

FEDERAL MINISTRY OF EDUCATION

REPORT OF THE VISITATION TO THE NATIONAL MATHEMATICAL CENTRE, ABUJA 2016-2020

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FEDERAL MINISTRY OF EDUCATION VISITATION PANEL TO THE NATIONAL MATHEMATICAL CENTRE, ABUJA

Ref: VP/NMC/21/VOL.1/01 11th June, 2021

Mallam Adamu Adamu

The Honourable Minister of Education,
Federal Ministry of Education,
Federal Secretariat, Phase III,
Central Area,
Abuja.

Dear Honourable Minister,

LETTER OF SUBMISSION OF THE 2021 VISITATION PANEL REPORT ON THE NATIONAL MATHEMATICAL CENTRE, ABUJA

- 1. I hereby submit the Report of the Presidential Visitation Panel to the National Mathematical Centre, Sheda, Abuja.
- 2. Honourable Minister, I received your letter with reference FME/PS/606/C.1/111/183 dated 29th March, 2021 through which I was appointed the Chairman of the Visitation Panel to the National Mathematical Centre, Abuja. On Tuesday, 13th April, 2021 myself and Chairmen of other Visitation Panels and Secretaries were inaugurated.

- 3. The Panel is happy to report the completion of its assignment at the end of the approved 60 days' period.
- 4. The Report of the Panel is in two volumes- the Main Report and the Appendices.
- 5. Members of the Panel express deep appreciation through you to the President, Commander-in-Chief of the Armed Forces, Federal Republic of Nigeria, His Excellency, Muhammadu Buhari, GCFR, Visitor, National Mathematical Centre, Abuja, for the opportunity to serve the Nation on this assignment.
- 6. Honourable Minister, please accept assurances of our highest regards.

Professor Emmanuel Nzegbule

(Chairman, Visitation Panel)

ACKNOWLEDGEMENTS

The Chairman and members of the Panel to the National Mathematical Centre, Abuja, are grateful to the President, Commander-in-Chief of the Armed Forces of the Federal Republic of Nigeria, His Excellency, Muhammadu Buhari, *GCFR*, for the opportunity given to us to carry out this important national assignment.

We appreciate the Honourable Minister of Education, Mallam Adamu Adamu, the Honourable Minister of State for Education, Hon. Chukwuemeka Nwajiuba, the Permanent Secretary, Federal Ministry of Education, Arc. Sonny Echono and the Director, Department of Tertiary Education, Mrs. R.G. Ilyasu, for the confidence reposed on us and for tirelessly providing logistics for the work.

The Panel is profoundly grateful to the Executive Secretary of the National Universities Commission, Professor Abubakar Adamu Rasheed, *mni, MFR, FNAL,* for services rendered to make the assignment a success.

We acknowledge with appreciation the following:

- 1. The traditional ruler, the ETSU of Kwali, Alhaji, Amb. (Dr.) Shaban Audu Nizazo III for his warm reception of the Panel.
- 2. The Divisional Police Officer, Mr. Vitalis Obianom for his kind support and for escorting the Panel, with his team, to visit the traditional ruler.
- 3. The Director/Chief Executive, Professor. Stephen Onah, Principal Officers and other staff of the National Mathematical Centre for their effort and assistance towards the successful completion of the exercise.
- 4. The Administrative and Secretariat staff who assisted members of the Visitation Panel throughout the assignment.
- 5. Mrs. Mary Ibadim, Michael Umar, Christopher Anyaoha, Grace Olorunmaye and Kikelomo Adeyemo for their assistance and placing their services at our disposal.

Finally, the Panel extends appreciation to those that submitted memoranda, such as the professional bodies in Mathematics, Computer Science, Statistics and Physics (MAN, NMS, NCS, NSA and NAMP) those that attended the oral interactive sessions physically or through zoom and all who have in one way or the other contributed to the successful completion of the assignment.

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ACRONYMS AND TERMS

1. NMC 2. IGR	National Mathematical Centre Internally Generated Revenue	
3. VAT	Value-Added Tax	
4. IMO	International Mathematical Olympiad	
5. ISOTPAND	International Seminar on Theoretical Physics and National	
	Development	
6. IMSOPS	International Mathematics and Sciences Olympiad for Primary	
	School	
7. TOR	Terms of Reference	
8. MIP	Mathematics Improvement Programme	
9. COMSATS	Commission on Science and Technology for Sustainable	
	Development in the South	
10. NMCGSCL	National Mathematical Centre Global Services Consultancy Limited	
11.MAN	Mathematical Association of Nigeria	
12.NMS	Nigerian Mathematical Society	
13. NAMP	National Association of Mathematical Physics	
14.NSA	Nigerian Statistical Association	
15.NCS	Nigerian Computer Society	
16.IMSA	International Model Science Academy	
17.NUC	National Universities Commission	
18.ITF	Industrial Training Fund	
19.PAYE	Pay As You Earn	
20.PAMO	Pan African Mathematical Olympiad	
21.ITRG	International Thematic Research Group	
22.TWAS	22.TWAS Third World Academy of Sciences	
23.ICTP	International Centre for Theoretical Physics	
24.WHT	Withholding Tax	
25.TETFund	Tertiary Education Trust Fund	

LIST OF APPENDICES

 Honourable Minister of Education's Address at the Inauguration. Universities Miscellaneous Provisions (Amendment) ACT, 2012. The Laws of the Federation of Nigeria 2004, NMC ACT. National Mathematical Centre Academic Brief. Annual Report. Strategic Plan. Memorandum from the Director/Chief Executive. Memorandum from Chairman of Governing Council. 	
Unions	
 Non-Academic Staff Union of Educational and Association Institutions (NASU). Senior Staff Association of Nigerian Universities (SSANU). Academic Staff Union of Research Institutions (ASURI). 	
Academic Programmes	
 Computer Science. Mathematical Sciences Education. Theoretical Physics. Mathematics. Statistics. 	
Departments/Units	
 Memorandum from Registry Department. Staff on study leave. Memorandum from Bursary. Submission from Centre Library. Report from Works and Physical Planning Department. Memorandum from Procurement Unit. Memorandum from Internal Audit. Memorandum from Academic Planning Unit. Report from Security Unit. Report from International Linkages and Advancement Unit. Memorandum from NMC Consult. Report from Olympiad Unit. Report from International Model Science Academy. 	
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EXECUTIVE SUMMARY

The Visitation Panel was inaugurated by the Honourable Minister of Education, Mallam Adamu Adamu, on behalf of the President of the Federal Republic of Nigeria and Visitor to all the Federal Universities and Inter-University Centres, President Muhammadu Buhari, *GCFR*, on 13th April, 2021. The Panel began work at the National Mathematical Centre immediately by visiting relevant sites, inviting and interacting with stakeholders, soliciting and receiving memoranda and reviewing relevant documents amongst other activities. It worked to address all the ten (10) terms of reference it was tasked with.

On the term of Reference (TOR) 1, which was to inquire into the level of implementation of the white paper on the last visitation report; the Panel noted that there is no White Paper to implement.

For TOR 2, the Panel looked into the leadership quality of each Centre in terms of the roles of the Governing Council, the Vice-Chancellors and other Principal Officers. The Panel found that the Governing Council had a cordial relationship with the Management. The Council approved appointments of External Auditor in 2016, the Bursar in 2017, and Centre Librarian in 2019. A five-year strategic plan (2020-2025) was developed to support the realisation of the mandate of the Centre. The Council developed and sent a draft Bill to the Federal Ministry of Education to amend the NMC ACT. The Council produced a draft Conditions and Scheme of Service for members of staff which were about to be sent to the President for signature and approval. Also, Council has not been able to resolve the issue of re-possession of block of 6 flats at Area 11, Garki, Abuja that belongs to the Centre which was a court case before their tenure. The Panel made the following recommendations:

i. The FME should include in its proposed amendment of the NMC Law, that the Governing Council shall approve the Conditions of Service of the Centre as

- obtained in conventional universities instead of Mr. President, to avoid further delay.
- ii. The Council and the FME should engage the Federal Capital Development Authority to urgently resolve and reclaim the block of 6 flats at Area 11 Garki, Abuja.

The Director/Chief Executive, Professor Onah, and other Principal Officers showed good leadership quality in the day-to-day administration of the Centre. Under their leadership, the Academic Board articulated and delivered various activities (research, trainings, preconference workshops, conferences, colloquiums and Foundation Postgraduate Course (FPC)) in the 5 programmes of the Centre. There were several national and International Olympiad activities, talent hunts, and national competitions. The Centre's management enabled staff development exercises that improved the capacity of both academic and non-academic staff in various departments and units. However, the Centre's management should have reviewed the 28-year old Academic Brief and in many of the years, the Financial Statements were prepared in arrears. It is recommended that:

i. The Academic Board should take immediate steps to review the Academic Brief and make the document reflect the current changes in mathematical sciences.

On TOR 3, the Panel looked into the financial management of each institution including Statutory Allocations and Internally Generated Revenue over the recommended period to determine whether it was in compliance with appropriate regulations. It was observed that the total Personnel and Overhead costs of the Centre were within the approved Statutory Allocation. The Overhead cost was at an average of N63.8m for the period under review. Between 2016 and 2020, the total Capital Grant allocation was N2,036,374, 856.52 while total capital expenditure stood at N1,378,382,936.56.

An amount of N44,600,000 released in 2016 for the Delivery of Research and Teaching Equipment was only 50.2% utilised. N40,000,000 released in 2017 for Capacity Building of High-Level Manpower in Mathematical Sciences was only 50%. The Centre got a special grant of N50,000,000 in 2020 from UBEC for basic training in Mathematics Junior Secondary within 4 Senatorial Districts.

Recommendations made include, that:

- i. The Master Plan of the Centre is still not fully implemented therefore, more capital funds should be allocated to NMC by the Federal Government.
- ii. The Federal Government should reinstate the Centre as one of the TETFund (ETF) interventions recipient institutions.
- iii. The Centre should concentrate more on the development of Mathematics at the Tertiary level. Substantial amount of the Capital Grant expended on training and capacity building should concentrate also on Tertiary level research and training instead of Primary level only.
- iv. The Centre should ensure that capital funds appropriated and released are fully utilised for the execution of projects for which they were approved for.

The Panel observed that the IGR for this period drastically reduced from N639,075,000 to N58,48,155 (92% decrease). The total figures for IGR submitted by the Bursar and the one reported in the Audited Financial Statements do not agree. The Consult still maintains five (5) bankers. The performance of the Consult was unimpressive within the period under review. Total Revenue generated in these years was N69,552,934. The Consult continued to carry huge sums of other liabilities each year which range between N36m to N43m. The Panel recommends that:

- i. The NMC Global Services Consultancy Limited should limit the number of bank accounts it is operating to mitigate instances as defalcation.
- ii. External Auditors should be appointed to audit the 2020 accounts of the Consult.
- iii. The Management of the Consult should improve its revenue drive.
- iv. There should be deliberate actions to ensure the reduction of the cost of running the Consult as its viability is at stake because of the huge losses.
- v. The Management should ensure that all statutory deductions of PAYE, WHT, VAT, NSITF and ITF should be remitted as and when due.
- vi. The liabilities for Salaries and External Auditors Fees are of serious concern and Management should settle all the outstanding and ensure such future payments are made promptly.

The Internal Audit of the Centre conducted both pre and post payment audits of all transactions. The staff of the unit were being trained annually and they also attended professional conferences. The Head of the Unit still retained the title of Chief Accountant after being transferred from Bursary Department and he does not seem to have independence. It is recommended that:

- i. Proper arrangements should be made to advertise and recruit the Head of the Internal Audit Unit to ensure its independence and effective functioning.
- ii. Automated audit software and modern techniques should immediately be deployed and the staff of the Unit should be adequately trained.
- iii. As a matter of urgency, the Centre should put in place a suitable domesticated accounting and internal control manual.
- iv. The Centre should put in place a policy to regulate cash advances and retirements as well as sanctions for noncompliance.

The Bursary Department was not timely in preparing the Financial Statements during the period under review. The accounts for the year 2018 were all finalised in July 2020. There was improvement in 2019 as Financial accounts were finalised in July 2020. The Centre continued operating in deficits for all the years. Beginning with a negative Accumulated Fund of N340,737,000 in 2016, the Centre ended the period with a negative Accumulated Fund of N802,174,000 in 2019 as a result of the huge annual deficits recorded especially, in 2017 (97,110,000) and in 2018 (N241,925,000). This, they explained was because of annual depreciation in assets. It is recommended that:

- i. The Centre should prepare its Financial Statements on time (within 3 months after the end of the year) and there should be no delays in external auditing of the accounts.
- ii. The Council should appoint External Auditors to audit the 2020 Financial Statements of the Centre.
- iii. The Centre should put in place a proper budgetary process, ensure full participation of the internal stakeholders and secure proper Management and Council approval.

- iv. The Centre should guard against violation of the relevant provisions of the Financial Regulations of the Federal Government. Efforts should be made to fully recover the advance made to the widow of the deceased staff. Any unrecoverable amount should be written off.
- v. The Centre should remit the annual Mandatory 25% of IGR to the Federal Government Sub-treasury.
- vi. The Centre should ensure that Statutory deductions are remitted as and when due.
- vii. The Centre should settle all liabilities for Audit Fees and ensure that future payments are made immediately after the conclusion of the audit exercise.
- viii. The Council should ensure that External auditors are immediately replaced after the expiration of an existing auditor's tenure.

To address TOR 4, the Panel investigated the application of funds, particularly the special grants and loans meant for specific projects in order to determine the status of each projects and their relevance for further funding.

In 2020 Universal Basic Education Commission (UBEC) released the sum of №50,000,000.00 (fifty million naira only) to the Centre for basic training in Mathematics Junior Secondary within 4 Senatorial Districts. The total grants in the form of Statutory Allocations from the Federal Government of Nigeria in the form of Capital funds were N1,918,440,414.37. The Total Capital releases annually to NMC was N11,918,440,414.37 or 65.1% of the Total Annual Appropriation.

Within the period of 5 years, Research and Development and Library Books and Journals received only 0.005% and 0.023% of the total capital grant for 5 years (N1,688,593,586.72). The Panel recommended that:

 The Centre should use the same initiative as adopted in finishing the uncompleted Participants' hostel which was started in 2010 to complete the remaining 3 uncompleted projects; ii. The Management should be innovative and mobilise its resources to improve on IGR. The contribution of NMC Global Consult Limited to IGR is almost nothing and should be overhauled to serve the purpose for its establishment.

There are 5 uncompleted/abandoned projects in the Centre which were carried forward from 2011 and 2015 period. The Management of the Centre was flexible as it finished one of the uncompleted projects (The Participants Hostel /Guesthouse). The Panel recommended that:

- i. Since the two TETFund projects (Construction of Printing Press Building and Procurement and Installation of Press Machines and Equipment) have joint use, and collectively over 70% of the original contract sum has been paid out, the Centre with the NUC should engage the TETFund to bring the project to completion to avoid wasting the fund already committed to the projects;
- ii. The Management should re-finance the construction of Roads and Storm Water Drain project and bring it to completion since it is a key project reflected in the Centre's Master Plan.
- iii. The Council should ensure that outstanding matters delaying payments to contractors who have completed their projects are resolved (Table 6.5).
- iv. The Centre should work with the FME to ensure that adequate funds are appropriated to finish the two remaining uncompleted projects (namely: Construction of Participants' Hostel and Construction of 500 seater capacity auditorium with offices 22/5/2019). Otherwise, these projects may be abandoned because of very low grant releases.

During the period of 2016 and 2020, the Council of NMC developed a 5-year Strategic Plan 2020-2024 titled "Expanding the Frontiers of Training and Research in the Mathematical Sciences" to further give the Centre a sense of direction.

The Council should ensure that the Strategic Plan (2020-2024) is courageously implemented according to the implementation plan in order to advance towards achieving the Master Plan and attaining the mandate of the Centre.

On TOR 5, the Panel examined the adequacy of the staff and staff development programmes of the Centre. Only 8 staff were recruited in the period of 2016 to 2020. Over 80% of the staff of the Centre are non-academic, mainly made up of staff from the Registry, the Bursary and Works & Physical Planning units. This does not agree with the NUC's approved Academic: Non-Academic ratio of 60:40. It was found that all academic programmes, except Mathematical Sciences, were highly deficient in staff. Also, half of the staff in Mathematics Programme had their degrees in Biology, Chemistry or other subjects, but not Mathematics. The lingering problem of unqualified staff recruited between 2011 and 2015 still persisted. A total of 118 staff were recruited in that period which was made up of junior academic and non-academic staff with only one professor. This quality of employees cannot contribute positively towards achieving the Centre's core mandates particularly, advanced research and training in Mathematical Sciences. The following were recommended:

- i. That the Centre should conduct Staff Auditing and Right Placement to address the issue of unqualified staff posted to the Mathematics Programme;
- ii. That academic programmes need proper funding to enable it to conduct advanced research, postgraduate lectures and conferences in the programme;
- iii. The Centre is advised to recruit active and productive Professors or Chief Research Fellows in all the 5 academic programmes to provide the needed leadership in advanced research and training at the tertiary level;
- iv. The conditions of service of the Centre should be made attractive over that of the conventional federal universities in order to attract the best brains to serve in the Centre;
- v. NUC and TETFund should reinstate the Centre as a TETFund beneficiary institution. Its delisting was in error and should be rescinded because NMC's advanced research and development mandate covers five (5) distinct disciplines: Mathematics, Computer Science, Statistics, Theoretical Physics and Mathematical Sciences Education at tertiary education level. Therefore, NMC is not a monotechnic, which was the reason given for its delisting by TETFund;

vi. The Centre should consider out-sourcing non-essential services in line with Government's directive where convenient, to save cost while maintaining a small team of quality academic and support staff. The Centre should work in close collaboration with mathematical sciences departments in the universities and equivalent tertiary institutions in Nigeria and abroad to function effectively.

