision of technical education even

1. Ogunlade, F.O., (1970). op. cit. p. 76

2. Ogunlade, F.O., Ibid., Loc. cit.

though it could not be regarded as spectacular considering the magnitude of the task to be accomplished in the field.

2.1.2 Yaba Higher College 1930-1948

Hussey's proposals aimed at the Higher College providing well trained assistants for the various departments of government and for private enterprise. The departments of government were to be associated with the Education Department in the training, practical and theoretical, to facilitate the absorption of the students on completion of their courses.

This admission policy, and other matters related to the nature of the institution generally, provoked considerable controversy between nationalists and the colonial Government for several years after the inception of the institution.

On the issue of the admission policy, a limitation on the number of people who could be trained was imposed while intake was restricted to the vacancies which existed in the various government departments. Such vacancies were expected to be open to students who successfully completed their courses¹.

1. Fafunwa, A. Babs (1974) op. cit. p. 144.

This became a controversial issue which met with the criticism of nationalists who alleged that admissions into faculties were strictly regulated to tally with the demands of the government's technical departments. The Youth Movement which was formed at that time also condemned the policy which imposed subjects on students rather than leaving them free to make their choices¹.

The college was opened officially on the 19th January, 1934, by the Governor, Lord Cameron, whose opening speech caused a lot of controversy as to the nature of the institution². It was alleged that the government viewed Yaba Higher College as a reservoir for the production of skilled men and cheap labour for government services, as assistants to the leading expatriate officers; but instruction at the institution was to be kept at a low level, more practically oriented below the rank of a University. This meant that the status of those who passed through the system was not to be equal to standards set internationally since the diploma awarded was localised. The foundation ceremony,

1. Ogunlade, F.O. (1970), op. cit. p. 123.

2. Ogunlade, F.O. (1970), op. cit. p. 76.

was only formalising the establishment of the college which

could be said to have started as far back as 1928 when a special class of medical scholars was tagged on to King's College, Lagos .

In 1932 also, the College emerged as an outstanding institution with a students' hostel in a temporary site off the Race Course at Onikan, Lagos.

From its inception, the college generated a lot of arguments which led to the pressure from nationalists to affiliate Yaba with reputable overseas Universities like Oxford, Cambridge and London. They felt this would remove the tag of inferiority imposed on the college by its ambiguous status. While the debate about general policy was going on, the nationalists were also probing the details of the Yaba scheme to find out what the true character of the institution was to be.

They made it clear that although Nigeria was in dire need of technically trained skilled workers, any institution of higher learning for Nigeria would be looked up to as a source for ² all types of leadership wanted for the country .

They, therefore, predicted failure for the Yaba scheme "with its narrow professional training" which could not

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1. Ogunlade, F.O. (1970). op. cit. p. 53.
 2. CSO 26 File HC 24/21/53 Youth Movement memo to Chief Secretary through E.O. Moore 17/3/34, Lagos, in Ogunlade (1970). op. cit. p. 121.

produce the leaders the country needed then.

To allay the fears of the nationalists, however, the admission into the college was no longer conducted arbitrarily but on a properly constituted entrance examination which was organised annually. During subsequent years, the college witnessed some events which disorganised it. For instance, the second world war brought about the acquisition of the campus for war purposes and led to a dispersal of the students, some to Umuahia and others to Fourah Bay in Sierra Leone where they were most unwelcome¹.

Some time during the War in 1943, the Secretary of State for the Colonies set up the Elliot Commission² on higher education in West Africa to

report on the organisation and facilities of the existing centres of higher education in British West Africa, and to make recommendations regarding future University development in that area"³.

1. Fafunwa, A.B. (1974) op. cit. p. 144
2. Ibid., loc. cit.
3. Ibid., loc. cit.

It was felt then that:

in the stage preparatory to self-government, Universities have an important part to play; indeed they may be said to be indispensable. To them we must look for the production of men and women with the standards of public service and capacity for leadership which self-rule requires¹.

The Elliot Commission submitted its report in 1945. Following the recommendations of the Elliott commission, a University was set up in Nigeria and the Yaba Higher College formed the nucleus of the University, named the University College, Ibadan, while its students became the foundation students of the University which moved to its site in Ibadan in January, 1948.

The University College, Ibadan, as a pioneering institution of higher learning, has not only set a high standard which universities, subsequently established, were supposed to uphold, it has also turned out men and women who have had tremendous influence on the development of the country generally.

1. Ogunlade, op. cit., p. 121.

2.2 The Rise of the Nigerian Colleges of Arts Science and Technology, 1949-1960.

Almost simultaneously with the Elliot Commission on higher education in West Africa, the Asquith Commission, was set up in 1943 to

examine the principles which should govern higher education in the colonies, and to explore areas of co-operation between Universities and other appropriate bodies in Britain and institutions of higher learning in the colonies"¹.

This commission, which also reported in 1945, recommended the establishment of an Inter-University Council for Higher Education in the colonies, a delegation of which visited West Africa in 1947, led by Sir William Hamilton-Fyfe. The delegation recommended that polytechnics should be established in West Africa called "regional Colleges" instead of the Elliot Commission's minority reports "territorial colleges" which the commission regarded as inadequate for West Africa².

The nature of the polytechnics was indefinite and to ensure an adaptation of these institutions to the needs of the country, a commission was set up to conduct a survey. The commission made up of F.J. Harlow and W.H. Thorpe³, Nigerian Deputy Director of Education

1. Fafunwa, A. Babs (1974) op. cit. p. 177

2. Ibid., loc. cit.

3. Ibid., loc. cit.

(technical), suggested among other things, in its "Report on a Technical College Organisation for Nigeria in 1949, the establishment of a technical college which was to provide "additional opportunities for secondary school leavers and technical institute leavers"¹. The commission emphasized the importance of "technical education to a country needing economic and social development"². The commission also recommended that a Nigerian College of Arts, Science and Technology should be established with a branch of the college in each of the three regions of the country³.

The report also proposed professional and sub-professional training in various courses including agriculture and training for medical auxiliary services. Although the Nigerian Government accepted the report in 1950, people were sceptical of the status of students turned out of such a college and they expressed fears. Therefore, there was delay in the passing of the bill

1. Ibid, loc. cit.

2. Ibid, loc. cit.

3. Ibid, loc. cit.

which was to establish the college.

After clarification had been sought with regard to status and organisation, the first branch of the college opened in January, 1952 in Zaria with thirty one students. The college was officially opened in Ibadan on 27th February 1954. The Enugu branch was opened in 1955 with thirty two students¹. It was a fully residential college and to ensure that the standard was acceptable, the college entered into relationship with London University issuing a degree in Engineering while the other courses were affiliated to recognized bodies for diploma awards abroad².

Ten years after the inception of the first branch, in 1962, the Nigerian College of Arts, Science and Technology was closed down while its assets were taken over by three of the then four newly established Universities, namely Universities of Ife, Ahmadu Bello and Nsukka. While this move advanced University development by the establishment of the new Universities, it marked the downward trend of attempts at improving the image of technical and commercial education at the

1. Ibid. p. 178

2. Ibid. loc. cit.

intermediate level, a dream which did not materialise until the establishment of the Polytechnic, Ibadan in 1971.

One thing that was outstanding during this period was that there was no definite policy laid down by the government to guide the provision and administration of technical education in Nigeria.

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2.3 Harbison's Manpower Estimates and the Ashby Commission, 1958-1960.

On the eve of independence, it was obvious that Nigeria lacked both technical know-how and skilled manpower to effect full development in all spheres: economic, social and political. This prompted the Colonial Government to set up the Ashby Commission in 1959 to look into the manpower requirements of the country for the twenty years which followed independence.

The commission's mandate was

to conduct an investigation into Nigeria's needs in the field of post-school certificate and Higher Education over twenty years¹.

thereby forecasting Nigeria's educational needs up to 1980.

Considering the interrelationship between the different stages of education, the primary, secondary and post-secondary institutions, the Commission concerned itself with the existing primary and secondary educational structures as at independence in 1960. Findings revealed the inadequacy of the numbers completing the different types of education which has

1 Fafunwa, A.B. (1974) op. cit. p. 152.

led to acute manpower shortage; the poor quality of staff of most of the schools, primary and secondary, and the academic and literary bias of the system. To combat these shortcomings, the Commission devised a system of post-secondary education which, based on a strong primary and secondary school structure, was expected to produce the necessary high-level manpower which the country was estimated to need by 1970 and thereafter.

Even though the Ashby Commission based its report on Harbison's manpower estimates, however inadequate it was thought to be, the report of the Commission was of considerable significance in the development of education in the country generally. The report prompted various governments to expand education at all levels.

For instance, technical and commercial education below University level was given a new impetus by the establishment of the Technical College, Ibadan, the Government Trade Centres at Oshogbo, Ijebu-Ode, Owo and Oyo. The establishment of these and similar educational institutions all over the country could be seen as attempts by the various regional governments to implement the Commission's recommendations. These institutions, together with similar colleges in Yaba, Kaduna,

Benin City, Port-Harcourt and Kano, were supposed to provide the 2,500 technicians needed by the country annually to fill vacant posts at the high technical and sub-professional level.

More than any report before it, it seemed to have set the pace for the educational development of the country even to the present day. It highlighted two major reasons which have adversely affected the pace of development of education in the country as largely dependent on the imbalance of the rate of development of education between the North and the South. The other reason was the general tendency to prefer academic type of education to technical or agricultural type which was usually better rewarded than the technical type of education which had never really been accorded deserving remuneration.