The Panel addressed TOR 6 by determining the relationship between the Centre and the various statutory bodies it interacts with according to its law for purposes of supervision, planning, finance, discipline, guidance and any other relationship (i.e. Governing Council, NUC, and the Federal Ministry of Education (FME). It was observed that a 14-man Governing Council had its inaugural meeting on 23rd April, 2018, with Professor Buba Bajoga as the Chairman. The Council within the period recruited the Centre's Librarian, Bursar and Deputy Director. Council also examined the Report of and approved the annual appraisal of staff of the Centre. The Council began to remedy some of the anomalies created by previous Councils (2011-2015) that recruited mainly staff at the lower cadre by approving 58 Study Leave and fellowships to staff to enable them to obtain M.Sc. and Ph.D. degrees. Annual Reports for 2017/18 and 2019/2020 were produced and approved within the period. The Council appointed Sada, Idris & Co as External Auditor in 2018 who cleared the backlog of the 2015, 2016 and 2017 annual audit of the Centre's accounts and presented them for approval in 2019. The Council guided the Management of NMC on the Court cases involving the Centre and some entities. The Council was briefed on the disappearance of the Certificate of Occupancy in respect of a block of six flats (at Area 11, Garki, Abuja) belonging to NMC.

The NMC maintained a good relationship with the Federal Ministry of Education as shown by the NMC's participation in review meetings hosted by the FME. The annual budget (expenditure and income) of NMC in 2016, 2017, 2018, 2019 and 2020 were scrutinised by the Ministry.

The Centre also maintained good relationship with the professional bodies. There were three representatives of the Professional bodies in the Council in compliance with the Act establishing the Centre. The Nigerian Mathematical Society (NMS), Statistical Society of Nigeria, Mathematical Association of Nigeria, and Association of Computer Science were also supported by NMC in hosting their annual meetings.

With the repeal of ETF and establishment of TETFund there was revision of the category of institutions qualified to receive funding from the scheme by the TETFund in collaboration with the NUC in 2012. TETFund delisted the Centre from the institutions benefitting from their grant in 2012. This stalled the construction of a printing press building and installation of printing press equipment at the Centre. By the mandate of NMC, it is expected to provide leadership to the above mentioned programmes at both tertiary and foundation levels. Stakeholders expected that the quality of activities at the Centre should always be above those in any other tertiary institutions in the country. The Panel recommended that:

- The Representative of the NUC in the Governing Council of NMC should be active in providing stronger communication and relationship between the two organisations to foster synergy.
- ii. The Professional bodies should be carried along in developing annual activities of the Centre to provide better collaboration for development of advanced research and training.

For TOR 7, the Panel examined the law establishing the university including the relationship between the various internal organs, units, and offices and indicated the ways the law has been observed by the competent authorities. The Panel also suggested modifications to the law.

- i. The Centre and the FME should review the tenure of the Director to a single term of five (5) years as applicable to Vice-Chancellors of Universities and to bring the NMC Act to be in tandem with the Miscellaneous Act of 2012 through an amendment of the NMC Act.
- ii. Similarly, it is advised that the Centre and the FME should define the qualification for the position of the Director in the proposed amendment Act to reflect that the

candidate shall be a Professor or its equivalent in Mathematical Sciences (not only mathematics).

- iii. The FME should ensure that the Offices of the Registrar, the Bursar and Controller of Works and Physical Planning as key Officers are provided in the Law establishing the Centre at the next amendment to ensure independence and clarity of functions.
- iv. The post of Controller of Works and Physical Planning should be advertised internally and externally and a qualified candidate recruited with defined job description.
- v. The Director should be advised to always adopt official channels in communicating with the Unit to reduce conflicts and disagreements as well as to streamline staff responsibilities.

On TOR 8, the Panel traced the historical evolution of the university and took stock of its achievement and problems as well as its style and direction. It was noted that the Centre was created to develop appropriate initiatives and resources of international standing for reawakening and sustaining interest in the mathematical sciences at all levels in Nigeria, and also as an adequate response to the dramatic decline in the production of teachers and specialists in the mathematical sciences at all levels.

NMC maintained close relationship with Higher Education Institutions (HEIs), especially the universities. The Centre made effort to deliver on its mandate by re-launching Foundation Postgraduate courses and conferences. This attempt did not go far because of lack of funds. The Panel found out that the Centre had deviated from its mandate of creating a resource centre of advanced research in Mathematical Sciences (Mathematics, Physics, Computer Science and Statistics) and primary education has been given undue attention. Few Foundation Postgraduate Courses and Conferences took place in this period and there was no visiting programme within the period. It is recommended that:

i. The NUC and the FME should ensure that proper funding and attractive conditions of service are approved at the Centre to enable it to attract the right calibre of scientists in all areas of Mathematical Sciences.

In TOR 9, the Panel examined the general security in the Centre and how the Centre has dealt with it and recommended appropriate measures. The Panel found out that the Management and Security Unit were trying to ensure adequate security of life and property within the NMC campus but the Centre's 127.4 hectares of land is not fenced. As a result of this, entry into the Centre is uncontrolled, creating many security challenges with only 19 personnel in the Unit. The security unit lacked operational communication systems, such as secret cameras, fire alarms, walky-talky, GSM handsets and security vehicles. The Centre witnessed encroachments into its property by the neighbouring community and herdsmen that occupy portions of the Centre's land from where they carry out uncontrolled grazing. The following were recommended, that:

- i. As a matter of urgency, fencing the entire Centre should be carried out as a priority to reduce the security challenges in the Centre.
- ii. A Security Committee should from time to time review the security situation between NMC and her neighbours and the Security Unit should be better equipped with a patrol vehicle and communication gadgets.

Under TOR 10 which required the Panel to examine the processes and structures of discipline of students in each university in line with due process of the rule of law, the Panel noted that the Centre has no students.

CHAPTER ONE

INTRODUCTION

1.1 Inauguration of the Visitation Panel

The President, Commander-in-Chief of the armed forces of the Federal Republic of Nigeria and Visitor to the Federal Universities and Inter-University Centres, His Excellency, Muhammadu Buhari *GCFR*, approved the constitution of Visitation Panels to 38 Federal Universities and 4 Inter-University Centres.

Consequently, the Honourable Minister of Education, Mallam Adamu Adamu, ably represented by the Permanent Secretary, Architect Sonny Echono, inaugurated the Visitation Panels on 13th April, 2021, at the Idris Abdulkadir Auditorium, National Universities Commission, Abuja.

The purpose of the Visitation is to examine the activities of the institutions with emphasis on the area of governance, management of finances, quality assurance, academic standards, relationships between management, staff and students, condition of physical infrastructure and instructional facilities. After checking the records, the Presidential Visitation Panels are also to make recommendations for the Government to make informed decisions to correct identified problems in the institutions. The inauguration of the Visitation Panels was attended by the Chairmen and Secretaries of the various panels while the other members of the Panels connected to the ceremony through the zoom link provided by the Federal Ministry of Education.

The last Visitation exercise covered the period 2004 - 2010. The Panels were given 60 days, starting from the day of inauguration to complete the assignment and the exercise was scheduled to cover the periods 2011 - 2015 and 2016 - 2020.

1.2 **Composition of the Panel**

The following persons from the academia and public sector were appointed as members of the Visitation Panel to the National Mathematical Centre, Abuja:

1. Professor Emmanuel Nzegbule

Chairman

Professor of Ecology and Environmental Management Michael Okpara University of Agriculture, Umudike.

2. Professor Gregory Maksha Wajiga

Member

Professor of Computer Science Modibbo Adama University, Yola.

3. Professor Aisha Abubakar Haliru

Member

Professor of Mathematics Bayero University Kano.

4. Professor Ahmed Modu Kumshe,

Member

Department of Accounting
University of Maiduguri
Currently, Registrar/Chief Executive
The Institute of Chartered Accountants of Nigeria (ICAN).

5. Mrs Olufunso Owasanoye

Member

Executive Director Human Development Initiatives, Lagos.

6. Engineer Aminu Usman Halilu

Member

Former Member of Governing Council Alvan Ikoku Federal College of Education, Owerri.

7. Dr. Margaret- Mary Ekenna

Secretary

Deputy Director National Universities Commission, Abuja.

1.3 Terms of Reference

- To inquire into the level of implementation of the White Paper on the last Visitation report;
- ii. To look into the leadership quality of each University in terms of the roles of the Governing Council, the Vice-Chancellors and other Principal Officers;
- iii. To look into the Financial Management of each Institution including Statutory
 Allocations and Internally Generated Revenue over the recommended period
 and determine whether it was in compliance with appropriate regulations;
- iv. To investigate the application of funds, particularly the special grants and loans meant for specific projects in order to determine the status of such projects and their relevance for further funding;
- v. To examine the adequacy of the staff and staff development programmes of each University;
- vi. To determine the relationship between the University and the various statutory bodies it interacts with according to its law for the purpose of supervision, planning, finance, discipline, guidance and any other relationship (i.e., the Governing Council, NUC, and the Federal Ministry of Education (FME);
- vii. To examine the Law establishing the University including the relationship between the various internal organs, units, and offices and indicate the ways the law has been observed by the competent authorities and also suggest any modifications to the law;

- viii. To trace the historical evolution of the University and take stock of its net achievement and problems as well as its style and direction;
- ix. To examine the general security in the University and how the University has dealt with it and recommend appropriate measures; and
- x. To examine the processes and structures of discipline of students in each University in line with due process of the rule of law.

CHAPTER TWO

METHODOLOGY

The Visitation Panel adopted the following procedures to carry out the assignment:

2.1 Operational Strategies

The exercise commenced on 19th April, 2021. On arrival the Panel members met to work out the modalities for a hitch-free exercise. Appointment letters of the panel members and some documents required for the assignment, such as the White Paper and the Honourable Minister of Education's speech containing the Terms of Reference, were distributed to the members.

2.2 Meeting with the Director/Chief Executive and the Principal Officers

The Panel members arrived at the National Mathematical Centre on 20th April, 2021. On arrival, the Chairman and the Panel members were warmly received by the Director and the Principal Officers.

In his opening remarks, the Chairman of the Panel, Professor Emmanuel Nzegbule introduced the Panel members. He informed the gathering that the Presidential Visitation Panel came at the instance of the President and Visitor of all the Federal Universities and Inter-University Centres in Nigeria, His Excellency, Muhammadu Buhari *GCFR*.

The Chairman explained the main objectives of the exercise. He further reiterated that the Visitation was not a witch-hunting exercise, but a good initiative done every five years by the Federal Government to determine whether the institutions operated according to the mandate by which they were established and make recommendations to the Visitor for improvement of the system. The exercise, the Chairman said, would cover activities from 2011 - 2015 and 2016-2020.

Thereafter, the Director/Chief Executive of the Centre, Professor Stephen Onah, expressed his gratitude to President Muhammadu Buhari, the Minister of Education and

Stakeholders of the Education Sector, the Federal Ministry of Education (FME) and the National Universities Commission (NUC) for the visitation panel. He said he was particularly happy because the Visitation would expose and probably solve the Centre's problems. Professor Stephen Onah assured the Panel of the Centre's cooperation for a smooth and successful exercise. The Panel then retired to the Secretariat at the NMC Guest house to commence the work.

2.3 Call for Memoranda

Staff of the National Mathematical Centre, interested parties and members of the public were invited to submit memoranda or information to help the Panel achieve their objectives. The call for the submission of memoranda was displayed around the Centre. The Panel also met with the leadership of the Non-Academic Staff Union (NASU), Senior Staff Association of Nigerian Universities (SSANU) and Association of Staff Union of Research Institutes (ASURI). Members of the Panel urged them to submit memoranda on behalf of their Unions regarding any of the advertised Terms of Reference and popularise the Visitation exercise in their social media platforms.

The Panel placed radio announcements in Love FM station to inform the general public about the purpose of the Visitation Panel and to call for memoranda concerning the activities of the National Mathematical Centre. The radio announcements were made for three days.

2.4 Courtesy Visits:

The Panel paid courtesy visits to the Divisional Police Officer (DPO) of Kwali, SP. Vitalis Obianom and the traditional ruler, the Etsu of Kwali, Alhaji, Amb. (Dr) Shaban Audu Nizazo III. After a cordial reception at the DPO's office, the Panel proceeded to the Etsu's palace. The traditional ruler and members of his cabinet received the Panel with warmth. Thereafter, the Chairman explained the purpose of the Visitation Panel. He requested that the members of the community with information on the activities of the National Mathematical Centre should submit them to assist the Panel in their assignment.

In his response, the Etsu informed the Panel that Mathematics is the mother of the whole sciences and the key to science and technology development. He advised the Government not to ignore researches carried out by Professors in Nigerian universities. He encouraged them to implement the recommendations gathered from the Visitation Panels reports to improve the education system.

The Panel made attempts to visit the Kwali Local Government Chairman but unfortunately, he was bereaved and could not receive the Panel.

2.5 Inspection of Facilities

The Panel undertook an inspection of facilities in the National Mathematical Centre, such as the Mental Arithmetic and Mathematics Laboratory, Computer Unit, Computer Laboratory, buildings housing the five programmes, the Centre Library, Recreation Centre, Visiting Researchers' Village, Departments, Project sites, Participants' Hostels, the Consult, Bursary and the Medical Centre.

2.6 Interviews

The Panel had interviews with individuals and groups that submitted memoranda, such as the Governing Council Chairman, the Director/Chief Executive, the Principal Officers, the Academic Board, Coordinators of Programmes, Controller of Works and Physical Planning, General Manager of the Global Services Consultancy Limited, the Unions and other individuals. All oral interviews were recorded. Furthermore, the Panel utilised the Governing Council and Academic Board minutes, Financial Regulations book, the Government White Paper on the last visitation exercise (2004-2010), the National Mathematical Centre Act and several other documents for the exercise.

2.7 The Report

The Panel's Report is submitted in two volumes. Volume 1 is the Main Report which includes the Terms of Reference, Summary of Findings and Recommendations, while Volume 2 is the Appendix.

CHAPTER THREE

TERM OF REFERENCE 1

To inquire into the level of implementation of the white paper on the last visitation report of the 2006 -2010

3.1 Explanation:

The Last Presidential Visitation Panel to the National Mathematical Centre was for the period of 2004 to 2010. The White Paper of its Report should be implemented between 2011 and 2015 by the then administration at the National Mathematical Centre, Abuja.

The Panel observed therefore, that there is no White Paper to implement.

CHAPTER FOUR

TERM OF REFERENCE 2

To look into the leadership quality of the NMC in terms of the role of the Governing Council, the Directors and other Principal Officers

4.0 Preamble

The National Mathematical Centre was established on 1st January, 1988 but the Decree 40 that gave it legal backing was promulgated on 12th December, 1989 (now Act CAP No. 58 of 2004). The Part 1 section 2 Subsection (i) of the ACT states that "There is hereby established for the Centre a Governing Council (hereafter in this Decree referred to as "the Council") which shall be responsible for directing the affairs of the Centre. In other words, the Council is to carry out oversight functions in the Centre. The Governing Council is statutorily allowed to meet quarterly but may hold emergency meetings if the need arises but not more than eight meetings in a year. The tenure for each Council is four years.

In compliance with the Law, the Governing Council during the period under review, which was the 5th Council of the Centre held its inaugural meeting on 23rd April, 2018, with Professor Buba Bajoga as the Chairman. The Chairman of the 5th Council was appointed in 2017, one year before the other members of the Council. The members of the Governing Council were:

Table 4.1: List of members of the Governing Council (2018 –April 2021)

	Names	Position/ Affiliation
1.	Professor Buba Bajoga	Chairman
2.	Professor G.O.S Ekhaguere	Representative of Professional bodies - Mathematical Sciences
3.	Professor David O. Adewunmi	Representative of Professional bodies - Mathematical Sciences

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4.	Professor Gregory Wajiga	Representative of Professional bodies -
		Mathematical Sciences
5.	Professor Osilike	Representative of Nigerian Academy of Science
	Okwuchukwu	
6.	Professor Garba Goje Uba	Representative of Nigerian Universities
7.	Professor Romanus Keke	Representative of Nigerian Universities
8.	Professor Hadiza Galadanci	Representative of the National Universities
		Commission
9.	Mrs. Patricia Okengwu	Representative of the Federal Ministry of
		Education
10	Dr. Mrs. Amina Shamaki,	Representative of the Federal Ministry of Science
	mni	and Technology
11.	Dr. Mathew Otafugebe Adaji	Representative of Nigerian Polytechnics
12.	Ishaku Yaraki	Representative of Nigerian Colleges of Education
13.	Professor Stephen E. Onah	Director/Chief Executive
14.	Mallam A.M. Biu	The Registrar NMC (Secretary)

4.2 Findings

4.2.1 The Leadership Quality of the Governing Council

The 5th Council had a full complement of its statutory membership with qualified and experienced professionals. The Governing Council had regular statutory meetings during its first two years with a good attendance of members. However, the Corona Virus pandemic hindered the 2020 physical meetings making the Council to introduce virtual meetings. So, the last quarter of 2020 meetings were done virtually.

The Council had cordial relationship with the Management. Through interactions with the Management, the Panel discovered that the Council was firm and focused on discharging its duties. In carrying out its functions, the Council demonstrated commendable leadership qualities. In its tenure, the Council approved appointments of External Auditor in 2016, the Bursar in 2017, and Centre Librarian in 2019. They also examined and approved the promotion of qualified staff of the Centre annually. The Council guided the

Management to emphasise more on advanced research activities as stated in the mandate of the Centre.

The 5th Council produced a five-year strategic plan (2020-2025) which is the first of its kind since the establishment of the Centre to support the realisation of the mandate of the Centre. The Council approved the re-assignment of academic staff in non-core mathematical sciences discipline to Departments where they may be found useful to reduce redundancy.

The Council advised the Management to continue to observe due diligence and strict observance of provisions of the Procurement Act in dealing with contractors. They also monitored various projects going on in the Centre to ensure quality assurance. The 5th Council began the process of reviewing/ amending the NMC ACT in order to reposition the Centre for greater productivity by developing a draft Bill which has been sent to the Federal Ministry of Education. Furthermore, the Council stopped the Centre's participation in the running of the MSc Financial Mathematics in collaboration with the University of Abuja in compliance with the directives of the previous White Paper.

The Panel noted that the Council produced a draft Conditions and Scheme of Service for members of staff which were about to be sent to Mr. President for signature and approval. Also, the Council has not been able to resolve the issue of the possession of block of 6 flats at Area 11, Garki, Abuja that belongs to the Centre which was a court case before their tenure. However, they are still following up on that case and other cases of the Centre in the court.

In general, the Council's working relationship with the Management was cordial. Through interactions with the Management and members of staff, the Panel learnt that the Council earned a lot of respect due to their achievements and contributions to move the Centre forward.

4.2.1 Recommendations

- i. The Governing Council should be empowered to sign the draft Conditions of service as obtained in conventional universities rather than Mr. President to avoid delay by amending the Act.
- ii. The Council and the FME should engage the Federal Capital Development Authority to urgently resolve and reclaim the block of 6 flats at Area 11 Garki.

4.2.2 Leadership Quality of the Management

The Principal Officers of the Centre are the Director/Chief Executive, the Deputy Director, the Registrar, Bursar and the Centre Librarian. The Management of the Centre has the responsibility to proper organisation and implementation of the vision and mission of the Centre. To achieve the vision of the Centre, which is "to be a world-class institution for training, learning and research in the mathematical sciences and their applications to development," the Principal Officers interacted well and had a very cordial relationship with the Council. They supported the Council by submitting reports and memoranda during Council meetings. The Principal Officers regularly attended the meetings and readily implemented all directives from the Council. The leadership qualities of the Director/Chief Executive and other Principal Officers were revealed through their activities in the Centre.

4.2.2 (i) The Director/Chief Executive

The Director/Chief Executive, Professor Stephen E. Onah, assumed office on 1st August, 2016 for a five-year tenure. He had a cordial relationship with the Council and other Principal Officers. It was his good leadership approach that led to the completion of Participants' 24-room Hostel, Phase 2 which was uncompleted since 2010, completion of the Sports and Recreational Centre that was abandoned for some years, installation of Solar Power as an alternative source of energy for the Administrative building; Library and Computer Laboratory and provision of campus-wide internet connectivity and other capital projects.

The Director working with the Council developed a Strategic Plan 2020-2024. More of the Director/Chief Executive's quality leadership was seen in the delivery of academic activities by being the Chairman of the Academic Board of the Centre. Under his leadership, the Centre organised research, trainings, pre-conference workshops, conferences, colloquiums and Foundation Postgraduate Course (FPC) in the 5 programmes of the Centre. These activities were endorsed by the Academic Board, which handles all academic matters before forwarding them to the Council for approval. The Centre organised National Mathematics competitions for university students regularly. There were several activities and competitions on local and international Olympiad during the period under review.

The Panel noted some ongoing and completed research activities in the programmes of the Centre, such as research on Big data, Modelling and Applications to security problems. The Director /Chief Executive set up research groups and the Centre embarked on a private sector partnership initiative to implement and deliver some of its programmes.

During the period under review, the Centre sent out competitive proposal/concept notes to TETfund, Third World Academy of Sciences (TWAS) and COMSATS Centre for Climate and Sustainability (CCCES) for NMC-NOUN research collaboration and NMC-International Thematic Research Group (ITRG) OF COMSATS for externally funded research. There were also proposals for internally funded research.

The Centre organised talent hunts and national competitions. The competitions served as the avenue for selecting the best secondary school students to represent Nigeria in International Olympiads in Mathematical Sciences.

However, there were complaints from the staff of epileptic public power supply and dilapidated buildings and equipment in the Centre.

In addition, the Panel noted that the Centre had not reviewed the academic brief produced 28 years ago. This is not a comfortable situation if the Centre is to advance in achieving its mandate.

4.2.2(i) Recommendation

i. The Academic Board should take immediate steps to review the Academic Brief and make the document reflect the current changes in mathematical sciences.

4.2.2 (ii) The Deputy Director

In 2019, the Deputy Director, Professor Peter Onumanyi, was nominated by the Academic Board to serve for a 2-year tenure. The Deputy Director served in that capacity from 2014 to 2016. He later became the Coordinator of Mathematics Programme. His nomination and approval for the post of Deputy Director again was a confirmation of his good leadership qualities. The Deputy Director was part of the Management that approved and gave direction to both physical and academic activities. He also took charge of the Centre in the absence of the Director/Chief Executive.

4.2.2 (iii) The Registrar

The Registrar, Mallam Aliyu Mohammed Biu was the Acting Registrar from September, 2012 and was later appointed as the substantive Registrar of the Centre, for a single term of five (5) years with effect from 13th November, 2014. On the expiration of the tenure on 13thNovember, 2019, the Council approved a one-year extension of his services. The extension ended on 13th November, 2020 and the most senior staff in the Registry, Mr. Bernard Azuka, was appointed as the Acting Registrar. The Registrar was the custodian of the seal of the Centre. He had a good working relationship with the Council and other Principal Officers and his leadership qualities were evident in the extension of his services by the Council and his activities in the Centre.

The Registrar participated in the formulation and execution of administrative policies. Additionally, by virtue of his position as the Registrar, he advised the Management on administrative and staff matters under the following sections; Establishment, Governing

Council and General Matters, Legal Matters, Welfare and Pension Matters, and Training and Staff Development. The Panel observed that the nomenclature of Registrar is not in the Act and there has not been a written Staff Development Guidelines for staff trainings and study-leave.

4.2.2 (iii) Recommendation

i. The Office of the Registrar as one of the Principal Officers should be provided in the Law establishing the Centre at next amendment.

4.2.2 (iv) The Bursar

The Bursar of the National Mathematical Centre, Mallam Mohammed A. Ibrahim, was in acting capacity from August, 2015 to 6th November, 2018 when he was appointed the substantive Bursar for a 5-year tenure.

The Bursary was computerised in 2013 and under the leadership of the former Bursar, which improved the efficiency of the Department. The capacity of the Bursary has been sustained by Mallam Mohammed A. Ibrahim. The bursary staff were trained internally and externally for efficient job performance. The Department witnessed improvement in job performance. For instance, they developed a template that helped them in budget preparation, budget control, maintaining the financial records and producing financial Statements for auditing and Management decisions. They successfully completed the department's local area network, which contributed to the ease of interconnectivity of the various bursary functions. They also enrolled in the Integrated Personnel Payroll Information System (IPPIS). However, the Bursary department lacks adequate Information Technology infrastructure and it was observed that the nomenclature of Bursar is not in the Law establishing the NMC.

4.2.2 (iv) Recommendation

i. The Office of the Bursar as one of the Principal Officers should be provided in the Law establishing the Centre at next amendment.

4.2.2 (v) The Centre Librarian

The Librarian of the Centre is another Principal Officer whose leadership role was seen in her effort to provide relevant books and journals to promote research in the mathematical sciences. The Centre Librarian, Mrs. Victoria Fadeyi-Akinwale, was the acting Librarian from August, 2015 to November, 2018 when she was made the substantive Librarian for a five-year tenure. Her leadership role has made the Centre Library provide bibliographic details to electronic books. The Centre Library integrated e-books acquired from Elsevier into their institutional repository and has been linked with the local area network in the Centre so that members of staff and participants can access the library collection from anywhere within the Centre. They also increased the subscription to local mathematical sciences journals.

During the facility visit, the Panel observed that most of the books in the Library are outdated. Also, the Library has only 10 computers and there are no subscriptions to relevant databases. There are no Mathematical reviews in the Library. Furthermore, it was observed that the Library is short-staffed. There are only 5 staff, 3 professional Librarians and 2 para-professionals. The Library does not have e-books in the 5 programmes in the Centre and the erratic power supply interrupts the Library's services.

During the interaction, the Panel noted that the former Centre Librarian has been posted to one of their zonal network offices after her tenure.

4.2.2 Recommendations

i. The Centre should acquire relevant and current books and journals for the Library while Information Communication Technology (ICT) with dedicated internet connectivity, as well as desktop computers and laptops, should be procured for the Library in order to position it to serve as a Resources Centre for advanced research and knowledge sharing in mathematical sciences. ii. The Library should be given enhanced budgetary allocation to enable it to subscribe to relevant subject databases, such as Science Direct, ProQuest, Ebscohost, Emerald and purchase international Mathematical reviews or the electronic version of MathSciencenet and E-books, which are expensive but relevant for the Centre.

CHAPTER FIVE

TERM OF REFERENCE 3

To look into the financial management of each institution including statutory allocations and internally generated revenue over the recommended period and determine whether it was in compliance with appropriate regulations

5.1 Preamble

The TOR looks at the Financial Management of the Centre. This was achieved under the following headings:

- i. Statutory Allocations
- ii. Internally Generated Revenue (IGR)
- iii. NMC Global Services Consultancy Limited
- iv. Internal Audit Unit
- v. Bursary Department
- vi. External Auditors

The Panel examined NMC's Mandate/Warrant for the Release of Subvention - Recurrent and Capital, its approved Budget, Expenditure Profile, Appropriation and the Special Grants. It reviewed the Annual Financial Statements of the Centre, the External Auditors' Reports and the Management Letters on the Statutory Audits. The Panel also interviewed the principal officers.

5.2 Findings

5.2.1 Statutory Allocations

i. Personnel Cost:

The total Personnel cost of the Centre was within the approved Statutory Allocation. The Statutory Allocation made for Personnel cost appears not to be consistent with the staffing of the Centre. Personnel cost grew slightly but there was a reduction in the number of staff. The staff strength decreased by about 8% but Personnel cost increased by 21%.

Table 5.1: Summary of Personnel cost and total number of staff

Year	Personnel Cost	Total Number Staff
2016	428,874,815.09	285
2017	419,993,402.67	277
2018	454,524,442.38	264
2019	469,357,720.53	254
2020	558,078,422.21	251
TOTAL	2,330,828,802.88	

ii. Overhead Cost:

The total Overhead cost of the Centre was within the approved Statutory Allocation. The Statutory Allocation made for Overhead appears to be consistent with the overheads of the Centre. However, Overhead cost was at an average of N63.8m for the period under review.

Table 5.2: Summary of Overhead Cost

Year	Overhead Cost
2016	63,209,276.51
2017	53,051,497.05
2018	66,059,811.34
2019	73,377,899.62
2020	63,499,436.65
TOTAL	319,197,921.17

Of the total Overhead cost of N319,197,921.17 for the period under review, major cost items were Motor Vehicle Operating Expenses N32,918,035; Motor Vehicle Repairs & Maintenance N28,674,202, Council Expenditure N26,547,299; Transport & Travelling N21,480,139; and Security System Expenses N20,057,550.

iii. Capital Grant:

Capital Grants are targeted at the development of physical infrastructure facilities. The Centre has still not been able to adequately implement its Master Plan due to underfunding. For the period under review the total Capital Grant allocation was N2,036,374, 856.52 while total capital expenditure stood at N1,378,382,936.56.

Table 5.3: Summary of Capital Expenditure Profile

Year	Capital Fund
2016	181,292,137.47
2017	223,431,169.85
2018	299,843,722.19
2019	531,756,143.43
2020	142,059,763.62
TOTAL	1,378,382,936.56

Key Projects Executed within this period include:

- i. Construction of 500-Seater Auditorium N219,990,357.67
- ii. Nationwide Mental Arithmetic Programmes (SDG Project) N164,193,825.00
- iii. Campus wide Internet Connectivity N162,245,717.82
- iv. Construction of Participants Hostel N157,741,169.87
- v. Olympiad and Training/Manpower Development in Mathematical Sciences N155,385,123.08

In the year 2020, an amount of N21,705,700 appropriated and released for Store Complex and Procurement Offices in December 2020 was not utilised (0% Utilisation). It was reported that the fund was released in December 2020.

An amount of N44,600,000 released in 2016 for the Delivery of Research and Teaching Equipment was only 50.2% utilised. N40,000,000 released in 2017 for Capacity Building for High Level Manpower in Mathematical Sciences was only 50%. Only N61,354,000 out of another release of N190,000,000 for the Completion of Furnishing Participant Hostel was utilised giving only 32.3% utilisation.

In the year 2019, only N8,000,000 was appropriated and released for the Construction of 500-Seater Capacity Auditorium with offices; however, N95,265,000 was expended on the project giving an over utilisation of 1190.8%.

iv. Special Capital Grant/Donations:

In 2020 UBEC released the sum of ₩50,000,000 for basic training in Mathematics Junior Secondary within 4 Senatorial Districts.

The following agencies donated equipment to the Centre in 2018.

- a) National Information Technology Development Agency (NITDA) donated the following items.
 - i. 70.5KVA Generator set
 - ii. 15 number Desk top computers and 1 mini server.

All these items are domiciled in the Computer Systems Programme in the Centre.

b) Nigeria Communication Commission (NCC) donated one hundred and ten (110) Laptop computers to the Centre.

5.2.1 Recommendations

- i. The Master Plan of the Centre is still not fully implemented therefore, more capital funds should be allocated to NMC by the Federal Government.
- ii. The Federal Government should reinstate the Centre as one of the TETFund (ETF) interventions recipient institutions.
- iii. The Centre should concentrate more on the development of Mathematical sciences at the Tertiary level. Substantial amount of the Capital Grant was expended on training and capacity building. The trainings were concentrated at the Primary level with little or nothing at the Tertiary level.
- iv. Installation of Campus wide Internet Connectivity is commendable. Access to the internet should be secured.
- v. The Centre should ensure that capital funds appropriated and released must be fully utilised for the execution of projects for which they were approved for.

5.2.2 Internally Generated Revenue (IGR)

The IGR for this period drastically reduced. It dropped from N639,075,000 to N58,48,155, that is 92% decrease. Revenue was generated internally in the following areas:

- Sale of Instructional Materials
- ii. Academic Service charges (Workshop Training)
- iii. Workshop and Seminars
- iv. Olympiads
- v. Sale of Forms/Advert Fees (Olympiad Forms)
- vi. Undergraduate Registration (Workshops)
- vii. Contractors Tender Fees

The total figures for IGR submitted by the Bursar and the one reported in the Audited Financial Statements do not agree. The Financial Statements indicated a total IGR (Other Income) of N28,084,000 as against the figure of N50,408,155 submitted by the Bursar.

There is a difference of N22,324,155. However, it was explained that the 2020 account is yet to be audited and was not included in the analyses.

5.2.3 NMC Global Services Consultancy Limited

- i. The Consult still maintains five (5) bankers.
- ii. The performance of the Consult was very unimpressive within the period under review. Revenue generated in 2016 was N8,902,700. It increased to N11m, N21m and N28m in years 2017, 2018 and 2019 respectively. Total Revenue generated in these years was N69,552,934.
- iii. The total Cost of Sales and other expenses were higher than the total revenue.
- iv. The Consult made losses in 2016 and 2017 of N4.1m and N4.9m respectively. Profits of N1,026,048 and N190,337 were made in 2018 and 2019.
- v. The balance of Reserves at the end of each year was in negative ranging between N26.5m to N31.5m.
- vi. The Consult carries liabilities for Statutory deductions for PAYE, VAT and WHT at the end of every year.
- vii. The Consult continued to carry huge sums of other liabilities each year. This ranges between N36m to N43m. The liabilities are owed to NMC, IMSA, Kaduna and Kogi MIP, NSITF, ITF, Salary arrears and two External Auditors' Fees for various years.
- viii. The audit of Financial Statements of the Consult for the years 2016 and 2017 were all concluded in November 2019 while for the years 2018 and 2019 were concluded in February 2021. The Financial Statements for the year 2020 are yet to be audited.