The report of the Commission had highlighted the demands which education generally and technical education in particular were to make on the Federal Government. The report, among other things, had impressed upon various governments the need for educational expansion. The importance attached to the recommendations of the Commission led to the issue of the Federal White Paper

on "Educational Development 1961-70" which resulted in the government setting up a two-man commission made up of F. Caunce and W.L. Cottier in 1961, "to review the needs of technical and commercial education below professional level in Nigeria from 1961 - 1976"¹.

The commission gave a highly comprehensive picture of the existing provision for technical and commercial education below professional level with the ultimate goal of "producing a realistic phased programme for the period 1961 - 70"². It was also charged with the task of considering, "in the light of the Ashby's Report, plans for developing technical and commercial education"³ and advising as to the means of effecting changes in the erstwhile provisions for technical education.

It discovered that the existing provision was inadequate to effect necessary change towards the advancement of the country. The immediate reaction of state governments to the Ashby Report was the concerted effort of each government to implement the Commission's recommendations

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1. Caunce F. and W.L. Cottier: Report on the development of technical and commercial education (below professional level) in the Federation of Nigeria 1961 - 1976. London, 1961, p.i.
 2. Ibid. p.1.
 3. Ibid. p.i.

particularly with regard to the provision of technical education to produce the two thousand, five hundred (2,500) technicians needed¹ by the country annually to fill necessary vacancies. As highlighted in the Federal "White Paper on Educational Development, 1960 - 70", the implementation of educational development programme required co-ordinated effort on the part of the Federal and Regional Governments.

Thus the establishment of the Technical College, Ibadan, in 1960, the Government Trade Centres at Oshogbo, Ijebu Ode, Owo and Oyo were prompted by the urge of the former West Regional Government to implement the recommendations of the Ashby Commission. However, the Federal Government, in its White Paper on Education, 1961, stated that

for the overall supervision of technical education in the Federation, there will be a Federal Advisory Council on Technical Education²,

a basically advisory council which was only meant to be able to deal with matters of general policy in broad terms being really unable to undertake effective overall supervision of technical education throughout Nigeria³.

1. Ibid, Loc. cit.

2. Ibid. p.16.

3. Ibid. Loc. cit.

In addition to the Federal Adviser for Technical Education, there was a Chief Technical Education Officer in each of the three regions into which the country was divided then. These officers were able to consult together to a limited extent and they were responsible through the Permanent Secretaries of the Regional Ministries of Education for the supervision of technical education in their regions.

Henceforth, a definite policy was evolved by the government to ensure that success attended every step taken in implementing the recommendations of the Ashby Commission, to which a lot of importance was attached, an attitude which became apparent in the fact that education generally was henceforth regarded as an investment, the fruits of which were earnestly expected rather than the erstwhile utilitarian attitude adopted towards education. At this stage, the government was prepared to render specialised services and consider requests for financial aid for approved projects.

Matters concerning the curriculum were guided by the suggestions made by the Ashby Commission as to the inclusion of technical subjects in some secondary schools, to be carried to School Certificate level with post-

secondary courses for the training of technicians and the expansion of the technical institutes then in Enugu, Ibadan, Kaduna and Yaba together with those planned for Benin City, Port-Harcourt, and possibly Kano.

One major problem at that time was the difficulty experienced in recruiting and retraining adequately qualified staff for the technical institutes which meant that great reliance had to be placed on recruitment from abroad. From 1962, the curriculum was slightly modified and the Crafts schools became a sort of post-primary intermediate institutions from which pupils entering the trade centres were recruited.

Under a new policy, all trade centres became technical schools and technical institutes were converted into technical colleges¹. By 1965 there were ten trade centres and five technical institutes (renamed technical colleges in 1964) in operation.

With regionalization which started in Nigeria before 1960, each region carried out programmes of expansion in technical and vocational education independently; hence the establishment of the Technical College, Ibadan, in 1960. In its report, the Banjo Commission set up in

1. Skapski, A.S.: Short outline of plan of action to improve technical education in the Western Region. Western Region, Ministry of Education, Ibadan, 1962.

1961 to review the educational system of the then Western Nigeria, suggested among other things, co-operation between employers and technical institutes. As a result, three major Advisory Committees were created among which was the Advisory Committee on Technical Education made up of representatives from the Ministries of Economic Planning, Trade and Agriculture, the Faculties of Engineering in the Universities and of the departments dealing with the Physical Sciences, the Universities, the Voluntary Agencies, the Technical Colleges, the Trade Centres, the International Co-operation Administration and a wide range of trade unions to which people with technical skills belonged.

Its functions were mainly advisory as well as dealing with matters of general policy in broad terms as it was impossible to undertake effective overall supervision of technical education throughout the country.

CHAPTER THREE

GOVERNMENT POLICY ON TECHNICAL EDUCATION:

PHASE I, 1960-1970.

As soon as Nigeria regained her independence, the Nigerian Government settled down to the tasks ahead. The Ashby Commission report had prompted the government to take up the challenge posed by the need to devote more attention to technical training and to commercial education at the middle level by reviewing the whole policy and structure of technical education in Nigeria below professional level. The urgency to effect a policy was further highlighted by the report of the two-man commission set up by the government to further investigate the matter.

The report of this commission resulted in "The National Plan for the Development of Technical Education in the Federation of Nigeria" of June 1962¹ in which the government stated its objectives of achieving rapid "economic independence for the country as soon as possible". In turn, the objectives of the National Economic Development Plan for the country were based on an

1. Federation of Nigeria; A National Plan for the development of technical education in the Federation of Nigeria, Lagos, Federal Ministry of Education, 1962, p.1.

intention to achieve "a modernised well developed economy consistent with the democratic, political and social aspirations of the people"¹.

In as much as the plan, referred to as the First National Development Plan, enunciated by the government was meant to guide the direction of the nation's development, what the government planned could be regarded as policy statement. There was a proposal of growth in the economy at 4% per annum

with particular emphasis on shifting the country's resources more into the enlargement of the directly productive capacity of the economy i.e. on agriculture, trade and industry and both high and intermediate level manpower².

with the "strategic objective" being "economic independence as soon as possible"³ the plan also provided for

the enlargement of the basic social and economic services such as education, health, communication, water and power and for the essential fiscal and monetary policies which would be involved.⁴

To effect the plan, it aimed at "setting national targets and the agreement of the Governments of the Regions in designing their plans so as to contribute to the achievement of these targets"⁵. Economic Planning in the

1. Ibid. p. 1

2. Ibid. p. 3

3. Ibid. loc. cit

4. Ibid., loc. cit.

5. Ibid. p. 1.

decade before independence was largely on a Regional basis although the National Economic Council established in 1955 by the Federal Government achieved a degree of co-ordination through its efforts. Along with this development of the economy of the country is that of technical education which was deemed to

follow closely and indeed wherever possible, anticipate that of the economy, as they point the way to technical education planning¹.

However, there was a realisation that technical education could not continue to be "seen as an isolated or independent activity, but as an integral part of an overall system of national development"². In an attempt to effect changes, since the various steps taken to improve vocational and technical education in Nigeria had been fruitless, a "Seminar on Comparative General Education" was organised in 1962³ under the

1. Ibid., loc. cit.

2. Ajayi, O.A. (ed): COHEADS: Structure of Instructional Programmes in Technological Institutions. Ibadan, Heinemann Educational Books, 1982, p.2.

3. Skapski, A.S. Report of the Comparative Technical Education Seminar Abroad and Recommendations for a National Plan of Vocational and Technical Education in the Republic of Nigeria. Ibadan, African Education Press 1966, p.14.

chairmanship of Dr. Skapski and the sponsorship of the Federal Ministry of Education with USAID financial support¹.

Reports previously published had failed to exert any major impact on this aspect of education possibly because the government failed to take into consideration the following three premises highlighted by Skapski as being vital to a successful reform of technical education:

Premise 1: In the second half of the 20th century, technical education can be effectively developed only on the foundation of adequately structured general education.

Premise 2: To create the "wind of change" necessary for the acceptance of the reform, there must arise in the country a group of professionally competent educators aware of the most progressive achievements of other countries and united into one team by a sense of mission derived from common personal involvement in the ideology which they are anxious to bring to life.

Premise 3: Several educational nuclei (pilot projects) in which the new ideas could be demonstrated for all interested to see and to learn from, must be established throughout the country and their efficient operation assured for a period, during which the changes would have time to take root².

1. Ibid. p. 16

2. Ibid. p. 13

From the foregoing, it was obvious that an overhauling of education generally must precede any "true reform of technical education". One of the objectives of the "Seminar on Comparative General Education" to which reference was made earlier, was to enable the Nigerian Government to obtain first hand information from advanced countries on recent developments in education.

The recommendations of this seminar were to have far-reaching effects on technical education particularly as far as secondary level of education was concerned. Secondary School Curriculum was considered unsatisfactory while Comprehensive Secondary Schools were recommended on the basis that they were expected to provide opportunities for more people to be educated than in Secondary Grammar Schools¹.

Proposals advanced for the comprehensive schools envisaged a broad based curriculum so that "secondary education would be terminal for different students at different levels"² with the course of study covering both academic and other subjects which were

to cater to the whole range of human abilities and aptitudes, with particular stress on pre-agricultural training (including domestic science) as well as pre-vocational and pre-technical training (including commercial)³

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1. Ibid. p. 15
 2. Ibid., Loc. cit.
 3. Ibid. Loc. cit.

Again, this seems to have influenced the contents of the 3-3 Secondary School Curriculum in the New National Policy on Education. An early experience of this kind of curriculum was that of Aiyetoro Comprehensive High School now in Ogun State.

In 1963, the Ford Foundation office in Lagos began to explore the possibility of giving massive support to the government to improve vocational and technical education in Nigeria¹. Discussions were held with the Ministries of Education throughout the country to intimate them with these moves. In 1964, the Permanent Secretaries decided to introduce a programme on a "master plan" level supposed to consist of the collection of relevant information about different approaches to vocational and technical training in a few chosen countries². The experience gained from the trip was to be disseminated throughout the country by organising workshops-conferences and operating

new and improved courses as pilot projects located all over the country and ensuring proper adaptability to Nigerian conditions noting the acceptability of these to the Technical and Commercial Committee of the WAEC³.

1. Ibid. p. 16.

2. Ibid., Loc. cit.

3. Ibid., Loc. cit.

Almost simultaneously, in 1964, many people from all walks of life started to express concern for the lack of relevance of the education system in meeting the pressing economic needs of the nation¹. This led Professor A.B. Fafunwa, then of the University of Nigeria, to conduct an opinion survey in an attempt to "sound out" the opinions of 2,000 parents randomly sampled over a wide geographical and representative area of the country on the primary and secondary systems of education².

As a result of the survey, a National Curriculum Conference was proposed at the 1964 bi-annual Joint Consultative Committee (JCC) on Education to involve a cross-section of the people in the country - a proposal which was the first of its kind in the world, considering the eventual composition of the delegates at the conference. One major consideration at this conference which did not take place until September 1969 - the civil war having broken out in 1966 - was to review old and identify new goals for Nigerian education bearing in

1. Fafunwa, A.B. The genesis of National Education Policy. Daily Times (Lagos). 2 October, 1984 2.

2. Ibid., Loc. cit.

mind the task¹ of nation building and national reconstruction which have been necessitated by the Civil War.

The report of the National Curriculum Conference, called "A Philosophy For Nigerian Education", embodied sixty five recommendations on seven major educational aspects of the conference theme in the nine areas identified as crucial to the attainment of the conference objectives². Obviously, setting goals serves as a move in the right direction, the achievement of which will be ultimate in everybody's mind. Every other thing has taken a cue from here even though a policy statement was still almost a decade away - as the first of its kind by the government was published in 1977. It was at this conference that the idea of a 6-3-3-4 system of education, embodied in the new National Policy on Education, emerged³.

1. Ibid, Loc. cit.

2. Ibid., Loc. cit.

3. Ibid., Loc. cit.

CHAPTER FOUR

PERIOD OF RAPID EXPANSION OF GOVERNMENT POLICY ON TECHNICAL EDUCATION, PHASE II 1970 - 1980.

As soon as the goals of education in general was identified by participants at the 1969 National Curriculum Conference, the government thereafter settled down to the tasks of achieving the objectives and goals identified as essential to national development.

Even though no specific policy statements were made before that enunciated in 1977, various plans were made by the government to give direction to development generally. The government made special attempts to ensure that it was advised with regard to the development of technical education by setting up boards and councils.

One such council was the Nigerian Council for Science and Technology (NCST) set up by Decree No. 6 in 1970 by the then Military government with the aim of "advising the Federal Government on science policy and its implementation"¹. This was to satisfy the need to identify in clear terms the national policies and

1. - Nigerian Council for Science and Technology, National Policies and Priorities for Research in Science and Technology, Lagos, Cabinet Office, 1975 p. 6.

research programmes in Science and technology to support national development activities in all sectors.

The Council produced in 1975 a document, "National policies and Priorities for Research in Science and Technology", which contained a review of the current status of science and technology in Nigeria in terms of institutions, fields of scientific research, manpower, and expenditure on research¹. It identified the broad national objectives in science and technology and strategies for achieving the objectives. In addition, it described the long term policies and programmes of research necessary in all development fields while indicating the institutions, existing, approved and proposed, as well as the priority programmes of research for the 1975 - 80 plan period, (the Third National Development Plan Period)².

The highlights of the objectives and policies in Science and Technology included those on

- (a) Scientific and technical manpower development;
- (b) research and development activities,
- (c) transfer of technology;
- (d) Co-ordination of national scientific activities and
- (e) international collaboration in science and technology³.

1. Ibid. p. 5

2. Ibid. Loc. cit.

3. Ibid. p. 18.

The policy for scientific and technical manpower development emphasized the need for:

- i. adequate planning both long-term and short-term, for the University and other institutions required for the training of an adequate number of scientific and technical manpower.
- ii. Curriculum review at all levels of education training so as to relate the curricula to local environment and its resources, and the technical problems of economic and social development;
- iii. maintenance of an equitable balance between the various cadres of scientists and technicians; and
- iv. maintenance of an equitable relationship between demand and training, including specialization of scientists and technicians¹.

The recognition of the need for research and development made it necessary for Nigerians to appreciate the fact that while scientific research is basically an intellectual discipline its value as a source of economic and social development must be fully exploited.

Thus, policy for research and development centred around ensuring full utilisation of existing research centres for acquisition of technological skills for adaptation and creating new ones if need be. In addition, transfer of technology policy required involvement of Nigerian scientists and engineers in research institutes while evaluating the technologies being

1. Ibid. p. 19.

imported and the effectiveness of the process of technology transfer.

Another vital policy was that on National Research Co-ordination which aimed at ensuring a regular inventory of science and technology in order to obtain information regularly on national scientific activities, manpower and financial resources devoted to science and technology in the country.¹ The establishment of specialised documentation and scientific library services for storage of scientific and technical information have served as an avenue for tapping resources provided by international scientific information organisations such as "the World Science Information System (UNISIST)"².

A final policy area was the International Co-operation policy, a must for any country, since no country develops in isolation. Such a policy ensures bilateral and regional co-operation in science and technology. Nigerian scientists and technologists need to participate in relevant international meetings and programmes so as to encourage exchange of information on results relevant to national scientific activities. Such were the areas which the policies evolved by the

1. Ibid., p. 21

2. Ibid., p. 22.

Nigerian Council for Science and Technology (NCST) covered, all in an attempt to create a self-sustaining national scientific and technical capability, and to direct this competence to the main problems of economic and social development.

The activities of this council were to be further consolidated by the National Policy on Education of 1977 in which the government expressly stated its recognition of the fact "that technical education forms the basis of our technological development"¹ and had substantially increased its expenditure in this field during that plan period. Section 6, sub 49 stated the aims of technical education as follows:

- a. to provide trained manpower in applied science, technology and commerce particularly at sub-professional grades;
- b. to provide the technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development;
- c. to provide people who can apply scientific knowledge to the improvement and solution of environmental problems for the use and convenience of man;

1. Federal Republic of Nigeria. National Policy on Education, 1977. Federal Ministry of Information Printing Division, Lagos, 1977, p.20.

- d. to give an introduction to professional studies in engineering and other technologies;
- e. to give training and impart the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self reliant, and
- f. to enable our young men and women to have an intelligent understanding of the increasing complexity of technology¹.

In pursuance of these aims, the government has taken positive steps to ensure the fulfilment of its policy. Sub-section 50 outlined the measures the government wished to take for the development of technical education. Among these measures are ensuring expansion of training facilities and encouraging teachers for the technical education institutions. The Federal Government decided to devote a greater proportion of its educational expenditure to technical education and it was intended that the states should be encouraged to do the same. In addition, it welcomed international aid and co-operation in higher technical education. All these were embodied in the Fourth National Development Plan.

For the first time, the government also made various moves to implement the policy statements made and went further to set up a special committee, the

1. Ibid. Loc. cit.

Implementation Committee for the National Policy on Education in September 1977¹, the activities of which will be discussed in the chapter where the implementation of government's policy is being examined.

In the National Policy on Education, the aims of technical education were expressly stated as well as the measures proposed to achieve the aims. The government proposed making²:

1. a conscious effort to expand the facilities for the training of technical teachers which are expected to prosecute the Junior Secondary School (JSS) system which the government had adopted.
2. A vital policy statement is that in which the government decides to introduce elementary technology into schools as early as possible to kindle in the people an attitude of respect for an appreciation of the role of technology in society.
3. It is intended to introduce skill-forming technical courses into the secondary school curriculum. The curriculum in the technical schools are intended to be broadened to embrace certain basic fields which are relevant to the present and future needs of the country.
4. The government's recognition of technical education as forming the basis of the country's technological development has made the Federal Government substantially increase its expenditure in this field in the development plan. While it is intended that a greater proportion of educational expenditure is to be devoted to technical education by government at both Federal and State levels.

1. Op. cit. p. 8.

2. Op. cit. p. 19.

5. International co-operation is also encouraged in the form of exchanges of personnel, exchanges of ideas, curriculum development and staff development¹.

From the policy statement made by the government, one thing becomes obvious: the government has fully accepted its responsibility in the provision, financing and administration of education in general and the furtherance of technical education in particular as the vital organ of effecting progress in every aspect of the country's development.

The establishment of the National Board for Technical Education (NBTE) in May 1977 was to have far-reaching effects on the direction of technical education in the country to date. Set up by the Federal Government with terms similar to those of the National Universities Commission (NUC), it was charged with the responsibility

to advise on policy on development of technical education, the rational financing of technical education and to be the agent of government for the financing and support of technical education.²

The Board was set up on the revelation of the major constraints in the implementation of the Second National Development Programme particularly with regard

1. Ibid. loc. cit.

2. Towe, P.E.O. The role of NBTE, Ministries of Education and other educational agencies in promoting technical vocational education. Kaduna 1984. Mimeographed article p. 3.

to "the dearth of middle level and lower categories of technical manpower"¹ usually produced by polytechnics or colleges of technology and technical colleges respectively. This was prior to the preparation of the Third National Development Plan which was eventually evolved and for which reason the government wished to match its commitment with resources to implement the plan by setting up the Board.