5.2.3 Recommendations

- i. The NMC Global Services Consultancy Limited should limit the number of bank accounts it is operating to mitigate instances as defalcation.
- ii. The Financial Statements must be timely prepared and audited within the stipulated period.
- iii. External Auditors should be appointed to audit the 2020 accounts of the Consult.
- iv. The Management of the Consult should improve its revenue drive.
- v. There should be deliberate actions to ensure the reduction of the cost of running the Consult as its viability is at stake because of the huge losses.
- vi. Management should ensure that all statutory deductions of PAYE, WHT, VAT, NSITF and ITF should be remitted as and when due.
- vii. The liabilities for Salaries and External Auditors Fees are of serious concern and Management should settle all the outstanding and ensure such future payments are made promptly.

5.2.4 NMC International Model Science Academy (NMC IMSA)

The National Mathematical Centre International Model Science Academy (NMC-IMSA) was established in 2011 under the tenure of Professor Sam Ale as Director-General of NMC. According to the Centre's Director, the rationale for establishing NMC-IMSA was to provide a testing ground for NMC products and as a source of international Generated Revenue. The secondary school has been having poor students' enrolment and huge operational cost attributable to many factors such as relying on State Governments' patronage for students' enrolment rather than the parents of the pupils. For the 10 years of NMC-IMSA existence, it incurred more liabilities to the Centre. Its contributions are not reflected on the Financial Statement or Consolidated accounts of the Centre. Although, NMC-IMSA is a private school registered with Corporate Affairs Commission and operated under NMC-Global Services Consultancy Limited, yet it still depends on the Centre for bail outs.

NMC-IMSA has staff strength of 25 teaching staff and 40 non-teaching staff but only 47 students.

5.2.4 Recommendations

- i. The Governing Council should consider divesting from the NMC-IMSA considering its unprofitable profile over the past 10 years.
- ii. The mandate of the Centre is to promote the development of mathematical sciences at the Basic and tertiary education levels covering all Primary/ Secondary Schools and all tertiary institutions in Nigeria. The Centre's Management is advised not to narrow its mandate by emphasising on IMSA.

5.2.5 Internal Audit Unit

- i. The Internal Audit of the Centre has started doing both pre and post-payment audits of all transactions. The staff of the unit were trained annually and they also attended professional conferences.
- ii. The Head of the Unit still retained the title of Chief Accountant. He does not seem to have independence having been transferred from Bursary Department.
- iii. Although the accounting system of the Centre was automated, the Internal Audit Unit still operated manually. The Unit does not have any audit software nor uses modern auditing tools.
- iv. Regular audits to probe and perform checks on the accounting system were not being done.
- v. The Unit did not have in place a suitable domesticated accounting and internal control manual.
- vi. There seems to be no policy on the limit of cash advances and there were troubling delays in the retirement of the majority of the cash advances.

5.2.5 Recommendations

- i. Proper arrangements should be made to advertise and recruit the Head of the Internal Audit Unit to ensure its independence and effective functioning.
- ii. Automated audit software and modern techniques should immediately be deployed and the staff of the Unit should be adequately trained.
- iii. As a matter of urgency, the Centre should put in place a suitable domesticated accounting and internal control manual.
- iv. The Centre should put in place a policy to regulate cash advances and retirements as well as sanctions for noncompliance.

5.2.6 Bursary Department

- (1) The issue of untimely preparation of the Financial Statements by the Bursary Department also continued during the period under review. The Financial Statements for all years were not prepared on time. The year 2016 and 2017 accounts were finalised in September 2019. The accounts for years 2018 were all finalised in July 2020. There was improvement in the preparation of the Financial Statements by the Bursary Department as the accounts for year 2019 were finalised in July 2020. Likewise, year 2020 accounts have been completed and the Trial Balance made available but the accounts are yet to be audited as new auditors are yet to be appointed because of lack of Governing Council for the Centre.
- (2) The Centre continued operating in deficits for all the years. Beginning with a negative Accumulated Fund of N340,737,000 in 2016, the Centre ended the period with a negative Accumulated Fund of N802,174,000 in 2019 as a result of the huge annual deficits recorded especially in 2017 (97,110,000) and in 2018 (N241,925,000). Though it was reported that the huge annual deficits are related depreciation charged on assets during the year.
- (3) No quarterly Management Reports were presented.

- (4) There seemed to be no adequate internal budgetary process in place. Budgets were centrally compiled and finalised by the Bursary Department and not collectively approved by the Management staff.
- (5) There was non-remittance of the Mandatory 25% of IGR to the Federal Government Sub-treasury.
- (6) The Centre owns the NMC Global Services Consultancy Limited and the International Model Science Academy. However, the financial transactions and accounts of the two were not consolidated with the Financial Statements of the Centre.
- (7) There was non-remittance of Statutory deductions of Withholding Tax (WHT) and Value Added Tax (VAT).
- (8) An advance of N3.5million was granted to the widow of a deceased staff of the Centre more than four years and the amount is yet to be substantially recovered. This is a clear violation of the relevant provisions of the Financial Regulations of the Federal Government.
- (9) Cash advances made to staff were not timely retired and there was no evidence of sanctions against these staff.

5.2.6 Recommendations

- i. Financial Statements must be timely prepared (within 3 months after the end of the year) and there should be no delays in external auditing of the accounts.
- ii. External Auditors should be appointed to audit the 2020 Financial Statements of the Centre.
- iii. The Centre should put in place proper budgetary process, ensure full participation of the internal stakeholders and secure proper Management and Council approval.
- iv. The Centre should guard against violation of the relevant provisions of the Financial Regulations of the Federal Government. Efforts should be made to

- fully recover the advance made to the widow of the deceased staff. Any unrecoverable amount should be written off.
- v. The Centre has been deficit financing its activities. This has to be critically examined to avoid putting the going concern of the Centre in jeopardy.
- vi. The Centre must remit the annual Mandatory 25% of IGR to the Federal Government Sub treasury.
- vii. The Centre should ensure that Statutory deductions are remitted as and when due.

5.2.7 External Auditors

- 1) Sada, Idris & Co. (Chartered Accountants) audited the accounts for 2016 2019. The Firm had audited the 2015 accounts.
- 2) The audited accounts of the Centre for the years 2016 to 2019 were approved.
- 3) Substantial amount of the Audit Fees is being owed by the Centre for many years despite the fact such have been budgeted for annually.
- 4) A new External Auditor was not appointed in the year 2019 after the existing Auditor, Sada, Idris & Co. completed his tenure of five years.
- 5) Main observations of the External Auditors include:
 - Non-remittance of statutory deductions.
 - Decrease in IGR in the year 2016.
 - Non availability of Accounting and Internal Control Manual.
 - Non-deduction of 1% stamp duty on payments made to contractors.
 - No information about the status of the Centre's assets in the Fixed Assets Register.

5.2.7 Recommendations

- i. The Centre should settle all liabilities for Audit Fees and ensure that future payments are made immediately after the conclusion of the audit exercise.
- ii. Council should ensure External auditors are immediately replaced after the expiration of an existing auditor's tenure.

CHAPTER SIX

TERM OF REFERENCE 4

To investigate the application of funds, particularly the special grants and loans meant for specific projects in order to determine the status of such projects and their relevance for further funding

6.1 Preamble

Financial grants were received by the Management of NMC to implement different projects between 2016 and 2020. Presented in this section of the Report is the manner in which the scarce resources were deployed by the Management of the Centre. The explanations provided in this Chapter include:

- pattern of allocation of Total Grants
- examining the performance of previous years' budget
- to assess how prudent, the institution has been with management and development of physical facilities
- examining the implementation of approved physical development plan
- examining the institutions strategic plan and implementation thereof
- determining the quality of performance of contractors handling projects

6.2 Findings

6.2.1 Special Grant

In 2020 Universal Basic Education Commission (UBEC) released the sum of \\$50,000,000.00 (fifty million naira only) for basic training in Mathematics Junior Secondary within 4 Senatorial Districts. The States that benefited were:

North East – (Yola, Adamawa State) 6th to 19th September, 2020

North Central – (Makurdi, Benue State) 6th to 19th September, 2020

South East – (Owerri, Imo State) 4th to 17th October, 2020

South West – (Ado-Ekiti, Ekiti State) 4th to 17th October, 2020.

The Centre implemented the project for which the grant was provided by spending twelve million, nine hundred thousand naira (\$12,900,000) only per State, amounting to \$51,600,000.00. UBEC has received the report of the project and a retirement for the amount on 26^{th} November, 2020.

The total Grants in the form of Statutory Allocations from the Federal Government of Nigeria in the form of Capital funds to NMC are shown in Table 6.1.

Table 6.1: Annual Total Capital Appropriation and Releases to NMC (2016 – 2020)

Year	Total Appropriation (N)	Total Released Capital (N)	Percentage of Appropriation Released	Percentage Utilisation on Release (N)
2016			35.9%	
	613,552,715.00	220,219,573.00		86.6
2017			120.5	99.1%
	437,293,753.00	527,188,804.30		
2018			44.3	100.0%
	1,214,059,033.00	537,974,782.07		
2019			100	100.0%
	459,679,255.00	459,679,255.00		
2020	224,178,000	173,378,000	77.3	100.0%
TOTAL	2.948,762,756.00	1,918,440,414.37	65.1	

6.2.2 Pattern of Allocation of Total Grants

The Total Capital releases annually to NMC was N11,918,440,414.37 or 65.1% of the Total Annual Appropriation. This affected the rate of development of the Master Plan. The projects for which allocations were released are shown in the table below.

Table	Table 6.2: Capital Expenditure Profile 2016 - 2020						
Capital							
	2016	2017	2018	2019	2020		
Conduct Of National/Internati onal Mathematical Sciences Olympiad	36,999,326 .05	45,961,550 .00	23,359,901 .00	30,000,000	19,064,346 .03		
Capacity Building For Manpower In Mathematical Sciences	9,191,384. 00	19,998,700 .00	23,359,901	30,000,000	10,539,050 .00		
Nationwide Mental Arithmetic Programmes (SDG's Project)	78,070,429 .00		40,545,826 .00	28,577,570 .00	17,000,000 .00		
Special Mathematics Improvement And Olympiad Training For Junior Secondary School Girl Students(SDG's Project)			38,375,841 .00	19,103,850 .00	16,897,405 .67		
Research & Development: Production Of Textbooks And Workbook For Mathematics And Sciences		-			9,940,334. 53		
Consultancy And In House Technical Crew	12,086,000 .00	11,094,332 .91			-		
Capacity Building Research And Development	5,229,513. 13	24,625,727 .32					
Purchase Of Teaching/Learning Equipment	22,385,617 .25			-	-		
Purchase Of Library Books And		40,246,591 .40					

Mathematics Journals					
Rehabilitation/Ren ovation Of Office Buildings		25,000,000 .00	23,654,077 .00	21,202,997 .00	9,544,312. 83
Purchase Of Motor Vehicle		55,032,676 .00			
Campus Wide Internet Connectivity		82,204,336 .14	31,097,378 .00	30,000,000	18,944,003 .68
Construction Of Office Building: Sports And Recreational Building	9,818,570. 87	67,709,000 .00	26,846,677 .00	39,682,752 .87	
Construction Of Office Building, & Equipping Model Maths. Lab		11,806,385 .00	38,375,841 .00	34,679,255 .00	
Construction Of Office Building: Participant Hostel Phase 2b	21,000,000	46,224,364 .50	18,379,829 .00		-
Construction Of Office Building: Participant Hostel Phase 2b(Consultancy Fee)		14,292,975 .00			
Construction Of Office Building: 500 Seater Auditorium			114,725,35 7.67	95,265,000 .00	10,000,000
The Commission On Science And Technology For Sustainable Development In The South (COMSAT)					4,672,300. 00
Construction Of Office Building: 500 Seater			35,063,762 .00		

Auditorium(Consultancy Fee)					
Support To Maths Activities		7,981,670. 00			
Furnishing Of Sport & Recreational Centre				24,995,700 .00	
Construction Of New Participant Hostel			71,387,169 .87	61,354,000 .00	25,000,000 .00
TOTAL	194,780,84 0.30	452,178,30 8.27	485,171,56 0.54	414,861,12 4.87	141,601,75 2.74

Within the period of 5 years, Research and Development and Library Books and Journals received only N9,940,334.53 and N40,246,591.4 respectively which were in 2020 and 2017. This is equivalent to 0.005% and 0.023% of the total capital grant for 5 years (N1,688,593,586.72).

6.2.3 Internally Generated Revenue and Utilisation

The Internally Generated Revenue in the period declined to N50,408,155.79 and the bulk of the revenue was generated through Olympiad (N20,957,540.00) and Sale of Forms/Advert Fees (Sale of Olympiad Forms) (N11,243,418.60).

Table 6.3: Yearly Internally Generated Revenue and Utilisation

S/ N	Item	2016	2017	2018	2019	2020	Total
		₩	₩	₩	N	N	₩
1	Under						
	Graduate	-	-	-	2,700,00		2,700,00
	Registration				0.00		0.00
	(Workshops						
	Registration/						
	training)						
2	Other						
	Academic	-	-	-		1,233,19	1,233,19
	Service					7.19	7.19
	charges						
	(Workshop						
	Fees)						
3	Others -						
	Olympiad	6,833,04	7,250,00	6,874,50	_	_	20,957,5
		0.00	0.00	0.00			40.00
4	University						
	Consultancie	1,158,00	1,050,00	4,250,00			6,458,00
	s -	0.00	0.00	0.00	_	_	0.00
	Workshop/T						
	raining						

5	Printing -						
	Instructional	1,296,00	150,000.	2,000,00	2,250,00		5,696,00
	Materials	0.00	00	0.00	0.00	-	0.00
6	Sale of						
0							
	Forms/Adver	-	-	-	8,100,00	3,143,41	11,243,4
	t Fees (Sale				0.00	8.60	18.60
	of Olympiad						
	Forms)						
7	Contractors					-	
	Registration	390,000.	950,000.	150,000.	630,000.		2,120,00
	(Tender	00	00	00	00		0.00
	Fees)						
8	Total IGR						
		0.677.04	0.400.00	12 274 5	12 (00 0	4 276 61	FO 400 1
	Received	9,677,04	9,400,00	13,274,5	13,680,0	4,376,61	50,408,1
		0.00	0.00	00.00	00.00	5.79	55.79
9	Utilisation						
	of IGR	9,677,04	7,798,45	12,607,5	12,850,0	3,114,57	46,047,5
		0.00	5.00	00.00	00.00	4.70	69.70

6.2.3 Recommendations

- The Centre should use the same initiative as adopted in finishing the uncompleted Participants' hostel which was started in 2010 to complete the remaining 4 uncompleted projects.
- ii. The management should be innovative and mobilise its resources to improve on IGR. The contribution of NMC Global Consult Limited to IGR is almost nothing and should be overhauled to serve the purpose for its establishment.

6.2.4 Examine Previous Years' Budget Performance

The total Personnel and Overhead costs for 2016 to 2020 were N2,294,326,535.05 and N320,356,814.84 respectively. The annual recurrent cost (Personnel and Overhead) are presented in Table 6.4.

Table 6.4: Recurrent Grant and Expenditure of NMC for 2016 to 2020

Descr iption	Personnel Cost	Overhead Cost	Total Subvention	Total Recurrent Expenditur e	Shortfall
2016	429,681,680.96	63,214,111.75	492,895,792.	492,084,091	811,701.
			71	.60	11
2017	419,993,492.67	53,145,702.66	473,139,195.	473,044,899	94,295.6
			33	.72	1
2018	454,524,945.98	66,936,238.82	521,461,184.	520,584,253	876,931.
			80	.72	08
2019	469,571,269.80	73,383,016.16	542,954,285.	542,735,620	218,665.
			96	.15	81
2020	520,555,145.64	63,677,745.45			-
			584,232,891.	621,577,858	37,344,9
			09	.86	67.77
TOTA	2,294,326,535.0	320,356,814.84			-
L	5		2,614,683,34	2,650,026,7	35,343,3
			9.89	24.05	74.16

The Centre was having a negative balance of N35,343,374.16 considering the total Recurrent grant received from the Government and the Expenditure.

6.2.5 How Prudent the Institution has been with Management and Development of Physical Facilities

The Centre appeared prudent in the management and development of physical facilities. On the whole, it awarded fresh 29 capital projects between 2016 and 2020 and none of those projects was abandoned. The Centre also awarded all its projects through competitive bidding and the execution of projects were closely monitored thereby eliminating frivolous claims and request by contractors.

There existed 5 uncompleted/abandoned projects carried forward from 2011 and 2015 period. They include:

- i. Construction of Roads & Storm Water Drains
- ii. Participants' Hostel
- iii. The TETFund Printing press building project
- iv. Procurement and Installation of Press Machines and Equipment
- v. Shehu Musa Yar'Ardua Computer Laboratory (Phase 1) Endowment Project

Due diligence was not applied in the award of these projects as the guidelines regulating tendering procedures were not observed which led to petitions and arbitration at their award stages between 2010 and 2011. On the construction of Roads and Storm Water Drains which was awarded in December, 2010, the fund was diverted in 2012 for another activity.