Since the Board's inception, it has continued to make its impact felt in spite of some major constraints centering around resources at its disposal which has been limited, as well as the attitude of the established institutions to effect necessary changes which are meant to meet the country's peculiar needs. It has produced a "master plan" for short term from 1980 to 1985 and for long term up to 2000 AD, incorporated in a document titled "Format of Technical Education"² which is yet to be published by the Board.

Some of the short term plans which were included in the Fourth National Development Plan dealt with

the production of technical teachers for the economy and in-service staff development programmes for technical teachers through short courses, workshops... designed to upgrade and

1. Ibid. p. 2.

2. Ibid. p. 13.

up-date in-service staff in our institutions¹. The Board's activities ensure the implementation of government's policy of laying emphasis on technology-based courses than in business programmes in all the technical institutions.

Almost simultaneously, during that same year as the Federal Military Government issued the first White Paper on the National Policy on Education in 1977, the government set up a seven-man "Implementation Committee for the National Policy on Education"² which was charged with the responsibility for "translating the policy into a workable blueprint and to develop programmes for the implementation of the policy"³. The Blueprint produced in 1978 by the committee dealt with important and necessary steps that should be taken in order to implement the new education policy effectively and efficiently⁴.

1. Ibid. p. 14

2. Fafunwa, A.B. (1984) op. cit p. 8

3. Ibid., loc. cit.

4. Ibid., loc. cit.

In 1979, the Federal Government issued another white paper titled "Government's views on the Implementation Committee's Blueprint on 'The Federal Republic of Nigeria National Policy on Education'." The government accepted most of the recommendations of the Implementation Committee, rejected some, and deferred decisions on some others¹. When the country returned to civilian rule in October, 1979, the government reviewed the 1979 White Paper and issued a revised edition of the National Policy on Education in 1981.

One of the highlights of these policy statements is the need for the dissemination of information on the acquisition of the knowledge behind technology which is hardly forthcoming from the advanced countries particularly technology transfer. Yet, without the involvement of the appropriate local research and development institutions, it is almost impossible to absorb, adapt and diffuse the technology on a self-reliant basis. The end result is that little or no technology capability can be developed. In a bid to absorb technology on a self-reliant basis, international assistance and collaboration are considered essential.

1. Ibid. Loc. cit.

This was highlighted by G.B. Leton, the Federal Commissioner for Education in 1979, at the banquet given in honour of the Nigerian Delegation at the Nigerian-US Workshop on Technological Development in Nigeria where he stated the government's objectives of the policies of providing "trained manpower in applied science and technology and commerce"¹. In addition, he emphasized that "one of the cardinal objectives of the policies of the Nigerian government is to ensure that the nation becomes self-reliant, but keeping in view international co-operation"².

The government also created the National Science and Technology Development Agency (NSTDA) in 1979, and charged it with the responsibility for the promotion and development of science and technology including initiation of policy in research and development activities³. This Agency was also given the responsibility of setting up a National Science Library and Documentation Centre to ensure the dissemination of science information activities in the country⁴. It is supposed to co-ordinate

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1. Leton, G.B.: The address of G.B. Leton, Federal Commissioner for education, Nigeria in Amoda and Tyson: 'Technological Development in Nigeria', N.Y. Third Press Int., 1979. p. 81.
 2. Ibid. Loc. cit.
 3. NSTDA: Nigerian National paper for the United Nations Conference on Science and Technology for development, Lagos NSTDA Secretariat, 1979. p. 5.
 4. Akande, O.: Towards A National Science Information Policy. Country Report Submitted to the First UNISIST Meeting on Regional Information Policy and Planning in West Africa. Lagos, Publication and Information Division, 1978. p. 10.

the information obtained from the various Research Institutes in an effort to make scientific research useful and relevant to the lives of the people. This is by making its results easily and quickly available to those expected to transform them into productive ends (like food, clothes and shelter), and to ensure mass involvement in the development of science and technology as an essential tool for socio-economic development and political freedom.

In putting the co-ordination of science information in Nigeria under the NSTDA, the Federal Government has attached a lot of importance to the development and dissemination of scientific and technical information, and that it has been accorded a high recognition as an essential tool for the country's fast socio-economic advancement in keeping with resolution 2.131 of the 17th General Conference of UNESCO¹.

The period, 1970 to date, has been characterised by government activities on all aspects of development which education in general and technical education in particular could effect. It is gratifying to note that the revision which the government carried out in 1981 on the National Policy on Education centred around the aspect of technical education mainly and the government expressly stated in the policy that;

1. Akande, O. (1978). Ibid., loc. cit.

1. a greater proportion of education expenditure will be devoted to science and Technology; and
2. Universities and other levels of the education system will be required to pay greater attention to the development of scientific orientation.

To this end, more colleges of Technology and Polytechnics will be opened in a bid to improve technological and science education.

The ratio of Science to Liberal Arts students in the universities has been fixed at 60:40 during the Third National Development Plan period. This ratio was to be constantly reviewed in accordance with the manpower needs of the country¹.

The revision which was carried out on the 1977 Policy becomes actually noticeable in Section 6, the Technical Education Section, a testimony to the importance which the government seemed to have attached to this aspect of education. To the sub-section 50 of the policy statement, as many as fifteen steps of implementation were added to the same section of the 1977 version, to demonstrate government's intentions to carry out positive measures for the development of technical education. These additions expressly stated

1. Federal Republic of Nigeria. National Policy on Education (Revised), 1981. p. 25
Federal Ministry of Information Printing Division, Lagos, 1981,

the role of the states in the task ahead, particularly in the provision of technical schools; and changes to be carried out in the curriculum.

One vital policy statement is that which expressed the government's intention that:

at the very early phases of the education system, efforts must be made to inculcate an attitude of respect for an appreciation of the role of technology in society. To accomplish this, elementary technology will be introduced into the school curriculum as early as possible.

Pupils will be exposed to using their hands in making, repairing and assembling things¹.

This aspect of the policy pinpoints the importance of inculcating the right attitude into the minds of the people who have hitherto, since the introduction of western education into the country, looked down on any job other than the "white-collar" job, as being inferior. This, obviously, is a great departure from the erstwhile attitude of the people to any education which led to no other job than that involving the use of hands.

1. op. cit. p. 29.

CHAPTER FIVE

IMPLEMENTATION OF GOVERNMENT POLICY ON TECHNICAL
EDUCATION: PHASE I, 1960 - 1970

During the decade that followed Nigerian independence, the view which was held all along that provision of technical education was an expensive venture which the government left either to individuals, philanthropic organisations or the missionaries, changed as the government developed interest in this aspect of education because it realised the important role it was expected to play in the country's development.

The government set out immediately to identify the problems which confronted the country by appointing the Ashby Commission "to forecast Nigeria's educational needs in the field of post-school certificate and Higher education" as a prelude to evolving any policy whatsoever on education. The Ashby Commission's Report highlighted the need to pay more attention to technical training and to commercial education at the middle level.

The review of Technical and Commercial Education below Professional level carried out by W.L. Cottier and F. Counce in 1961 led to the publication of the report

and recommendations which were to have far-reaching effects on technical education in the country. The proposals of the experts were embodied in a "National Plan for Technical and Commercial Education in Nigeria". Although no policy statement as such was made, the "Plan", as long as it was meant to serve as a course for action, can be regarded as a guideline to effect change and serve as a policy statement.

In the document, the government made certain statements which embodied the steps the government intended to take ^{to} pursue the line of action desired. The government stated, inter alia:

1. The most suitable system of technical and commercial education is conceived as an overall pattern of courses, standards and institutions forming a cohesive, well co-ordinated, National framework strongly linked with industry and commerce which know no Regional boundaries, and within which the Regional Governments can develop their own arrangements.
2. The Federal Government undertakes overall responsibility for the pedagogical training of the necessary craft and technician teachers in a college built for this purpose.
3. The Federal Government also undertakes to set up the Nigerian Technical and Commercial Examinations council which will eventually take over the work of external examining bodies.
4. Co-ordination will be achieved through the inauguration of a National Advisory Council for Technical Education and Industrial Training upon which all the appropriate Government, industrial and other bodies will be suitably represented.

5. There will be considerable staffing and financial commitments involving both local expenditure and overseas aid and in view of the difficulties experienced in recruiting technical experts from overseas special attention is to be directed to this problem. The Federal Government will bring such financial aid as it can make available to assist selected Regional Government and industrial training projects and the Bureau of External Aid will assist both in the recruitment of overseas staff and in acquiring outside finance.
6. The Federal Government is fully aware of the urgency of these arrangements and will take swift action to secure their early implementation¹.

What one could deduce from the above and about forty-six other arrangements made by the government to effect the plan was the demonstration of the acceptance of the need for co-ordinated efforts between the states and the Federal Government to achieve the desired goal in the provision of technical education in the country. All these measures were intended to pave the way for the major reforms which the government envisaged in ensuring technical manpower supply for the development which the country badly needed at independence, as identified by the Ashby Commission.

One such step was in the direction of centralisation of administration of technical education by the

1. Federal Ministry of Education: Development of Technical Education 1961-70, Lagos, 1962, p. 2.

inauguration of the National Advisory Council for Technical Education and Industrial Training set up in 1962 and upon which all the appropriate government, industrial and other bodies were to be represented.

In a bid to implement the government's plan to meet manpower demands, various seminars and conferences were held as the preliminary steps to evolving a viable solution to the problem of manpower shortage. One such seminar was the Seminar on Comparative General Education held in 1962 under Dr. Skapski's chairmanship to consider steps which should be taken for the successful reform of technical education in Nigeria. In the report of the seminar, areas of reform were identified and solutions suggested particularly as affecting general education which was felt to be the pivot of effective development of technical education¹.

Findings revealed then the situation which existed in the country before the seminar members' visit abroad as one to be viewed with great concern. It was reported that they

considered the curriculum of the existing grammar schools unsatisfactory since, it is narrow and is suitable only for the academic type of pupil².

1. Skapski, A.S. Report of the Comparative Seminar Abroad. Lagos, African Education Press, 1966, 13-14.

2. Ibid., Loc. cit.

In addition, it was felt to be uneconomical.

A comprehensive system of education was recommended, the 6-5-2-3 system¹ which seemed to have muted the current 6-3-3-4 system. They recommended that there should be:

for post-primary education in Nigeria a comprehensive school system, whose course of study should cover not only academic subjects, but should be wide enough to cater to the whole range of human abilities and aptitudes, with particular stress on pre-agricultural training (including domestic science) as well as pre-vocational and pre-technical training (including commercial)².

To implement the policy, the then Western Nigeria (Now Oyo, Ogun, Ondo and Bendel States), took the lead by establishing a comprehensive secondary school in Aiyetoro in 1963 "under a contract between the Western Nigerian Ministry of Education, USAID and Harvard University"³.

This proposal was probably the forerunner of the 6-3-3-4 system of education which had its origin in 1964 "at the Joint Consultative Committee on Education (JCC) meetings in Enugu and Kaduna"⁴ where a national

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1. This is a six-year Primary, five-year Secondary followed by a two-year HSC and three-year University education.
 2. Ibid. p. 15
 3. Ibid, Loc. cit.
 4. Fafunwa, A.B. (1984), op. cit. p. 2

conference was proposed to overhaul the Nigerian Educational system.

The outbreak of the civil war delayed the conference until 1969 when it was held in Lagos. The National Curriculum Conference of 1969 was a major landmark in the history of Nigerian education as people from all walks of life participated in discussions held

to review old and identify new national goals for Nigerian education bearing in mind ... the task of nation - building and national reconstruction for social and economic well-being of the individual and the society¹.

Of course, the decisions taken at the conference were to affect the government policy on technical education in no small measure.

The five-day national Conference made a total of sixty-five recommendations on nine areas which were identified as crucial to the attainment of the conference objectives. Of particular interest was recommendation number 59, which proposed a free 6-3-3-4 system of education namely, a full six year primary education followed by a three-year junior and a three-year senior secondary school education, culminating in a four-year University course².

1. Ibid. Loc. cit.

2. Ibid. p. 8.

Prior to the adoption of this system of education, various steps were taken by the government to implement its plan to ensure improvement in all aspects of education. Even though no specific policy statement was made until 1977, the government endeavoured to ensure that the period was characterised by various activities carried out by various government agencies to serve as preparatory moves to evolving a viable educational policy which was to ensure national development.

Considered as requiring immediate attention was the curriculum which was felt to be inadequate and for which the Nigerian Educational Research Council (NERC) was set up by Decree (Now Act.) No.31 on 31st August, 1972¹ charged with the responsibility of the regular review of the country's primary

1. NERC: Nigerian Educational Research Council ITS GROWTH AND PROSPECTS. Lagos, KOSERVICES LTD., 1981

(Between 1965 and 1969, it functioned as a small unit attached to the office of the Chief Federal Adviser on Education. In April 1970 it started off on its role as a Federal Government parastatal in Tinubu Square, Lagos) culled from the Preface.

and post-primary schools' curricula. This council comprised representatives of the Federal and State Ministries of Education, Universities, Colleges of education and other agencies who organised a series of workshops on curriculum and material production in anticipation of the proposed new education policy.

The NERC's efforts were supplemented by the Comparative Education Study and Adaptation Centre (CESAC) which was also a curriculum development unit.

Unexpectedly in 1974, the then Head of State announced the intention of the government to see that the policy be scheduled to take off in September 1976. Great was the magnitude of the panic caused by this statement because of the implications of its implementation particularly with regard to the number of teachers needed to put the policy into practice. The government then embarked on crash programmes for training teachers.

In addition, there was the feeling that the other aspects of the policy would, at some time in the future, need to be implemented. Thus, the government expressed its intention to

undertake overall responsibility for the pedagogical training of the necessary craft and technician teachers in a college built for the purpose¹ in addition to

setting up the Nigerian Technical and Commercial Examinations Council which will eventually take over the work of external examining bodies"².

Also, the government decided that it was "fully aware of the urgency of these arrangements and will take swift action to secure early implementation"³.

Hitherto, education had developed on regional basis; each regional government provided whatever system of education it could afford for its people. For instance, part of the implementation measures taken by the then Western Region (Now Ogun, Oyo, Ondo and Bendel States) was the establishment of the Comprehensive Secondary School at Aiyetoro in 1963 in addition to about eight (private) comprehensive schools which were

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1. Federal Ministry of Education, op. cit. p. 1.
 2. Ibid, p. 2
 3. Ibid, p. 3.

opened in the Region. New, Nigerian - oriented syllabi, prepared in Aiyetoro by teams of expert teachers under Havard's guidance, were introduced into the comprehensive schools.¹

The Federal Government, however, sought to co-ordinate the activities of the Regional Governments by the establishment of the National Advisory Council for Technical Education and Industrial Training.

1. Skapski, A.S. 1966. op. cit. p. 15.

CHAPTER SIX

IMPLEMENTATION OF GOVERNMENT POLICY ON TECHNICAL
EDUCATION: PHASE II, 1970-1980.

The national objectives for the country's development have been identified and stated at the 1969 Curriculum Conference. The ravages of the Civil War had made it impossible for the government to embark on the implementation of the recommendations made at the conference, because the Civil War had exposed the more urgent areas of Reconciliation and Reconstruction of the war-affected areas of the country. Besides, the government had not made any policy statement as such and the change of government meant a change of certain policies, education inclusive.

Soon after assumption of duty, the then military government promulgated various decrees to guide its administration of the country. In 1970, the government passed Decree Number 6 which set up the Nigerian Council for Science and Technology with the aim of "advising the Federal Government on science policy and its implementation"¹. This council was to satisfy the need to identify in clear terms the national policies and

1. op. cit. p. 6.

research programmes in science and technology to support national development in all sectors.

The Council produced in 1975, a document "National Policies and Priorities for Research in Science and Technology"¹ which contained a review of the present status of science and technology in Nigeria in terms of institutions, fields of scientific research, manpower and expenditure on research. It identified the broad national objectives in science and technology and strategies for achieving the objectives. In addition, it described the long-term policies and programmes of research necessary in all development fields while indicating the institutions, existing, approved and proposed, as well as the priority programmes of research for 1975-80 plan period, the "Third National Development Plan Period"².

To effect the policies stated in the document with regard to carrying out research for the impact it could make in achieving national development, the government set up various agencies and assigned various duties to them. With the Federal Republic of Nigeria National Policy on Education published in 1977, the government was

1. op. cit., loc. cit.

2. Ibid., loc. cit.

accepting in principle, the policies enunciated by the various agencies and incorporating them in a document for the nation.

That same year, in May 1977, the government established the National Board for Technical Education (NBTE). The evaluation of the Second National Development Plan 1970 - 1975 revealed that implementation of the plan was hindered by shortage of

middle-level and lower categories of technical manpower produced by polytechnics/colleges of technology and technical colleges respectively ¹.

In order to implement plans to increase enrolment in the institutions as well as offering "diversified courses to reflect identified national needs"², for the Third National Development Plan 1975-1980, the Board was established.

It was expected to

advise on policy on development of technical education and the rational financing of technical education and to be the agent of government for the financing and support of that aspect of education³.

It was also to oversee the activities of the technical colleges which the government proposed to "increase from sixty three to ninety four so as to increase enrolment from 22,588 in 1975 to 117,686 by 1980"⁴.

1. Towe, P.E.O. (1984) op. cit. p.2

2. Ibid. p.3.

3. Ibid, loc. cit

4. Ibid., loc. cit.

In addition, it was to supervise

the expansion of Yaba College of Technology, Kaduna and Auchi Polytechnics as well as the four new ones which were proposed to facilitate increase in enrolment and diversification of courses offered¹.

The establishment of the Board has had tremendous influence on technical and vocational education outside the Universities. The institutions under the Board's jurisdiction included:

- a, polytechnics/colleges of technology
- b, Colleges of education (technical)
- c, technical colleges
- d. vocational training centres/schools.

The Board has offered advice to the government on the areas of:

- a. change of nomenclature of technical institutions and their headship;
- b. production, upgrading and updating of technical teachers;
- c. financing of technical education;
- d. laying standards of skill to be attained;
- e. conditions of service for polytechnic staff;
- f. establishment of more technical colleges;
- g. entry requirements and duration of courses;
- h. scheme of national certification and national standards of technical education;
- i. pre-vocational and general technical education;
- j. information on technical education;
- k. master plan for technical education by AD.2000.
- l. space standards for planning technical education facilities².