The Management of the Centre was flexible as it finished one of the uncompleted projects (The Participants Hostel /Guesthouse). However, it was observed that there are two projects which have been completed but the payments to contractors are still outstanding as shown in the table 6.5 below.

Table 6.5: Completed Projects whose Contractors have not been fully paid

	Project	Contract	Remark
	Description	Sum (N)	
1	Participants' Guest Hostel	42,334,635	No Certificate of completion granted by Consultant yet
2	Sports and Recreational Centre	70,681,560	Certificate of completion issued but no budgetary provision in 2020

Table 6.6 Inventory of Physical Facilities Developed Between 2016 And 2020

S/ N	Project Description	Date Awarded	Cost N	Remark
1	Construction of Participants Hostel (Phase 2B)	24/10/201 2	63,379,857	Completed
2	Construction of Participants' Hostel	2/5/2019	196,575,200.01	Uncompleted
3	Construction of Sports and Recreational Centre (Phase 2B)	2/5/2019	25,836,110.69	Occupied
4	Construction of 500 seater capacity auditorium with offices	22/5/2019	431,441,118.8	Uncompleted
5	Maintenance of NMC Science laboratory	28/2/2018	2,437,944.60	Completed
6	Maintenance of Fence wall at the ancillary building and NMC entry Gallery	28/2/2018	1,248,968.7	Completed

7	Reconstruction of Collapsed Soakaway Pit	28/2/2018	394,800	Completed
8	Renovation of NMC Researchers Village	26/2/2018	2,935,051.65	Completed
9	Maintenance of Fence wall at the Administrative building	26/2/2018	1,240,104.6	Completed
10	Alteration work to one of the offices at the Computer Lab	28/2/2018	986,516.55	Completed
11	Renovation of NMC Participant Hostel	28/2/2018	948,778.95	Completed
12	Maintenance of NMC Mathematical Kit Lab	30/11/201 8	2,040,865.31	Completed
13	Renovation of Olympiad Building	30/4/2019	6,175,422	Completed
14	Renovation of academic building	12/3/2019	4,740,175	Completed

6.2.5 Recommendations

- i. The two TETFund projects (Construction of Printing Press Building and Procurement and Installation of Press Machines and Equipment) have a joint use and are important projects that will advance the position of NMC in achieving its mandate. Since collectively over 70% of the original contract sum has been paid out, it is recommended that the Centre with NUC should engage the TETFund to bring the projects to completion to avoid wasting the funds already committed in them.
- ii. The construction of Roads and Storm Drain project was stalled because of the incompetence of the contractor and subsequent diversion of the funds in 2012.

The management should re-finance the project and bring it to completion since it is a key project reflected in the Centre's Master Plan.

- iii. The Council should ensure that outstanding matters delaying payments to contractors that have completed their projects shown in Table 6.5 are resolved.
- iv. The Centre should engage the FME to ensure adequate fund appropriation to complete the two projects which were awarded in 22nd May 2019 (namely: Construction of Participants' Hostel and Construction of 500 seater capacity auditorium with offices 22/5/2019). Otherwise, these projects may be abandoned because of very low grant releases.

6.2.6 Examine the Implementation of Approved Physical Development Plan

The Centre developed a Master Plan in 2008 which set out the overall strategy to develop the institution's program and infrastructure comprehensively. All the projects initiated by the Centre as contained in the physical development plan, is in line with the Centre's Master Plan.

The focus of the plan is to build capacity of trainers and trainees for the various works related to mathematical Sciences but it has reduced its former concentration on secondary education level. Between 2016 and 2020 the Centre implemented academic related activities to the tune of N475,929,966 and 94% of cost was spent on Mathematics Education Programme followed by Library Unit that received 2.7%. Interestingly, the bulk of the funds used in Mathematics Education programme was from SDG's Project targeting Mental Arithmetic/Maths workshops and the Mathematical Science Olympiad which are all in Basic Mathematics programme.

6.2.6 Recommendation

i. The Centre has given generous attention to Basic Education through the allocation of resources and funds, and limited attention was given to development of mathematical sciences at tertiary level. The Centre should equally grant attention to mathematical science development at tertiary level.

6.2.7 Examine the Institutions Strategic Plan and Implementation thereof

During the period of 2016 and 2020, the Council of the NMC developed a 5-year Strategic Plan 2020-2024 titled "Expanding the Frontiers of Training and Research in the Mathematical Sciences" to further give the Centre a sense of direction. The Strategic Plan is a 64-page document which detailed the various action plans of the Centre that could ensure the achievement of specific identified objectives of the Centre's vision.

The Strategic Plan re-emphasised the mission of the Centre which is "To be a world-class institution for training, learning and research in the mathematical sciences and their applications to development". The Strategic Plan is outlined in two (2) parts. Part 1 has ten segments namely: Governance and Administration; Human Resources; Training, Research and Learning Resources; Financial Resources; Research and Innovation; Internationalisation; Gender, Diversity and Equality; Quality and Assurance; Safety and Security; and Monitoring and Evaluation. The Part 2 contains the Framework for Implementation, Monitoring and Evaluation to ensure compliance to the schedule and the overall success of the plan.

The Strategic Plan will enable the Centre to prioritise projects and resources to fit into the Master Plan and maximisation of the limited resources for greater output.

6.2.7 Recommendation

(i) The Council should ensure that the Strategic Plan (2020-2024) is courageously implemented according to the implementation plan in order to incrementally achieve the Master Plan and attaining the mandate of the NMC.

6.3 Determine the Quality of Performance of Contractors Handling Projects

The Centre has a Tenders' Manual which contains procedures for initiating and implementing capital projects. Also the government's paper on the process of Tendering which stipulates procedures and responsibilities of various offices was followed. This has eliminated cases of petitions and arbitrations that arose in the past. The abandoned Construction of the Tertiary Education Printing Press which was awarded in 2010/11 went into arbitration and the arbitral process was concluded in 2019. However, the case of not honouring certificate was reported on one of the projects which has been completed.

6.3 Recommendation

(i) The Centre is advised to follow laid down procedures in tendering and selection of consultants and contractors handling physical projects to avoid petitions and arbitrations that eventually lead to abandonment of projects. Also, the Centre should honour verified certificates to avoid delays.

CHAPTER SEVEN

TERM OF REFERENCE 5

To examine the adequacy of the Staff and Staff Development Programmes of the Centre

7.1 Preamble

Decree No. 40 of 1989 establishing the National Mathematical Centre, has as one of its objectives, to attract good mathematical scientists from within and outside Nigeria. Over the years, the Centre has employed both mathematical scientists and support staff that were essential to its functions. Here, we are going to examine the staffing situation between 2016 and 2020.

7.1 Findings

Number of staff at the beginning of 2016 was 289. Only 8 staff were recruited in the period 2016 to 2020.

7.1.1 Recruitment

Table 7.1 gives a summary of employments by state of origin (Appendix D2).

Table 7.1: Employments in period 2016-2020 by State

SN	State	New Employee(s)
1	Benue	3
2	Delta	1
3	Enugu	1
4	Kaduna	2
5	Ogun	1
6	Others	0
	TOTAL	8

The new employees split equally into 4 juniors and 4 seniors, none of which was in the Chief Research Fellow rank or Professor. Also, there were 6 males (75%) and only 1 academic staff (representing 12.5%).

The Panel took a closer look at the composition and distribution of staff, particularly as it affected the academic programmes, hoping to identify the exact challenges of the Centre.

7.1.2 Academic Programmes

7.1.2 (a) Mathematics Programme

This Programme had 31 academic staff (Table 7.2). However, only 4 of them were Ph.D. holders, 3 of which were either Chief Research Fellows or Professors (Appendix C4). Sadly, 50% on the list were not qualified to be on the programme. These staff who had their qualifications in other fields than mathematics, such as Biology, Chemistry, or Engineering, cannot contribute positively to the development of the programme, so they should not have been posted to the programme.

 Table 7.2: Staff list for Mathematics programme

SN	Name	Sex	Qualification	Year of First Appointment	Area of Specialisation	Status
1.	Prof P. Onumanyi	М	PhD Mathematics	2004	Numerical Analysis	Professor (Dep.
2.	Prof A.R.T. Solarin	M	PhD Mathematics	2013	Theory of Loops & Non-Associative Algebra and Combinatorics	Director) Professor (Former Dir/CE)
3.	Dr Benjamin Oyelami	М	PhD Mathematics	2004	Mathematical Modelling and Impulsive Differential Equations	Chief Research Fellow
4.	Dr James I. Ajie	M	PhD Mathematics	2008	Numerical Analysis and Computations	Principal Research Fellow (Ag. Coordinator)

SN	Name	Sex	Qualification	Year of First Appointment	Area of Specialisation	Status
5.	Dr O. Abiri	М	PhD Engineering	1991	Nonlinear Finite Element Analysis, Data Modelling Simulation and Computational Mechanics	Senior Research Fellow
6.	Dr Mark Modebe I Ifeanyi	М	PhD Mathematics	2013	Numerical Analysis and Computations in Differential Equations and Mathematical Modelling	Research Fellow I
7.	Olorunmaye Benjamin	M	MSc Financial Mathematics	2005	Financial Mathematics	Research Fellow I
8.	Anthony C. Onyekonwu	М	MSc Mathematics	2009	Fuzzy Sets and Logic	Research Fellow II
9.	Dr Ahmed Abdulaziz Garba	М	PhD Mathematics	2011	Computational Fluid Dynamics, Mathematical Modelling and Frictional Calculus	Research Fellow II
10	Dr Uche David Ugochukwu	M	PhD Mathematics	2012	Computational Fluid Dynamics, Engineering Processes, Finite Volume Schemes and Mathematical Modelling	Research Fellow II
11.	Dr Okechi Nnamdi Fidelis	M	PhD Mathematics	2013	Fluid Mechanics, Perturbation Analysis and Mathematical Modelling	Research Fellow II
12.	Mrs Fatunsin Lolade Modupe	F	MSc Mathematics	2014	Complex Analysis (Geometric Function Theory)	Research Fellow II
13.	Mrs Mercy Ugochukwu Uche	F	MSc Mathematics	2012	Algebra (Nilpotent and Solvable Groups)	Research Fellow II

SN	Name	Sex	Qualification	Year of First Appointment	Area of Specialisation	Status
14.	Mrs Okafor Folakemi M.	F	MSc Mathematics	2011	Operations Research	Research Fellow II
15.	Dr (Mrs) Chinenye Nna-Orji	F	PhD Chemistry	2014	Analytical Chemistry (Assessment and Bioremediation of Environmental Pollution)	Research Fellow II
16.	Dr Linda Ochu Onyeke	F	PhD Biology	2008	Environmental Sciences (Pollution (Soil and Water))	Research Fellow II
17	Olumide Olaiya	M	MSc Financial Mathematics	2012	Numerical Analysis and Computations in Differential Equations and Financial Mathematics	Research Fellow II
18	Jamilu Auwalu Adamu	М	MSc Financial Mathematics	2010	Financial Mathematics	Research Fellow II
19	Dr (Mrs) Olawore Yemisi	F	PhD Biology	2012	Environmental Microbiology	Assistant Research Fellow
20.	Mrs Kate Ifeoma Utalor	F	MSc Mathematics	2016	Computational Mathematics	Assistant Research Fellow
21.	Bello Haris Ja'afar	M	MSc Biology	2013	Cell Signaling, Molecular Mechanisms involved in Fertilisation, Regulation of Capacitation & Acrosomal Exocytosis	Assistant Research Fellow

SN	Name	Sex	Qualification	Year of First Appointment	Area of Specialisation	Status
22.	Anas Muazu	М	MSc Biology	2014	Biofilms, Molecular Mechanisms involved in Regulation of Gut Microbiomes and Stunting	Assistant Research Fellow
23.	Olowu Abiodun R.	М	MSc Mathematics	2014	Numerical Analysis	Assistant Research Fellow
24.	Dr Abdulwasiu Salaudeen Olawale	М	PhD Chemistry	2014	Analytical Chemistry (Environmental)	Assistant Research Fellow
25	Dr Sunday Adedeji Asher	М	PhD Chemistry	2006	Environmental Heavy Metal Pollution Analysis in Soil and Water	Assistant Research Fellow
26.	Emmanuel Francis	М	MSc Biology	2014	Natural Resources and Environmental Management	Asst. Research Fellow
27.	Ekeocha Christopher	М	MSc Chemistry	2011	Environmental Pollution Assessment and Control, Corrosion Technology/Future Energies	Research Assistant
28.	Mrs Abdulkareem Aisha	F	MSc Chemistry	2014	Analytical/Industrial and Material Chemistry	Research Assistant
29.	Wasiu Temitope Shehu	М	MSc Chemistry	2014	Environmental Health/Environmental Epidemiology	Research Assistant

SN	Name	Sex	Qualification	Year of First Appointment	Area of Specialisation	Status
30.	Abubakar	М	BSc	2014	Computational	Research
	Aminu		Mathematics		Mathematics	Assistant
31.	Onah Pius	М	BSc Mathematics	2013	Number Theory	Research Assistant

SN	Name	Sex	Qualification	Year of First Appointment	Status
1.	Olorunsuyi Ademola S.	М	HND Business Administration	2004	Asst. Chief Executive Officer
2.	Effiong Essien A.	М	BSc Sociology	1992	Senior Asst. Registrar
3.	Mrs Okolie Mercy	F	BSc Economics	2016	Admin Officer II

7.1.2 (b) Theoretical Physics Programme

The Theoretical Physics Programme was grossly understaffed (Appendix C3). Something drastic needed to be done to get the programme running (Table 7.3). One suggestion would be to engage qualified physicists even on a short-term arrangement to setup the programme. The mistake made by the Centre was trying to develop its own staff. All qualified staff in the universities in Nigeria and abroad provided a global sample space to select qualified manpower from.

Table 7.3: Staff List for Theoretical Physics programme

SN	Name	Sex	Year of First Appointment	Highest Degree	Area of Specialisation	Rank
1	Dr Obagboye Lewis	М	2009	PhD	Gravitational Physics	Senior Research Fellow
2	Mr Okike Okorie	М	2007	MSc	Solid State	Research Fellow II

SN	Name	Sex	Year of First Appointment	Rank	Designation
1	Mrs Christiana	F	2011	CONTISS	Personal
	Rogbesan			7/6	Secretary

7.1.2 (c) Computer Science Programme

Table 7.4 reveals that all staff of the Computer Science Programme were on study leave (Appendix C1). Even if this pays off in the future, the programme should not be left without staff during this period. This shows that the Centre had no clear policy on staff training and development. The coordinator is the only academic staff on ground and has only an MSc degree.

Table 7.4: Staff List for Computer Science Programme

SN	Name	Sex	Year of First	Highest	Schedule
			Appointment	Qualification	
1	Bamidele Oluchi Jennie	F	1999	MSc Computer science	Academic staff
2	Omoniwa Babtunji	М	2012	BSc Computer Engineering	On study leave
3	Victor Rimdans Z	М	2012	BSc Computer Science	On study leave
4	Sarah N. Arih	F	2012	BSc Computer Science	On study leave
5	Chinonso Nriagu	М	2014	BSc Computer Science	On study leave
6	Abiodun Olowu	М	2014	BSc Mathematics	On study leave
7	Luke Joel	М	2014	BSc Mathematics	On study leave
8	Olufunminiyi Abiri	М	1999	MSc Mechanical Engineering	On study leave

S/No	Name	Sex	Year of First Appointment	Schedule
1	Nwagbo Uchechi	F	1997	Programme
	Mercy			Secretary
2	Chuks Mba	М	2013	Programme Admin
				Officer

7.1.2 (d) Statistics Programme

The Coordinator of Statistics programme was a Professor (Appendix C5). However, there were no serious activities, such as advanced research, postgraduate lectures and conferences carried out in the programme.

Table 7.5: Staff List for Statistics Programme

SN	Name	Qualifications	Specialisation	Rank
1	Prof. F. W. O.	Ph.D. Bradford	Statistical Modelling	Professor
	Saporu	M.Sc. Reading	Biometry	
	2015	B.Sc. Ife	Mathematics	
2	Dr. C. A.	Ph. D, Awka	Multivariate	Senior Research
	Awogbemi	M Sc., Abuja	Distributions	Fellow
	2004	B Sc., Ilorin	Financial Mathematics	
			Statistics	
3	Mr. A. K. Ilori	M Sc., Ilorin	Statistics	Research Fellow
	2014	B Sc., Ilorin	Statistics	II
4	Mr. P. T. Bitrus	B Sc., Maiduguri	Statistics	Research
	2014			Assistant

SN	Name	Qualifications	Rank		
1	Mrs. S. M. Lemo	Dip. Math. Ed (ABU)	Chief Executive		
	1998	B Sc. Math. Ed (Abuja)	Officer		
2	Mrs. P. S.	B Tech. Math. (FUTY)	Senior Assistant		
	Ogunyemi 2005	PGD Public Admin. (NOUN)	Registrar		
3	Mr. T. T. I.	Confidential Sec. III (FTC Enugu),	Personal		
	Emoefo	Confidential Sec. II (Head of Civil Service	Secretary I		
	2013	Exams)			
4	Mr. K. Ademola	B Sc. Statistics (Abuja)	Senior		
	2000		Executive		
	2009		Officer		

7.1.2 (e) Mathematical Sciences Education Programme

This programme was fully staffed but there was neither a Chief Research Fellow nor a Professor to provide the needed mentorship (Table 7.6) (Appendix C2). It was the most active academic programme of the Centre; it carried out many outreach activities at State

level and was in charge of quiz competitions and the Olympiad. However, its activities were veered mostly towards primary and secondary education, which is only a small component of the Centre's mandate.