1. Ibid., loc. cit.

2. Ibid. pp 4-5.

With regard to the production, updating and upgrading of technical teaching staff, a survey of staff in technical institutions conducted by the Board

revealed that a good number of lecturers have very little practical experience in their field of specialisation and only a few of them had pedagogical training.¹.

Realising that the "successful execution of any educational programme is the availability of teachers in quality and number"², the government accepted the advice of the Board on:

- a. industrial training for staff of polytechnics in overseas and local industries.
- b. the establishment of more NTTCs to produce NCE teachers to teach the JSS introductory technology and business studies programme.
- c. the mounting locally of short courses in curriculum development, management of technical education and educational technology during the long vacation³.

The Board also advised the Federal Government to support technical education through staff development, which the government already does, and also to provide equipment grant for approved priority programmes such as engineering, technology and environmental studies

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1. Ibid. p. 6
 2. Ibid., loc. cit.
 3. Ibid., loc. cit.

programmes whose diplomates were badly needed for the national development.

In compliance with the government's policy statement of taking steps to improve the immediate and long term prospects of technicians in relation to graduates and other professionals with respect to their status and remuneration,

the government has made moves to ensure this in full realisation that it is the only way it could retain staff in the institutions. As Ogunlade rightly observed,

any government policy on technical education which takes little account of the important issue of attractive wages for those who patronise it is not only unrealistic, but it is likely to fail¹.

The establishment of technical colleges to run advanced craft courses for those to be employed as technical instructors on the advice of the Board was replaced by that of establishing five new Federal Colleges of Education (Technical) to produce NCE teachers to teach JSS Introductory Technology programmes.

Another body concerned with the promotion of technical education is the Industrial Training Fund (ITF) which is used for the training of students who go on industrial attachment to the various industries. Such students include those from the polytechnics and the technology students of the Universities.

1. Ogunlade, F.O.: (1970). op. cit. p. 349.

The co-operation of the various industries was sought in the industrial training given to the students who went to gain practical experience. Before 1977, the training given, for example, to polytechnic students was financed by contributions made by industries. The industries usually contributed one per cent of the fund necessary to train the students. Thereafter the industries were unwilling to continue to carry the financial burden involved. Therefore, in 1977, when the National Board for Technical Education (NBTE) was set up by a Federal Government Decree, the financing of the Industrial Training Programme was taken over by the NBTE. The table below, shows the Federal Government's financial involvement in the training of Polytechnic students by means of grants made available for free technical education in the country.

The Federal government's seriousness to effect the National policy on Education manifested itself in its establishment of the Implementation Committee for the National Policy on Education in September 1977 with the following terms of reference:

1. to translate the policy into a workable blueprint and to develop programmes for the implementation of the policy.

Federal Grants for Free Technical Education for 1977-78
(Paid in 1978-79)

S/No.	INSTITUTION	AMOUNT ₦
1	Yaba College of Technology	234,600
2.	Kaduna Polytechnic	673,950
3.	Calabar College of Tech	117,600
4.	Port-Harcourt College of Science & Technology	149,400
5.	Ibadan Polytechnic	222,600
6.	Auchi Polytechnic	222,000
7.	Enugu Institute of Management & Technology	255,300
8.	Kwara College of Tech.	152,250
9.	Katsina	-
10.	Sokoto	28,600
11.	Lagos State	43,800
12.	Makurdi	26,100
13.	Kano	39,600
14.	Plateau	-
15.	Idah	26,850
16.	Akure	-
17.	Bida	31,650
18.	Owerri	-
19.	Ogun	-
20.	Ramat	-
21.	Yola	-
22.	Bauchi	-
23.	Ilaro	-
TOTAL		₦2,224,300

2. to co-ordinate and monitor the implementation of those programmes developed under the policy.
3. to advise government on and to assist in providing the infrastructural and other requirements for policy implementation and to provide a continuous review and assessment of the aims, objectives and targets of the policy with a view to ensuring the adequacy and continued relevance of the policy (and those programmes developed under it) to our national needs and aspirations, and to propose modifications on any aspects as may be found necessary¹.

These terms were broad enough to give the committee a wide scope within which to operate to give adequate guidelines to implement the government's policy. The Implementation Committee set about its task by carrying out certain preliminaries which were to facilitate the task of evolving the best plan by which the policy was to be implemented. The committee worked hand in hand with the Implementation Task Forces set up in each state on the National Policy simultaneously as the Implementation Committee.

The committee first consulted with the officials of the states on the best way to implement the policy before calling for memoranda from

prominent educators and agencies and also from those Nigerians who attended the 1973 National² Seminar on Education.

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1. Fafunwa, A.B. (1984). op. cit. p. 8.
 2. Ibid. loc. cit.

It held a number of workshops on each level of education - primary, secondary and tertiary - attended by all state ministries of education, the institutes of Education of Nigerian Universities, the Nigerian Union of Teachers (NUT), the Nigerian Educational Research Council, religious organisations and other interested groups. This was in the same spirit of the 1969 Curriculum Conference where all and sundry participated in identifying the country's aims and objectives of education.

The Committee outlined the necessary steps that should be taken in order to implement the new education policy effectively and efficiently. Each aspect of education, including educational services, was catered for with regard to the facilities required for each, the number and types of teachers needed, the kind of management control, and most essentially, the financial implications.

In 1979, the Federal Government issued another white paper titled

Government views on the Implementation Committee's blueprint on 'The Federal Republic of Nigeria National Policy on Education'.

in which the government accepted most of the recommendations made by the Implementation Committee, rejected some and

1. Ibid, loc. cit.

deferred decisions on some others. When the country returned to Civilian rule in October 1979, the government reviewed the 1979 white paper and issued a revised edition of the National Policy in 1981.

The government decided to take various steps to implement the policy by affirming that:

1. Education will continue to be highly rated in the national development plans, because education is the most important instrument of change as any fundamental change in the intellectual and social outlook of any society has to be preceded by an educational revolution.
2. Lifelong education will be the basis for the nation's educational policies;
3. Educational and training facilities will be multiplied and made more accessible;
4. Educational activity will be centred on the learner for maximum self-development and fulfilment;
5. Universal basic education, in a variety of forms, depending on needs and possibilities, will be provided for all citizens;
6. Efforts will be made to relate education to over-all community needs¹.

The Federal Government, in implementing the first phase of the 6-3-3-4 policy, launched the Universal Primary Education in 1976, preparatory to the Junior Secondary School stage which is

1. Ibid, loc. cit.

the most critical because it is the testing ground for the innovation or revolution that is to take place in the Nigerian educational system. Indeed, it is at this stage that the new system would correct the defects in the old system.

Although the system is laudable and identified as being able to ensure maximum benefit for the country, the government is ill-prepared for the implementation of the measures to effect the policy.

The establishment of the National Science and Technology Development Agency in 1977 (NSTDA) was one of the government's means of implementing its policy. It was also responsible for the promotion and development of science and technology including "initiation of policy in research and development activities"¹. It was to oversee the activities of the twenty three research institutes established for agricultural, industrial, medical and natural sciences to ensure full utilisation of the findings for the development of the country².

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1. NSTDA Nigerian National Paper for the United Nations Conference on Science and Technology for Development. Lagos, (1979) p. 5.
 2. (See Appendix I for the list of research institutions in the country and Appendix II for the list of the international agricultural research institutions).

The NSTDA has highlighted some problems which confront Nigeria in her bid to acquire skill in application of technology. One of such problems is the technological dependence of Nigeria on the advanced countries which has stifled the transfer of technology.

In most cases, investment by multinationals has meant a mere relocation of facilities without the transfer of ability to innovate since all the elements of technology required to make a project succeed are most often transplanted in package¹.

The consequences are obvious as the situation intensifies under development.

The indirect consequences are even more difficult to appreciate by the developing countries themselves, because of the factual existence of their under-development which limits their technical capacity,... and worsen the technological plight of the developing countries (Nigeria inclusive)².

As part of the government's realisation of the need to work hand in hand with the other countries in pursuance of its policy enunciated by G.B. Leton in 1979 that

one of the cardinal objectives of the policies of the Nigerian government is to ensure that the nation becomes self-reliant but keeping in view international co-operation³,

1. Ibid. p. 16.

2. Adubifa, O.A. (1982). op. cit. p. 14

3. Amoda, M. and Cyril Tyson: (1979), op. cit. p. 83.

the government regarded the dissemination of information within the country itself as also vital.

Nigeria participated, as it still participates, at Inter-governmental Conferences on Scientific and Technological Information for Development (UNISIST). The NSTDA was charged with the responsibility of setting up a National Science Library and Documentation Centre to ensure the dissemination of science information activities in the country. It was supposed to co-ordinate the information obtained from the various Research Institutes in an effort to make research useful and relevant to the lives of the people. This was to be achieved by making its results easily and quickly available to those who were to transform them into productive ends and ensure mass involvement in the development of science and technology as an essential tool for socio-economic development and political freedom.

To this end, NSTDA intensified efforts in various directions. For instance, it promoted public enlightenment in science and technology; it developed science literature, trained skilled information manpower, participated in relevant international science information programmes and was involved in a host of other activities to ensure keeping abreast of all necessary information for the

development of the country¹.

NSTDA established, managed and published five national journals in science and technology. These are:

Nigeria's Directory of scientific Research 1977;
National Register of Scientific Manpower 1977;
Union Catalogue of Scientific Periodicals in the
Libraries of NSTDA's Research Institutes 1977;
Union List₂ of Scientific and Technical publications
in Nigeria².