Table 7.6: Staff List Mathematical Science Education programme

S/N	Name	Sex	Year of First Appoin tment	Qualifications/A rea of Specialisation	Present Post	CONUASS/C ONTISS
1.	DR OLUWANIYI, S.D.	М	2006	NCE Math .B.Sc. (Ed) Mathematics, M. Ed (M&E), Ph. D(M&E) and PGD Computer Science	Princ. Research Fellow	CONUASS 6/8
2	DR SOLOMON G. OJO	М	2006	BSc Ed Maths, MSc Maths, PhD Maths Educ.	Senior Res. Fellow	CONUASS 5/
3.	MRS OMOLE, O. OMOLARA	F	2012	B.Sc. (Biology education), M.Sc. (Vertebrate Zoology) and Ph.D. Education (in view)	Research Fellow I	CONUASS 4/9
4.	Dr OLODA, F.S SMART	M	2009	NCE (Econs/Maths), B.Sc. (Ed) Mathematics, M.Ed. (Test and Measurement) and Ph.D. (Test and Measurement)	Research Fellow I	CONUASS 4/4

5.	Dr JEKAYINFA, J. OLATUNJI	M	2013	B.Ed. (Mathematics), M.Ed. (Mathematics), NBA(Marketing) and Ph.D. (Mathematics Education)	Research Fellow I	CONUASS 4/1
6.	Mr OKWUOZA, SYLVESTER O.	М	2013	B.Sc. (Ed), M.Tech. Mathematics (Ed) Ph.D. Mathematics Education	Research Fellow Ii	CONUASS 3/6
7.	Mr DUROJAIYE, J. DAVID	М	2012	B.Sc. (Ed)Mathematics, M.Ed. Mathematics Ph.D. Mathematics Education (in view)	RESEARC H FELLOW II	CONUASS 3/5
8.	Mr BALA GARBA	M	2010	B.Sc. (Ed) Physics, and M.Sc. (Ed) Physics	Asst. Research Fellow	CONUASS 2/8
9.	Mrs EGBUNIWE OBIAGELI N.	F	2014	B.S.Ed. (Mathematics) and M.Ed. (Mathematics)	Asst. Research Fellow	CONUASS 2/7
10.	Mr OWONUWA, SEUN OKE	М	2012	B.Ed. (Mathematics) M.Ed. (Mathematics)	Asst. Research Fellow	CONUASS 2/6

11.	Mr GAMAGE TUBONA	М	2014	B.Ed. (Mathematics), M Ed. (Mathematics) and Ph.D. Mathematics Education in view	Asst. Research Fellow	CONUASS 2/6
12.	Mrs ALE FLORENCE O	F	2012	B.Sc. Mathematics M.Ed. Mathematics Education Ph.D. Mathematics Education in view	Asst. Research Fellow	CONUASS 2/6
13.	Mrs UWAIGIAHA NO STELLA O.	F	2001	B.Sc. Industrial Mathematics, PGDE, M.Ed. Mathematics (in view)	Princ. Asst. Registrar	CONTISS 13/8
14.	Mrs CHARLENWA BUEZE. H.	F	2004	B.Sc. Statistics	Princ. Asst. Registrar	CONTISS 13/2
15.	Mr KOLAWOLE EMMANUEL A.	М	2009	B.Sc. (Ed) Mathematics., M.Ed. Mathematics Education	Senior Asst. Registrar	CONTISS 11/5
16.	Mrs FOLORUNSH E HELEN Y.	F	1997		Senior Personal Sec. 1	CONTISS 09/10
17.	Mrs KIDDAMS VICTORIA	F	2006	B.Ed. Management	Senior Asst. Registrar	CONTISS 11/2

18.	Mrs HASSAN PAUL DEBORAH	F	2009	B.Sc. Mathematics	Senior Asst. Registrar	CONTISS 11/2
19.	Mr SAIDU HARUNA AMANA	Δ	2014	B.Sc. Economics	Princ. Executive Officer I1	CONTISS 09/4
20.	Mr ALIYU KOLO M.	M	2014	B.Sc. Biological Sciences and M Sc. Environmental Management	Education Officer II	CONTISS 7/8

7.1.2 (f) The Centre Library

The Library should lead in implementing the objective of the Centre as stated in the Act, establishing it, that seeks to "create a resource centre to serve national and international communities as a focal point for advanced research and training in mathematical sciences and applications".

The Centre Library had three sections: Reader/Circulation; Serials; and Librarians Office. There were four (4) professional librarians, two (2) para-professionals, one (1) systems analyst and one (1) Assistant Chief Personal Secretary. However, there were no interns at the library, implying that they did not play much role in training future Librarians.

The staff list is given in Table 7.7 (Appendix D4). However, the Library was deficient in both physical holdings and currency of books and journals. There were ten (10) locally

networked computers but there was neither digitisation of the resources nor the use of Library management system for its operations. Internet access was epileptic and there was no subscription to standard online databases.

The Library holdings now stand at 1,940, made up of 120 e-books, 200 download materials, in addition to 168 books from SpringerVerlag and 500 articles from Elsevier. The Library subscribes to the journals of the following associations: Mathematical Association of Nigeria; Nigeria Computer Society; Nigeria Statistical Association; and Nigerian Mathematical Society.

There are ten (10) desktop computers and eight (8) laptops at the Library. Also, the Library is connected to the Centre's Wi-Fi.

Table 7.7: Staff List for Centre Library

S/N	Name	Sex	Year of First Appointment	Qualifications	Designation
1	Fadeyi- Akinwale Victoria Olubola	F	2002	MLS	The Librarian
2	Ibrahim Christiana	F	1986	MLS	Former Librarian
3	Bamidele Victoria Iwalewa	F	2012	MLS	Librarian II
4	Akoh Taiwo Hannah	F	2012	MLS	Librarian II
5	Abdullahi Abubakar	М	1998	Dip.LS	Asst. Chief Lib. Off.
6	Iloh Ifenyinwa	М	2011	Dip.LS	Principal Lib. Off.

7	Ahmed	М	2014	B.Sc. Info.	Systems
	Mohammed			Tech.	Analyst II
	Bello				
8	Anyamele	F	1993	Adv. ND Sec.	Asst. Chief
	Angela			Studies	Pers. Sec.

7.1.2 (g) Visiting Research Fellows

The law provides for visiting mathematical scientists for short periods, to work on their individual research problems using the Library, Computing and other resources of the Centre.

During the period under review, no visiting scientists were engaged to support advanced research and training in mathematical sciences. There were no budgetary provisions to support visiting programme to the Centre.

7.1.2 Recommendations for the Academic Units

- i. The Centre should conduct Staff Auditing and Right Placement to address the issue of unqualified staff posted to the Mathematics Programme;
- ii. The Centre should take advantage of available mathematicians in the universities or similar research institutes globally, on short-term arrangements to enrich and execute its programmes;
- iii. The Centre is advised to recruit active and productive Professors or Chief Research Fellows in all the 5 academic programmes to provide the needed leadership in advanced research and training at the tertiary level;
- iv. The conditions of service of the Centre should be improved to match or supersede that of the conventional federal universities in order to attract the best brains to serve in the Centre;

- v. The FME should ensure adequate funding of the Centre to enable it conduct advanced research, postgraduate lectures and conferences in all the programmes;
- vi. The Centre should restore and fund visiting programs to achieve its expected mandate particularly at Tertiary Education level.

7.1.3 Non-Academic Units

The non-Academic staff members include professional employees such as Engineers; Surveyors; Architects; Accountants; and Administrators. They contribute very significantly to the success of NMC. They have long-term experience which gives them invaluable expertise and lends consistency to the daily operations of the NMC. Their input and opinions are vital to many of the decision-making processes of the Centre, as it strives towards the goal of realising its mandate. However, the Centre does not need the huge population in this category of staff. Table 7.8 shows that over 80% of staff of the Centre are non-academic, mainly made up of staff from the Registry, the Bursary and Works & Physical Planning units. This does not agree with the NUC's approved Academic: Non-Academic ratio of 60:40.

Table 7.8: List of Non-Academic Staff

SN	UNIT	STAFF	STAFF	
		Junior	Senior	Total
1	Director's Office	1	6	7
2	The Registry	5	20	25
3	The Bursary	2	25	27
4	Academic Planning	0	5	5

SN	UNIT	STAFF		
		Junior	Senior	Total
5	Internal Audit	0	8	8
6	Procurement	0	3	3
7	Servicom	0	2	2
8	Protocol	0	2	2
9	Info & Public Relations	2	4	6
10	International Linkages	0	2	2
11	Security	13	4	17
12	Works & Phys. Planning	17	8	25
13	Computer Laboratory	1	9	10
14	Zonal Offices	0	8	8
15	NMC Global Consult	2	4	6
16	Clinic	1	1	2
	TOTAL	42	209	251

7.2. Staff Development

The Act does not specify in detail guidelines on staff development, but the Centre makes reference to the Conditions of service in universities, which prescribes 60:40 ratios for funding staff development, in favour of the academic staff.

There was no approved guideline for staff development, but there was evidence of sponsorships for conferences and training at higher degrees, even non-essential staff benefitted from it. Fifty-eight (58) staff of the Centre benefitted from study fellowship programmes with pay. Seven of them had exhausted their study leave but failed to return to the Centre. Eight drivers were sent on six months' intensive conversion training course

at the Federal Ministry of Works and Housing, Mechanical/Engineering Department. (Appendix D2):

7.3 Staff Appraisal

For lack of an approved conditions of service, staff promotions were carried out but not comprehensively as career progressions were terminated at level 14. The Centre had at various times used University of Abuja Appraisal Guidelines to appraise its staff, since the law permits them to do so (Appendix A3). However, there were drafts conditions and schemes of service which were not presented to the Governing Council for final consideration and approval by Mr. President. Part of the reasons for the inability of the Centre to have Conditions of Service after 30 years of existence is the provision in the NMC Law that the President of the Federal Republic of Nigeria must give assent to the draft document, unlike what obtains in the Universities.

7.4 Staff Complaints and Petitions

- 7.4.1 Sir Vincent N. Egwuatu (Controller, Works and Physical Planning)
- i) Sir Egwuatu alleged denial of promotion from Chief Quantity Surveyor to Deputy Director, Physical Planning for 6 years (2003-2009)
- ii) Denial of Acting Allowances when he was Acting Head of Works and Physical Planning (2009-2021) to the tune of N40,806,547.71.

7.4 Recommendations

 The Council is advised to direct its Appointments and Promotions Committee to investigate the allegation by Mr. Egwuatu on denial of promotion from Chief Quantity Surveyor to Deputy Director, Works and Physical Planning for 6 years (2003-2009) and take appropriate action. ii. Mr. Egwuatu should be advised to tender all receipts related to official expenditures incurred while as Controller of Works and Physical Planning Unit and be reimbursed as appropriate.

7.5 Other Observations

NMC was established to replicate ICTP Trieste in Italy, and to be fair it started well. Many Nigerian students and young lecturers benefitted from the Centre's academic activities and resources, including but not limited to lectures, library services, publications and sponsorships. However, the Panel observed that activities of the Centre started declining even before 2011 to limited activities at the tertiary level today. The regular advanced lecture series in mathematical sciences, which young Nigerian scholars benefitted from, are no longer available. It is imperative that drastic measures are taken to restore the Centre to its 1990s status. The following measures are recommended:

7.5 Recommendations

The law that established the Centre gave it a clear mandate, which if implemented, would yield immense benefits to Nigeria and the international community. To restore NMC to a path of achieving its mandate, the Panel recommends the following:

i. NUC and TETFund should reinstate the Centre as a TETFund beneficiary institution. Its delisting was in error and should be rescinded because NMC's advanced research and development mandate cover five (5) distinct disciplines: Mathematics, Computer Science, Statistics, Theoretical Physics and Mathematical Sciences Education at tertiary education level. Therefore, NMC is not a monotechnic, which was the reason given for its delisting by TETFund.

ii. The Centre working with FME should amend the law establishing NMC to enable it to take in graduate students of mathematical sciences on internship programmes and issue certificates of participation, so as to better prepare them for higher degree programmes in their chosen careers.

iii. The Centre should consider out-sourcing non-essential services in line with the Government's directive where convenient to save cost while maintaining a small team of quality academic and support staff. The Centre should work in close collaboration with mathematical sciences departments in the universities and equivalent tertiary institutions in Nigeria and abroad to function effectively.

CHAPTER EIGHT

TERM OF REFERENCE 6

To determine the relationship between the Centre and the various statutory bodies it interacts with according to its law for purposes of supervision, planning, finance, discipline, guidance and any other relationship (i.e. Governing council, NUC, and the Federal Ministry of Education (FME).

8.1 Preamble

The major statutory bodies with which the National Mathematical Centre interacts with include:

- i. The Governing Council
- ii. The National Universities Commission
- iii. The Federal Ministry of Education
- iv. The Tertiary Education Trust Fund
- v. The Universal Basic Education Commission

- vi. The Ministry of Science and Technology
- vii. The Professional Bodies in Mathematical Sciences

8.2 Findings

8.2.1 The Governing Council

According to the Act establishing the NMC, most of the bodies listed above have representation in the Governing Council of NMC also:

The NUC grants approvals for establishing universities and academic programmes run in the Universities; it serves as a channel for federal and external funding for universities and the 4 inter-university Centres.

The Federal Ministry of Education through its Minister makes recommendations for the appointment (or termination of appointment) of the Chairman and the members of the Governing Council apart from those representing the Ministries. Also FME through the Minister may give the Council directives of a general character or relating generally to particular matters, with regard to the exercise by the Council of its functions under the Act.

According to Act establishing the Centre, the Governing Council:

"shall be responsible for directing the affairs of the Centre, and exercise general control and superintendence of the policy, finances and property of the Centre, including its relations.

The membership of the Council shall consist of:

A Chairman;

One representative of the Federal Ministry of Education

One representative of the National Universities Commission

One representative of the of the Federal Ministry of Science and Technology

One representative of the Nigeria Academy of Science

Two representatives of the Nigerian Universities, appointed in rotation for two years at a time;

One representative of the Polytechnics;

One representative of the Colleges of Education;

Three members to represent professional and other interests in mathematical sciences, statistics, computer science and theoretical physics; and

The Director of the Centre.

A Governing Council was inaugurated in 2018 and the membership of the Council is as follows:

- Professor Buba Bajoga Chairman
- Professor E. S. Onah Director/CE NMC
- Professor G.U. Garba
- Professor G.O.S. Ekhaguere
- Professor I.R. keke
- Professor G.M. Wajiga
- Professor D.O. Adewumi
- Professor M.O, Osilike
- Professor H.S. Galadanci
- Dr. M.O. Adaji
- Dr. A.M.B. Shamaki
- Mrs. P. Okengwu
- Mal. A.M. Biu Secretary

Supervision: - The Council had an average of 4 meetings per year. At its inaugural meeting, 4 standing Committees were constituted as follows:

- Finance and General Purposes Committee
- Appointment and Promotions Committee
- Disciplinary Committee
- Academic Board

The above Committees met as often as necessary and performed oversight functions which helped the Council to promptly and effectively supervise the activities of NMC within the period. The Director/CE presented at every meeting of the Council, a Report of major activities that happened in the Centre or that had relationship with the Centre. The Director's Report was usually deliberated upon by the Council as shown in the minutes of Council meetings.

The Council within the period supervised the process of recruitment of both principal officers and other staff of the NMC. The Centre Librarian, Bursar and Deputy Director were appointed in the period. Council also examined the Report of and approved the annual appraisal of staff of the Centre as part of its supervisory roles.

In terms of recruitment of staff, the Council began to remedy some of the anomalies created by previous Council (2011-2015) that recruited mainly staff at the lower cadre by approving Study Leave and fellowships to staff to enable them obtain M.Sc. and Ph.D. degrees. The ratio of Academic and non-academic staff by 2020 was 61:251.

The Council approved Annual Reports for 2017/18 and 2019/2020 produced by the Management. The annual reports provided accounts of activities relating to academic and research programmes, trainings and personnel matters, publications and projects as well as future programmes of the Centre. The production of Annual Report is a requirement of the NMC Act which reflects the supervisory role of the Governing Council. However, the Panel did not sight Annual Report of 2016.

Planning: The Council developed a Strategic plan for 2020 – 2024 which contains a systematic development agenda for the Centre. The Strategic Plan will require the total commitment of management to specify priority of academic programmes and activities that should be given attention.

Finance: Within the period NMC had an annual budget preparation and documentations which were presented first to the Finance Committee of the Council and to General Council for scrutiny and approval. There was regular supervision of financial status of the Centre.

Contracts were awarded through due process by going through the tenders' board and monitoring and supervision of such contracted projects were regularly done through its committee. The Council examined proposals from the Centre relating to improving its Internally Generated Revenue IGR.

The Council appointed Sada Idris & Co as External Auditor in 2018 who cleared the backlog of 2015, 2016, and 2017 unaudited account and presented them for approval in 2019. There were delays in the auditing of these accounts which should have been done latest six months after the end of each year according to the financial regulations. Accounts for 2018 and 2019 were audited in 2020.

The finances of the Centre remained low particularly because of the delisting of the NMC from qualified institutions that benefit from the TETFund. This affected the development of the Centre in terms of physical, academic and staff development. There appeared to be poor representation by the NMC management (Council and Principal officers) which misguided the action to remove the NMC.

Discipline: Between 2018 and 2020 Council developed a draft Conditions of Service specific to the peculiarities of NMC. The Conditions of Service is awaiting final acceptance by the newly constituted Governing Council and final approval by the President of Federal Republic of Nigeria as specified by the Act of the Centre. The Act establishing the Centre requires that the Conditions of Service "shall not have effect until approved by the President". This provision is a constraint as the process of obtaining President's approval appears rigorous.

Guidance: Council guided the Management of the NMC in the Court cases involving the Centre and some entities. The Council was briefed on the disappearance of Certificate of Occupancy in respect of a block of six flats (at Area 11, Garki, Abuja) belonging to NMC and initially kept in the custody of Barrister Raji in his capacity as Secretary (Registrar) to the Centre. The Centre sued the Alpha Mortgage Bank along with Barrister Raji but the case was later struck out for want of diligent prosecution from the Centre's Lawyers. However, in order to continue with the matter, the Centre's Lawyer brought an application

for re-listing so that the defendants will be served properly. In 2018, the Council was informed that the former Counsel to the Court case did not hand over the Case File to the new Legal Retainer because the Centre owed him. The Council resolved that the Management should settle the former Lawyer and recover the Case file from him.

8.2.2 Relationship with NUC

The NUC is a parastatal under the FME saddled with the responsibility of granting approvals for establishing universities and programmes run by such universities as well as channel for federal and external funding for universities and the 4 inter-university Centres in Nigeria. The relationship of NUC and NMC between 2016 and 2020 improved from what it was in the past. There was limited subjection of NMC to the supervisory role of the NUC because most of the Centre's activities shifted to basic education and outreach. This was reported by many stakeholders that the Panel interacted with, such as the NASU, SSANU, ASURI and some principal officers (Appendix B). There was poor communication between the leadership of the Centre and the NUC. This situation may be because there was no mention of the NUC's supervisory role in the NMC Act. The lack of communication and cordiality between the NUC and the NMC contributed to the removal of NMC from the list of Institutions funded by TETFund.

It was observed that the NUC had representative in the Governing Council. However, this representation was not effective in providing stronger communication between NUC and NMC.

8.2.3 Relationship with the Ministry of Education

The NMC maintained a good relationship with the Federal Ministry of Education as shown by NMC's participation in review meetings hosted by the FME. The annual budget (expenditure and income) of the NMC in 2016, 2017, 2018, 2019 and 2020 were scrutinised by the Ministry.

The Tertiary Education Department of the FME has direct supervisory authority over the NMC, being an Inter-University Centre, but because of the greater activities and preference of NMC management for primary Level Education, the Centre appeared to work more closely with the Department of Basic and Secondary Education and Department of Policy Planning, Management and Research than the Tertiary Education Department.

8.2.4 Relationship with Relevant Professional Bodies

The Act establishing the Centre provides that the Council shall consist of:

(i) Three members to represent professional and other interests in mathematical sciences, statistics, computer science and theoretical physics.

The Council of 2018 – 2020 had three representatives from the professional bodies in compliance with the Act establishing the Centre.

Also, the Centre maintained a consultative relationship with the Nigerian Mathematical Society (NMS), Statistical Society of Nigeria, Mathematical association of Nigeria, Association of Computer Science by hosting a forum of Presidents of Associations/Societies in the Mathematical Sciences in May 2019 at the Centre. Furthermore, the Centre hosted a meeting of all Heads of Department of mathematical sciences from Nigerian Universities. Again the Centre supported and participated in the annual conferences of these professional bodies.

8.2.5 Relationship with TETFund

Tertiary Education Trust Fund (TETFund) was established by the Federal Government in 2011 to disburse, manage and monitor education Tax to government-owned tertiary institutions in Nigeria. Prior to this, the Education Tax Act of 1993 which was broader in scope was the operative instrument between 1999 and 2011. With the repeal of ETF and establishment of TETFund there was a revision of the category of institutions qualified to receive funding from the scheme by the TETFund in collaboration with the NUC in 2012. This was the juncture that the four inter-university Centres (namely: National

Mathematical Centre, Abuja, French Village Lagos, National Institute for Nigerian Languages, Aba and National Institute of Arabic Studies) were delisted.

The last funding from TETFund to the Centre was for the construction of a printing press building and procurement and installation of printing press equipment at the Centre which are yet to be completed because of the delisting of the NMC from the names of qualified Higher Education institutions to benefit from TETFund. This was corroborated by the memoranda submitted to the Panel by the Director/CE, the Registrar and the Unions of the NMC.

Efforts have been made to reverse the classification of NMC as a monotechnic which was the main basis for delisting of NMC. From the memoranda submitted by various Coordinators of programs, NMC runs 5 programmes (Mathematics, Mathematical Sciences Education, Statistics, Computer Science and Theoretical Physics programmes), which is multi-disciplinary. Therefore, it was improper to classify the Centre as monotechnic and subsequent delisting.

By the mandate of the NMC, it is expected to provide leadership through the above mentioned programmes at both tertiary and foundation levels. Stakeholders expect that the quality of activities at the Centre should always be above those in any other tertiary institutions in the country. For example, it was reported that in the early years of NMC, the quality of the library facilities and the environment for studies were far above any other national institute in the country. This was the reason that scientists rushed to the NMC to make use of the then excellent world class facilities in mathematical sciences under various programmes in the Centre.

Considering Nigeria economic situation, it will be impossible for the NMC to play the leadership role in mathematical sciences through capacity building, advanced research development and provision of infrastructure and resource materials without TETFund support.

8.2 Recommendations

- The Governing Council should not constitute the Academic Board as its Committee.
 The Act establishing the NMC recognises the Academic Board as statutory body;
- ii. The Representative of NUC in the Governing Council of NMC should be active in providing stronger communication and facilitating meaningful relationship between the two organisations to foster synergy;
- iii. The Professional bodies should be carried along in developing annual activities of the Centre to provide better collaboration for development of advanced research and training in mathematical sciences.

CHAPTER NINE

TERM OF REFERENCE 7

To examine the law that established the NMC including relationship between different organs, units and offices, and indicate the way the law has been observed by the competent authorities and also suggest any modification to the law considered necessary or desirable to enable the Centre achieve its objectives.

9.1 Preamble

The National Mathematical Centre Law [1989 No. 40] stated the objective of establishing the Centre as "to, amongst other, train and develop a high level of personnel in mathematical sciences, create a resource Centre to serve national and international communities and provide for other matters ancillary thereto".

9.1 Findings

The NMC Law has six (6) parts namely:

- Part i: Establishment of the National Mathematical Centre which contains the establishment and members of the Governing council, Tenure of offices and the power of the Minister to give directives;
- Part ii: Functions and power of the Centre which has functions of the Centre and powers of the Centre;

- Part iii: Staff of the Centre- contains sub-section for the Director;
- Part iv: Academic board- contains the establishment of an academic board for the Centre;
- Part v: Financial provisions has sub section, annual estimate; Accounts and audits;
- Part vi: Miscellaneous contains sub sections on regulations, interpretations and short title.

The provisions of the NMC Law 1989 have been guiding the general operations and day to day administrations of the Centre. The organs recognised in the Law are the Governing Council and the Academic Board which are already on ground.

The Units provided in the Act include: The Centre Library, the Computer Laboratory and the Academic programs.

9.1.1 Governing Council

9.1.1 (i) Appointment of Chairman and Members of the Council

The Law provides that the Chairman and other members of the Council who are not representing Ministries, shall be appointed by the President on the recommendation of the Ministry. The composition as contained in Part 1: 2(2) of the Law are: A Chairman; One representative of the Federal Ministry of Education; One representative of the National Universities Commission; One representative of the Federal Ministry of Science and Technology; One representative of the Nigerian Academy of Science; Two representatives of the Nigerian Universities, appointed in rotation for two years at a time; One representative of the Polytechnics; One representative of the Colleges of Education; Three members to represent professional and other interests in mathematical sciences, statistics, computer science and theoretical Physics; and the Director of the Centre.

The provision of the Law to this extent is not ambiguous but the application particularly, the appointment of "two (2) representatives of the Nigerian Universities, appointed in rotation for two years at a time and three (3) members to represent professional and

other interests in mathematical sciences, statistics, computer science and theoretical Physics" have not been realised for a long period.

9.1.1 (i) Recommendation

(i) The FME should fully constitute the Councils by following the provisions of the NMC Law relating to membership in order not to deny the benefits and professional contributions from these bodies in assisting the Centre to realise its statutory mandate.

9:1:2 Academic Board

The Establishment of an Academic Board for the Centre is provided for in Part IV (10) of the Law. Academic board is charged with the responsibilities of policy formulation and regulation of academic activities of the Centre. The membership of the Academic Board, as provided in Part IV, Section 10 (1) of the Act No 40 of 1989 are; the Director of the Centre; Deputy Director; Centre Librarian; four representatives drawn in rotation from among the universities in Nigeria in the discipline of mathematical sciences; and five other persons, for the time being holding such appointments on the staff of the Centre as the Director of the Centre may, with the approval of the Council, specify.

The statutory membership as contained in the Law needs to be specific on the ranks and positions of the members provided for in Sub-section 10 (1c) which says "Five persons, for the time being holding such appointments on the staff of the Centre as the Director of the Centre may, with the approval of the Council specify".

9.1.2 Recommendation

(i) The amendment should specify that "All Professors/Chief Research Fellows of the Centre and five persons who are Coordinators of Academic Programme of the Centre shall be members of the Academic Board.

9.1.3 Principal Officers

The Principal Officers recognised in the Law are the Director, Deputy Director, and Librarian.

9.1.3 (i) Appointment of the Director

Part III Sub-Section 7 (1-2) states that "There shall be for the Centre a Director who shall possess appropriate qualifications and be appointed by the President, on the recommendation of the Minister; and the Director shall hold office for a period of five years and shall be eligible for re-appointment; and enjoy conditions of service equivalent to those of the Vice-Chancellor of a Federal University".

The Law did not categorically provide the qualification required of the Director. Also, since the Director of the Centre enjoys the conditions of service equivalent to that of the Vice-Chancellor of the University, then the one-term tenure of eligibility of the Vice-Chancellor should be applicable to the Director of the Centre.

9.1.3 (i) Recommendations

- (i) The Amended Law should provide that the Director of the Centre should be a Professor/Chief Research Officer in Mathematical Sciences with a track record in research in any core areas of mathematical sciences, with sizeable number of publications in reputable international journals with high impact factor.
- (ii) Since NMC is an Inter-University Centre and the Director enjoys conditions of service equivalent to those of the Vice-Chancellor of a Federal University therefore, the single term of the tenure of Vice-Chancellors should apply to the Director of the Centre. The Law of NMC should be changed to be in tandem with the Miscellaneous Act of 2012 of Federal Universities.

9.1.3 (ii) Other Officers

Part III: 7 (6) of the Law says that "There may be appointed, from time to time, by the Council, such other employees as may be required for the purposes of the efficient performance of the functions conferred on the Centre by this Act." It was on this premise

that the previous Governing Council appointed the Registrar, the Bursar and Controller of Works and Physical Planning.

9.1.3 (ii) [a] The Registrar

The Registrar is in charge of general administration of the Centre including: Establishment; Governing Council and general matters; Training and staff development; Legal matters; Welfare, pensions matters, keeps official records, the seal of the Centre and provided other supportive administrative services for the management including providing secretaries to cover meetings of statutory committees.

9.1.3 (ii) [b] The Bursar

The Bursar is the Chief Finance officer of the Centre and is responsible for the day to day financial running of the Centre.

9.1.3 (ii) [c] The Controller, Works and Physical Planning Department

The Controller of Works and Physical Planning Unit is responsible for the construction, maintenance of the physical plant, structures and grounds of the Centre.

9.1.3 (ii) [a-c] Recommendation

(a) The Centre should liaise with the FME to ensure the proposed amendment of the Law establishing the Centre contains the Offices and functions of the Registrar, the Bursar and the Controller of Works and Physical Planning Unit to ensure independence and clarity of functions.

9.1.4 Other Recommendation

i. The Centre has no approved Conditions of service since its inception over 30 years ago. Two past Councils had developed a draft Conditions of Service but

could not give it an official seal because the Law requires that the Conditions of Service should be signed by the President. This is contained in Part III sub section 8 (2) of the NMC Law. This section of the Law needs to be amended to conform to the pattern obtainable in Federal Universities, which allows the Governing Council to approve the Conditions of Service after consideration.

9.1.5 Relationship between the Various Internal Organs, Units and Offices

The Centre has different organs, units and offices which are designed to work in collaboration in order to realise its Vision and Mandate.

There appears to be conflicts and frequent disagreements between some officers and Units.

(i) The Controller of Works and Physical Planning and the Chief Procurement Officer

The Controller of Works and Physical Planning complained that the Chief Procurement officer does not know the boundaries for his office. The Procurement Unit continues to interfere with projects even after award of contracts. In the memorandum submitted by the Controller, he indicated that the Procurement Unit should be under the Department of works and Physical Planning. Similarly, in the memorandum submitted by the Chief Procurement officer, he claimed that his responsibility continues from project design, tendering to implementation and demanded to have similar kinds of professionals in his Unit as that of Department of works and Physical Planning.

(ii) The Chief Procurement Officer and Bursary Department

The Chief Procurement Officer requested that the Stores Unit of the Centre should be moved from Bursary Department to the Procurement Unit. He complained that the current arrangement where the Stores Unit is under the Bursary Department is affecting his operations in terms of inspections and retirements

(iii) The Deputy Registrar and the Acting Registrar

Mr. Abayomi Olukayode Gregory (Deputy Registrar, 2016)

Mr Abayomi, in his memo to the Panel alleged unfair treatment meted on him when the office of the Registrar of the Centre became vacant in November 2020 and Dr. B. F. Azuka was appointed Acting Registrar, instead of him. He alleged further that Dr. Azuka was a Mathematician and lacked the qualification to be appointed to the office of Acting Registrar. That he complained to the Director on this issue, but no action was taken. However, Dr. Azuka's records show that he was employed in 1993 as Assistant Secretary and at some point he was posted to the Mathematical Sciences Education Programme, as a Registry staff. He holds the following qualifications: B.Ed. in Education Management/Mathematics (UI), MA in Education Planning (Benin), M.Ed. in Mathematics Education (Nasarawa) and PhD in Mathematics Education (Nasarawa). In absence of senior academic staff, Dr. Azuka was asked to oversee Mathematical Sciences Education Programme from 2011 -2016. Between the time of his employment in 1987 and presently, he received promotions in non-academic positions (Senior Assistant Secretary in 1996, Principal Assistant Secretary in 2000 and Deputy Registrar in 2004). While there, Dr. Azuka took advantage of ETF sponsorship that was available at that time to study for higher degrees, eventually obtained a Ph.D. in 2015. Dr. Azuka became a Deputy Registrar in 2004.

Minutes of the 4th and 5th Councils show that Dr. Azuka had been in the Governing Council Affairs unit of the Registry Department.

9.1.5 Recommendations

- (i) The Management should clearly define the responsibilities of the Controller of Works and Physical Planning and that of the Chief Procurement officer to avoid interfering with job performance.
- (ii) The Council and Management should transfer the Stores Unit from the Bursary Department to the Procurement for proper coordination.

(iii) The Panel is of the opinion that Dr. Azuka has been in a non-academic cadre from his first employment and progressed to be Deputy Registrar. He is qualified to be an Acting Registrar.

CHAPTER TEN

TERM OF REFERENCE 8

To trace the historical evolution of NMC and take stock of its net achievement and problems as well as style and direction.

10.1 Historical Background

President Ibrahim Babangida on the occasion of the inauguration of the Nigerian chapter of the African Mathematical Union on August 16, 1987, in Lagos, expressed great concern for the dramatic decline and the poor performance of Nigerian students in Mathematical Sciences in his goodwill message. An excerpt of which is as follows:

"... Mathematical Sciences in general have of late proved to be an area of great hardship. The number of teachers is not rising with the number of students. As a result of this, students seem to be doing less and less well in these subjects. They consequently tend to lose interest. All these in turn, mean that there will be fewer and fewer teachers. A vicious circle is set up and the prospects of scientific and

technological development become dim wherever such a circle is firmly established."