Also, it was involved in various activities on the international level such as the:

Organisation (and co-sponsoring with Unesco) of the Workshop for Scientific Editors in Africa, December 1976 and publication of its report;

Publication of the suggestions on the Standardisation of Bibliographic References in Scientific Publications (A guide of authors and editors);

Hosting (and co-sponsoring with Unesco) of the Pilot Project of the Regional Databank on Technologies in Africa;

Encouraging the formation of scientific professional societies whose major activities should include the dissemination of scientific and technical information through conferences and publications, and education of the users community in their various disciplines³.

The essence of effective international collaboration is to enable the country to learn by doing on-the-job⁴.

1. Akande, O. (1978) op. cit. pp 7-8.

2. Ibid. p. 8

3. Ibid. loc. cit.

4. Oragwu, F.N.C. Aspects of Transfer of Technology Research and Documentation of Scientific Information in Amoda and Tyson: 'Technological Development in Nigeria' N.Y. Third Press Int

Part of the NSTDA's activities covered "Regional co-operation in Science Information", since Nigeria places a high premium on regional co-operation among African countries. The Agency hosted the "Unesco-sponsored Regional Databank on Technologies in Africa" and

sent out 'feelers' to several African countries to explore the desirability and possibility of embarking on a few joint projects in scientific and technical information¹.

One such project was the publication of a Science Abstracting Journal for Scientific works published in Africa.

Unfortunately, language difficulties and uncoordinated nature of science information activities within most of the Black African countries were two major limitations to successful negotiations in this direction. In addition, NSTDA was "pushing with other member - countries of West Africa"² co-operation in other areas as:

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1. Akande, O., (1978). op. cit. p. 11.
 2. Ibid. loc. cit.

Regional Databank for Technologies in Africa;
Formation of an Association of Science
Editors in Africa;
Establishment of a regional school for training
scientific composers, typists, printers, proof-
readers, equipment maintenance staff etc.
Publication of an African Abstracting Journal¹

It is unfortunate, however, that what the government wishes to achieve by investing so much in technical education and setting up agencies to ensure that the impact of the output is felt in the development of the nation is not being achieved. As Hanf et. al. rightly observed,

If substantial investments in education are not accompanied by complementary capital investments, education will not yield any profit and these investments will be withheld from alternative, more profitable investment possibilities².

The danger in the case of Nigeria is that the extremely high expenditures for education, in proportion to the total state budgets, are largely unprofitable because they are not matched by capital investments. It is common, nowadays, to find large unemployment of school leavers because there are no places for them to contribute their quota to the development of the nation.

1. Ibid. p. 12.

2. Hanf, Ammann, Dias, Fremerey and Weiland: Education: An Obstacle to Development? Politics Education: Comparative Education Review (Munich), 19(1); 70, February, 1975.

Often, a graduate has to be employed to do a job for which he has not been trained because there is no place where he can utilise the skill which he has acquired.

The government, therefore, needs to re-order its priorities to stop the waste created by untapped human resources by investing in establishing industries so that the country's dependence on foreign goods can be reduced. In addition, there is always the hope that technology transfer can help in this direction. The danger in this is that this can yield good results only if there is technology acquisition and for the impact of this to be felt, depends more on the effort of the party seeking the technology than on the willingness of the party transferring technology. The acquisition of already know technology, the dissemination of technological know-how and the practical utilization of the knowledge are very pressing for Nigeria's development.

CHAPTER SEVEN

CONCLUSION

7.1 Brief of post - 1980 Events

This study can hardly be regarded as complete without a quick survey of the trends in the country's educational policy since 1981 when the revised edition of the National Policy on Education was issued. The five years to date has been crowded with activities culminating in the current implementation of the 6-3-3-4 system of education. The Junior Secondary School system was first introduced in all Federal Government institutions in 1982, while the system has taken off in full swing in the rest of the country in September, 1985. Also, some Universities of Technology were established specifically for training technical manpower.

The full implementation of the system has been delayed till now because of the financial commitments of the government as well as the prevailing global economic situation. In addition, economic problems and political instability have contributed immensely to the delay in ensuring a comprehensive plan to effect the various policy measures.

One only hopes that the fate which befell the institutions such as the Abeokuta Industrial Institution, the Toppo Agricultural School and the Hope Waddell

Training School¹, within the old system should not befall the current system because it was introduced without adequate preparation for its take-off. There is a tendency in this country to introduce changes in any sphere whatsoever, education inclusive, without a pilot test carried out to ensure the viability of such a system. Changes are often introduced only to find that they are unlikely to be viable in the country.

An instance of such a situation arose when the modern mathematics was introduced in the secondary grammar schools in the country in 19 However, Modern Mathematics was later (in 19) replaced by traditional mathematics because the concept of the former were found to be too advanced for students to grasp and also because teachers were not available in sufficient numbers to teach it. With the return to traditional mathematics, all the enthusiasm and efforts of teachers and publishers to produce books on Modern Mathematics suddenly died down.

The 6-3-3-4 system seems to be evolving along similar lines because the first graduates of the JSS in the Federal Government Secondary Schools were turned out in June, 1985, but since no adequate arrangements were made for the graduates to be sent to their various sections of the Senior Secondary Schools, they have had

1. Onabamiro, (1981) op. cit. p.3.

to return to their schools to continue this stage of their education as if they were running the erstwhile system of secondary education.

The introduction of the system throughout the country in September, 1985, has taken off on a haphazard note as the technical teachers who are supposed to execute the system are yet to be trained. Only recently is the government making efforts in this direction by sending about 600 people abroad, to America, on the Technical Teacher Training Plan (TTP)¹ to train as teachers who would man the vocational section of the Junior Secondary Schools. This is like putting the cart before the horse; but it is not surprising at all because this country is fond of executing plans along this line of trying to effect a system without previously planning for the personnel to execute it, and hoping that the system will take care of itself, plodding on until it is met up by the trained personnel.

Of course, this is a vital step, the training of teachers, which should have preceded any other thing at all since it takes a long time to train teachers necessary to effect any plan of this nature.

1. Bonuola, Lade (Ed.): "4 Polys now to award degree in technical fields". The Guardian (Lagos) 6 July, 1985: 3.

In Advanced Countries, a plan of this nature would have matured over some years before being introduced into a few schools where the merits and demerits are evaluated before finally adopting it throughout the country.

All that has happened so far in this country is that a couple of months before the system took off, the nation suddenly awoke to television and radio advertisements of the 6-3-3-4 system as if it were one of the commercial products to be consumed by the nation. Of course, the public seems to understand little or nothing of what the system is about and what it entails.

As recently as the middle of September, 1985, the news was flashed on the television that the ₦2.8 million equipment for the secondary schools were still being awaited while twenty five technical workshops for the vocational training were yet to be equipped for the use of the students. The curricula too are on the way. All these stages should have been catered for long before now¹.

One can only hope that the system survives this teething stage on which as far back as 1981 a note of warning has been sounded so that adequate preparation could have been made to

1. See a, Ozoro (1977): STAN Journal (Lagos), 15(3); 38-61. 1977.
- b. _____ (1982): Manpower for Science and Technological Development. CESAC Occasional Paper 1. (Lagos), 1982.
- c. _____ (1982): Technology in Nigerian Secondary Schools. CESAC Occasional Paper 2. (Lagos), 12-16. 5.5.1. 1982.

ensure a successful take-off. The late Professor Onabamiro, the Chairman of the Implementation Committee for the National Policy on Education, has warned that the type of fate which befell previous educational steps such as "the old Western Region's Secondary Modern School" should not befall the 6-3-3-4 system; but no one heeded the warning¹.

Without being pessimistic, the nation just has to keep its fingers crossed to see how the system will evolve and hope that it does not fail like some aspects of the previous systems of education. People have already started expressing fears for the success of the system although it might be a bit too early to foretell the fate which is likely to befall it.

A critical appraisal of the system by Dr. Adewole of the University of Jos has drawn everybody's attention to the inadequacy and inconsistency of

the new national policy on education as far as technical and technological education and the polytechnics were concerned².

It is felt that the policy "was heavily weighed towards the academic education of the grammar type"³.

1. Onabamiro, O. (1981). op. cit. p. 3.
2. Adewole, A. "6-3-3-4 Not good for technical education". New Nigerian (Lagos) 26 June, 1985: 11.
3. Ibid., loc. cit.

He went further to say that:

although certain portions of the policy stated government's determination to correct the general attitude of the public which regarded technical education as inferior type of education, the policy itself was unable to shake itself off the bias for academic education of the grammar type when it said that after Junior secondary school, "the senior secondary school will be for those 'able' and willing to have a complete six-year secondary education"¹.

The word 'able' has raised the issue of its implying that the

academic education was superior to other types, particularly technical and vocational, since the policy was comparing the 'able' ones with those who were 'unable' and would therefore settle with some technical or vocational training²,

a notion which has been held as far back as the time of the advent of the missionaries in the 1840s when premium was placed on academic education rather than the professional in terms of remuneration. Unfortunately, this notion still plagues the nation at the moment except for the fact that the people themselves have got the scales off their eyes to the realisation of the usefulness of professional qualification. This change in attitude of

1. Ibid., loc. cit.

2. Ibid., loc. cit.

the people has come as a result of their disenchantment with government work, the civil service, which has been rationed of recent and which has awakened people to regard a professional qualification to one which could make one who has such a qualification independent and able to fend for himself in these austere times.

Perhaps, one could end on a note that every effort should be made by the government to ensure that the system is prosecuted with such great care and dedication to rectify the present teething problems so that maximum benefits could be derived from its successful execution.

The government should note that:

an institution that has an inferiority label attached to it cannot flourish in a socially competitive society like ours.

The second is the failure to realise that a pre-vocational school costs far more to establish and maintain than a purely literary grammar school. The third is the failure to decide on a realistic distribution of the financial burden to be borne for this type of education and the fourth lesson is the danger of under-estimating the logistics involved in the training of the teachers who are to handle the pre-vocational courses in these schools¹,

1. Onabamiro, O. (1981) op. cit. p. 3.

which is currently paralysing the effective execution of the system as well as classroom space for the students.

In the final analysis, one can only agree and say it loud with Dr. Tai Solarin that "there is only one significant thing we want in our education for tomorrow - FUNCTION"¹, and hope that the government will ensure that it satisfies the aspirations of the people to acquire 'functional' education which a proper execution of the present system of education could give the nation.

1. Solarin, Tai "The education we want must have technical bias Education yesterday and tomorrow". Daily Times (Lagos) 31 December, 1968: 5.

7.2 Conclusions

The first decade after independence, 1960 to 1970, was characterised by a "conscious effort" on the part of the government to make positive moves towards evolving policy on technical education.

1. Henceforth, education was regarded as an investment. Government increased its financial commitments to the implementation of the current policy on education.
2. There was an acceptance of the need for co-ordinated efforts between the states and the Federal Government.
3. An attempt was made to ensure manpower supply for development by establishing institutions. Numerically intake of students in the Polytechnics in the country for example, has hit over 500,000 target annually.
4. The National Curriculum Conference of 1969 was to transform the provision of education generally and technical education in particular.
5. Finally, the inauguration of the National Advisory Council for Technical Education and Industrial Training in 1962 was aimed at centralising the administration of technical education.

The period 1970 - 1980 witnessed greater activity on the part of the government in implementing its policy on

technical education.

1. Various committees and agencies were set up to oversee certain aspects of the government's National Policy statements on education.
2. Government was involved in the dissemination of information on the acquisition of the knowledge behind technology.
3. The objectives of the government policy were expressly stated as wishing to ensure self reliance for the nation but at the same time maintaining international co-operation.
4. Inculcation of attitude of respect for the role of technology in society and giving attractive remuneration to those involved in technical education especially the teachers. Enhancing the image of technical education which has been regarded as the preserve of drop outs so that new HND holders start on the same salary as graduates.
5. Finally, the establishment of Polytechnics, colleges of education, Universities of Technology as means of ensuring the prosecution of the 6-3-3-4 system currently adopted by the government.

7.3 Recommendations

What however remain are the following recommendations:

1. The need by the government to ensure uniformity in the prosecution of the present 6-3-3-4 policy particularly as it affects technical education. Lack of continuity is one major factor which has bedevilled education in this country so that it seems as if it oscillates without showing continuous forward movement.
2. A conscious effort should be made henceforth to de-politicise education throughout the country irrespective of whether a civilian or military government is at the helm of affairs at any given time.
3. Government needs to ensure retention of teachers, particularly those in technical institutions to see the policy through because teachers cannot be trained overnight.
4. The process of policy formulation needs be adopted as consisting of various activities ranging from forecasting to planning, decision-making and action which should thereafter be followed by evaluation before deciding on the next line of action.

7.4 Suggestions for further Research

1. There is need to consider the evolution of government policy on technical education between 1940 and 1960.
2. A study should be carried out on the government policy on technical education from 1980 to date particularly with regard to the implications of the 6-3-3-4 policy of education for the role of technical educational institutions, especially the Polytechnics, Colleges of Technology and Universities of technology in the present system of education.

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Appendix I

Present structure of research in Nigeria.

Institute	Location	Research sector	Main coverage	1977-78 budget in naira* (000's)
1. National Cereals Research Institutes	Ibadan	Agriculture	Rice, maize and other cereals	10,550
2. Institute of Agricultural Research and Training	Ife	"	Agricultural research of the low-land rain forests zone	5,650
3. Institute of Agriculture Research	Zaria	"	Agricultural Research of Sudan and Sahel-Savannah Zone	7,750
4. National Horticultural Research Institute	Ibadan	"	Fruits and Vegetables	2,970
5. National Root Crops Research Institute	Umudike	"	Cassava, yams and other local tropical root crops	6,430
6. Cocoa Research Institute of Nigeria	Ibadan	"	Cocoa, coffee, kola-nuts, etc.	5,950
7. Nigerian Institute for Oil Palm Research	Benin	"	Oil palm and other palms	5,240
8. Rubber Research Institute of Nigeria	Benin	"	Rubber	3,060

Institute	Location	Research sector	Main coverage	1977-78 budget in naira* (000's)
9. Agricultural Extension and Research Liaison Services	Zaria	Agriculture	Information and extension services	1,280
10. Nigerian Stored Products Research Institute	Lagos	"	Storage and preservation of agricultural products	2,010
11. Forestry Research Institute of Nigeria	Ibadan	"	Forestry and Wildlife	7,240
12. Lake Chad Research Institute of Nigeria	Maiduguri	Water Resources Management	Resources of Natural Inland lakes	1,870
13. Kainji Lake Research Institute of Nigeria	Kainji	"	Resources of man-made lakes	3,820
14. Nigerian Institute for Oceanography and Marine Research	Victoria Island, Lagos	"	Marine and Oceanographic resources	4,650
15. National Animal Production Research Institute	Zaria	Livestock	Livestock production	4,650
16. National veterinary Research Institute	Jos	Livestock	Livestock diseases	7,440

Institute	Location	Research sector	Main coverage	1977-78 budget in naira* (000's)
17. Nigerian Institute for Trypanosomiasis Research	Kaduna	Live-stock	Trypanosomiasis	4,500
18. Leather Research Institute of Nigeria	Kaduna	Live-stock production	Leather utilization	3,730
19. National Institute for Medical Research	Lagos	Human health	Medical research	4,400
20. Federal Institute for Industrial Research	Oshodi near Lagos	Industry and technology	Food science technology and allied research	3,450
21. Projects Development Institute	Enugu	Industry and technology	Engineering Research and products development	4,880
22. Nigerian Building and Road Research	Lagos	Construction, Industry and technology	Road and building materials, design and construction	-
23. National Technology and Development Center	Not yet established	Industry and technology		-

*Derived from NSTDA approved Research Institutes' Recurrent and Capital Budget, 1977-78.

APPENDIX II

Present Structure of the international agricultural research network

	Location	Research	Coverage	Date of initiation	Proposed budget for 1975 (\$000)
International Rice Research Institute	Los Banos, Philippines	Rice under irrigation; multiple cropping systems; upland rice	Worldwide, special emphasis in Asia	1959	8,520
International Center for the improvement of maize	El Batan, Mexico	Wheat (also triticale, barley); maize	Worldwide	1964	6,834
International Institute for Tropical Agriculture	Palmira, Columbia	Beef; cassava; field beans; farming systems; swine (minor) rice (regional relay stations to CIMMRT and IRRI)	Worldwide in low-land tropics, special emphasis in Latin America	1968	5,828
International Institute for Tropical Agriculture	Ibadan Nigeria	Farming systems; cereals (rice and maize as regional relay stations for IRRI and CIMMRT); grain legume (cowpeas, soybeans, lima beans,	Worldwide in lowland tropics as special emphasis in Africa	1965	7,746

Center	Location	Research	Coverage	Date of initiation	Proposed budget for 1975 (\$000)
		pigeon peas); root and tuber crops (cassava, sweet potatoes, yams)			
International Potatoe Center	Lima, Peru	Potatoes (for tropics and temperate regions)	Worldwide including linkages with developed countries	1972	2,403
International Crops Research Institute for the Semi Arid Tropics (ICRISAT)	Hyderabad, India	Sorghum; Pearl millet; pigeon peas; chick peas, farming systems; groundnuts	Worldwide special emphasis on dry semi-arid tropics non-irrigated farming. Special relay stations in Africa under negotiation	1972	10,250
International Nairobi, Laboratory for Kenya Research on Animal Diseases) (ILRAD)		Trypanosomiasis, theileriasis (mainly east coast fever)	Africa	1974	2,170

Center	Location	Research	Coverage	Date of Pro- initia- tion	Propo- budge for 1 (\$000)
International Livestock Center for Africa	Addis Ababa, Ethiopia	Livestock production systems	Major ecological region in tropical zones of Africa	1974	1,885
International Board for Plant Genetic Resources (IBPGR)	FAO Rome Italy	Conservation of plant genetic material with special reference to cereals	Worldwide	1973	555
West African Rice Development Association (WARDA)	Monrovia, Liberia	Regional cooperative effort in adaptive rice research among 13 nations with IITA and IRRI support	West Africa	1971	575
International Center for Agricultural Research in Dry Areas (ICARDA)	Lebanon	Probably a center of centers for crop and mixed farming systems research, with a focus on sheep, barley, wheat and lentils	Worldwide emphasis on the semiarid winter rainfall zone		

Center	Location	Research	Coverage	Date of Propose initia- budget tion for 197 (\$000)
Soybean Improvement (INB30Y)				1,900 (1977)

Source: Nicholas Wade, "International Agricultural Research", Science, Vol. 188, pp. 585-589, Table 1, 9 May 1975, and Robert E. Everson and Yosv Kishev, Agricultural Research and Productivity (New Haven: Yale University Press, 1975), p. 28. in Amoda M. and Cyril Tyson: Technological Development in Nigeria. Third Press Int., N.Y., 1979, pp. 132-137.