The National Mathematical Centre, Abuja was created after the collective efforts of many notable Nigerians especially mathematicians and learned societies and some initiatives by Professor Abdus Salam, International Centre for Theoretical Physics (ICTP), Trieste, Italy, who visited Nigeria to show support for the Centre.

The National Mathematical Centre, Abuja was established by the Federal Government of Nigeria on 1st January, 1988 although Decree 40 was promulgated on 12th December, 1989, giving it a legal backing as a corporate body with perpetual succession and a common seal.

The Centre was created to develop appropriate initiatives and resources of international standing for reawakening and sustaining interest in the mathematical sciences at all levels in Nigeria and as an adequate response to the dramatic decline in the production of teachers and specialists in the mathematical sciences at all levels. The annual postgraduate output of mathematical scientists in Nigeria is steadily declining. Furthermore, the number of qualified senior secondary school graduates who apply for admission to read mathematical sciences in universities has drastically diminished. At all levels, the dearth of qualified teachers is a long standing problem which has now become more and more acute especially in the wake of the recent upsurge in student numbers and in the number of educational institutions. These and other reasons led to the creation of the Centre.

The Centre was first housed in the Department of Mathematics, University of Nigeria, Nsukka. The pioneer Director of the Centre, Professor J.O.C. Ezeilo, was appointed on 1st January, 1988, but the first Governing Council of the Centre was inaugurated on 12th April, 1991. And in December 1989, the Centre was moved from its first location, Department of Mathematics, University of Nigeria, Nsukka to Plot 261, Zone 4, Wuse,

Abuja, and later to Block 11, Zone 3, Wuse, Abuja, in April 1990, and finally to its permanent site in 2002 at Sheda, Abuja, FCT.

10.2 Mandate

During the period 1988 – 2002, the National Mathematical Centre, really delivered on its core mandate as spelt out in the law establishing it (Decree 40 of 1989), which are as follows:

- 1. train and develop high level personnel in mathematical sciences, including mathematics, statistics, computer science, and theoretical physics, for Nigerian and African institutions;
- create a resource centre to serve national and international communities as a focal point for advanced research and training in mathematical sciences and applications;
- enhance collaboration among mathematical scientists, especially between young Nigerian scientists and other advanced and experienced scientists from within and outside Nigeria;
- 4. attract good mathematical scientists from all over the world into the service of Nigeria;
- 5. encourage and support activities leading to the improvement of the teaching and learning of mathematical sciences at all levels;
- 6. identify and encourage young talents in mathematical sciences;
- 7. prepare Nigeria for a leading role in mathematical sciences; and
- 8. tackle national set goals in the development of mathematical sciences.

10.3 Findings

NMC maintained close relationship with Higher Education Institutions (HEIs), especially the universities, through its highly stocked and current library resources and holdings, advanced level lecture series, conferences and scholarships. However, there was a sharp and visible decline between 2012 and 2016, during which emphasis shifted from HEIs to

Primary and Secondary education levels. During this period only quiz competitions and Olympiads were conducted by the Centre, for which many people were employed even in areas outside Mathematical Sciences. These employees later became a problem to the Centre since they could not be placed in the five core Academic Units. The problem is yet to be resolved.

Efforts have been made to deliver on its mandate by re-launching Foundation Postgraduate courses and conferences by the administration that took effect in 2016. Even this attempt did not go far for lack of funds. TETFund discontinued funding the Centre in 2012, because it was erroneously classified as a Monotechnic institution. But since the Centre trains in five distinct areas of knowledge: Mathematics, Computer Science, Statistics, Physics and Mathematical Sciences Education, So, it is clearly not a monotechnic.

The Centre tried since 2012 to reverse the defunding status by TETFund to no avail. During this time the ailing NMC Consult was revamped to boost IGR, but this did not go far enough to make a difference. At a point, the idea of converting the Centre to a special University of Mathematical Sciences was considered by its Management, just to be able to access TETFund support.

10.3.1 Challenges

The Centre has deviated from its mandate as presented in Section 10.2. The reasons are paucity of funds and leadership failure.

The Centre is faced with the following challenges:

- 1. Insecurity due to porous boundaries, there is no perimeter fence
- 2. Huge number of incompetent manpower
- 3. Epileptic public power supply
- 4. Inadequate funding and exclusion from TETFund Intervention Programme
- 5. Dilapidated buildings and equipment and poor infrastructure

10.3.2 Evolution

In the thirty-three years of existence of the NMC, there has been only minimal evolution in the areas of Academic Programmes, Library Development, Administration/Management Structure, Physical Development, Infrastructure Development and others. There are few materially measurable areas of significant evolution in the Centre. Among them is the creation of the Directorate of Academic Planning which was established to collate, manage and interpret data to guide academic development of the Centre. Another significant change is the development of the Centre's Strategic Plan to support the NMC to focus and prioritise activities for achieving its mandate. The slow pace of evolution of the Centre in terms of development is due to the consistent low budgetary provision and non-review of its Act since it came into force in 1989. For instance, the poor funding has deprived the Centre from meaningful progressive development. The mode of funding for the NMC by the Federal Government has also contributed significantly to the very slow evolution of the Centre. For example, the non – provision of funds to take care of special needs like Visiting Professors, Post–Doctoral Fellowship, etc., has hampered the Centre from carrying out some of its fundamental functions. Also, the non – review of the Act has hindered the introduction of new academic programmes and collaboration with certain institutions in the country (Appendix A7).

10.3.3 Style and Direction

There is evidence of staff participation in the decision making of the management of the Centre. Administration of the Centre was hinged on Committee System where both Standing, and *ad-hoc* Committees were used for policy formulation and implementation. Also, Management had plans to institute e-financial transaction platform for the Centre.

The main focus of Management was to achieve the Mandate of the Centre and to give it global visibility, especially, through its website and other international engagements. To achieve this, the Management organised an annual forum of Professors and Heads of Department of Mathematical Sciences from the Nigerian University System (NUS). Here, a review of the activities of the Centre was carried out, especially as it relates to the NUS and then proffer solutions and the pathway into the future. During the period under

review, the Management of NMC instituted the forum of Presidents of Mathematical Associations and Societies such as Nigerian Mathematical Society (NMS), Mathematical Association of Nigeria (MAN), Nigerian Statistical Association (NSA), Nigeria Computer Society (NCS), National Association of Mathematical Physics (NAMP) and Nigerian Women in Mathematics (NWM)). The Forum met regularly to among other things, work out the modalities for regular and prompt payment of annual membership registration of the International Mathematical Union (IMU). In a way, the Forum served as the "Adhering Committee" of IMU in Nigeria (which NMS is the official known organisation).

The Centre deviated from its mandate of creating a resource centre of advanced research in Mathematical Sciences (Mathematics, Physics, Computer Science and Statistics). However, primary education has been given undue attention. A few Foundation Postgraduate Courses and Conferences took place in this period, but there was neither advanced research nor postdoctoral fellowships in all the programmes. Also, there was no visiting programme within the period.

10.3.3 Recommendation

(i) To ensure management of the Centre remains consistent with its mandate irrespective of who is at the helm of statutory bodies like the Academic Board and Governing Council, there should be more internal members nominated into these organs. At the moment, the Director of the Centre is the only internal member of the Council.

10.3.4 Achievements

From 2016 to 2020, the Panel noted the following projects and activities have been carried out by the management (Appendix A7):

Physical Building and Infrastructure

- Completion of Participants 24-room Hostel, Phase 2 which was abandoned.
- Completion of Sports and Recreational Centre (Phase 2B) that have been abandoned for some years.

- Construction of 32-room Participants Hostel (70% completion) as a new project initiated by the Administration.
- Construction of 500-Seater Auditorium and Participants Hostel (50% completion stage) with offices.
- Installation of Solar Power as an alternative source of energy for the Administration Building, Library and Computer Laboratory.
- Functional campus wide internet connectivity.
- Brought public power supply to the Centre by re-connection of power and payment of huge electricity bills accumulated.
- Development of active NMC website and near completion of e-payment Portal.
- Virtual Conferencing Facilities (Zoom): NMC now has viable zoom facilities, capable of hosting three parallel sessions at the same time and can take a reasonably large number of persons in each session.

In terms of Governance, the administration did the following:

- Introduction of monthly Departmental/Unit meetings.
- Introduction of regular meetings of all statutory bodies like Principal Officers, Management committee and Staff Forum with meetings of Procurement Planning Committee and Tenders' Board called whenever the needs arise. This is to ensure probity. Also, departmental (and Unit) meetings have been instituted.
- Introduction of functional Committee System of administration.
- Completion of up—to—date external audit of the Centre's accounts (2015-2019) including those of NMC-Global Consultancy Services Ltd (2015-2019) and NMC-International Science Model Academy (2013-2018).
- Production of Strategic plan (2019-2024) of the Centre for the first time in over 30 years of NMC's existence. This was made possible with the effort of the 5th Council.
- Production of NMC Identity Manual for branding which will lead to institutional identity.
- Production of 2017/2018 and 2019/2020 NMC Annual Reports.
- Production of NMC Handbook for the first time, since establishment, in 2019/2020.

Welfare and Staff Development

- An all-inclusive regular staff training through attendance of conferences, workshops and seminars. These include professional, refresher and in-house trainings.
- Introduction of annual rewards for a selected number of staff for outstanding performance by meeting certain criteria.
- Restructuring of Promotion procedure in the Centre: Introduction of Departmental Appraisal Committee and Central Appraisal Committee after which the Appointments and Promotions Committee of Council would sit.
- Payment of shift duty allowance to Security staff and overtime allowance to some deserving staff.
- Scheme and Conditions of service of the Centre currently before the Council for approval. This was the first since the establishment of the Centre. This was also made possible with the effort of the 5th Council.

Advanced Research, Training and High – Level Manpower Development

- Reintroduction of the Foundation Postgraduate Courses (FPC) in specialised areas of Mathematical Sciences (Mathematics, Statistics, Computer Science and Theoretical Physics) which hitherto, was limited to Mathematics only.
- Establishment of Research Groups and introduction of monthly Departmental Seminar.
- Establishment of Forum for Presidents of Associations/Societies and Nigerian Women in Mathematics. This Forum helped to address certain critical areas like payment of IMU dues.
- Annual regular Meetings of Forum of Heads of Departments and Professors of Mathematics of all Universities in the Country to brainstorm and fashion a way towards creating a critical mass of young Mathematicians, especially at postgraduate level in the Country.
- Commencement of e-library service at the Mathematical Sciences Library of the Centre.

 Regular annual international conference in Mathematics, jointly organised by the Departments of Mathematics and Computer Science of University of Lagos under the auspices of the Mathematical Analysis and Optimisation Research Group.

Talent Hunt and Human Capital Development

- Regular annual National Mathematics Competition of Undergraduate Students.
- Regular annual Nigerian University Programming Competition (NUPC).
- Introduction of National Statistics Competition of Undergraduate Students jointly organised by Nigerian Statistical Association.
- Introduction of SDGs Junior Girls Olympiad: Annual competition of JSS girl students across the country under SDG 4, to reinvigorate the interest of the girl child in mathematical sciences.
- NMC Google Africa code week which gave NMC an international visibility.

Collaborations

During the period under review, the Centre signed memoranda of understanding with the following organizations:

- Collaborative research with Nigeria Defence College (NDC).
- Collaborative research with Nigeria Content Development Management Board (NCDMB).
- Collaborative research with National Open University of Nigeria (NOUN).
- Collaboration with University of Lagos (Department of Mathematics and Computer Science) in organising international conferences.
- Collaborative research with Carnegie African Diaspora Programme on Ethno-Mathematics.
- Partnership with COMSATS and its Centre for Climate and Sustainability (CCCS), to address the issue of climate change.
- NMC-UBEC collaboration on training of teachers and students in Numeracy and Mental Arithmetic through UBEC grant.

10.3.5 Challenges

The Centre is faced with the following challenges, among others.

- 1. Irregular public power supply leading to heavy dependency on Generators and to huge expenses of diesel for Generators.
- 2. Inadequate funding to implement most of the proposed annual activities by different academic programmes.
- 3. Insufficient budgetary allocation and irregular timing in the release of appropriated funds.
- 4. Dilapidated buildings, non functional equipment, poor infrastructure, etc.
- 5. Porous boundaries of NMC due to lack of Perimeter fence.
- 6. Lack of appropriated fund for Researchers and Visiting Professors.
- 7. The long overdue amendment of the NMC Act, 2004.
- 8. Inadequate books and online services at the Library.

10.3.5 Recommendation

 The Centre should strengthen the Linkage Unit so as to aggressively pursue linkages/collaboration with similar institutions within and outside the Country in order to operationalise the MOUs already signed and draw new ones (with focus on tertiary programmes) to support the achievement of its mandate.

CHAPTER ELEVEN

TERM OF REFERENCE (IX)

To examine the general security in the Centre, how the Centre has dealt with it and recommend appropriate measures to deal with it.

11.1 Preamble

Conducive environment which guarantees peace is necessary for the achievement of the mandate of the National Mathematical Centre. It is on this premise that the Panel examined the Security situation and systems available to the Centre through engagement of the stakeholders in the Centre, host communities and security personnel.

11.2 Findings

The security unit of the Centre headed by Chief Security Officer is under the office of the Director/Chief Executive. There is a Security Committee headed by a Professor/Chief Research Fellow or a former Principal Officer with the Chief Security Officer and three others as members. The task of the unit is to ensure safety and adequate security for the Centre.

11.2.1Security Unit and Operations

The Unit has 17 regular staff and 22 ad-hoc staff which cannot take care of the Centre considering the size of the land area.

Table 11.1: List of Staff in the Security Unit 2016-2020

S/N	Name	Designation	Qualifications
1	Ishaya Musa	Deputy Chief Security Officer	B.Tech, PGD Conflicts MGT and Resolution
2	Danlami Gammanuel	Higher Security Officer	Higher Dip. In Security MGT and Operations
3	Enna Lega	Security Officer	Dip. In Security MGT and Operations
4	James Abah	Security Officer	WASSE Certificate
5	Stephen Orimolade	Assist. Security Officer	Dip. In Security MGT and Operations
6	Onoja Ojonugwa	Assist. Security Officer	S S School Certificate
7	Achagh Bawua	Assist. Security Officer	Gen. Cert in Education GCE
8	Joseph Azu	Assist.t Security Officer	Dip. In Security MGT and Operations
9	Madamori Olorunyomi	Patrol Supervisor	WASSE Certificate
10	Rotji Yilwada Lar	Patrol Supervisor	S S School Certificate
11	Mathew Agu	Patrol Supervisor	WASSE Certificate
12	Aliyu Nizelemi	Patrol Supervisor	WASSE Certificate
13	Paul Bege	Patrol Supervisor	S. S. School Certificate
14	Dauda Samuel	Patrol Supervisor	S. S. School Certificate

15	Idika Okoro	Patrol Supervisor	S .S. School Certificate
16	Victor Onoja	Patrol Supervisor	S .S. School Certificate
17	Samuel Izere	Patrol Supervisor	Technical Certificate

- i. The Centre's 127.4 hectares of land is not fenced, as a result of this, entry into the Centre is uncontrolled creating many security challenges.
- ii. Security agencies were invited monthly to train and retrain security personnel in different relevant topics. All the guards have passed through some forms of drills to keep abreast of the recent trends of security challenges in the society.
- iii. The security guards have only batons and sometimes knives which might not be enough to face a criminal with a better weapon.
- iv. The security units lack operational communication systems, such as secret cameras, fire alarms, walky-talky, GSM handsets and security vehicles.
- v. The Centre lacks functional fire service station.
- vi. There is poor lightning of the Centre in the night. The Centre is connected to the national grid but there is constant power failure.
- vii. The Centre partially provided solar power for Administrative Block, Library and Computer Laboratory but there are some isolated places that need to be illuminated.

11.2.2 Relationship with Government Security (Police)

The Police Command, the State Security Service and other security agencies in Kwali Local Government Area have good working relationships with the Centre. Its officers (uniformed and plain clothed) some of whom are armed, patrol the Centre, thus helping in crime prevention. Whenever the Centre organised an event, they send a detachment of armed men after notification. The Centre also participated in the activities of Police Community Relation Committee. The FCT commissioner

of police approved deployment of two armed policemen for the Centre but they are not adequate.

11.3Security Incidences Recorded at the Centre

The unit is much concerned with the porous nature of the Centre because of the lack of comprehensive fencing as a result of this, the unit finds it extremely difficult to control movement of people and stray animals.

11.3.1 Incidence 1:

In 2020, one Mr. Biko, the Bake of Kwali sent in a letter of complaint to the Centre that his portion of land in the Centre was not compensated for and no Centre development should extend to that area until he is adequately settled.

Resolution:

A committee was constituted to address the matter and the Centre is awaiting the outcome.

11.3.2 Incidence 2:

In May 2019, it was reported to the unit that some bags of cement were missing from the store.

Resolution:

The unit swung into action, intelligent report took them to where the 15 bags were hidden in the bush, far from the site. The bags were returned to the contractor.

11.3.3 Incidence 3:

In July 2019, some iron rods were stolen from the 500 seater capacity project site.

Resolution:

The security guards were able to retrieve the stolen rods.

11.3.4Incidence 4:

In September 2019, a suspect was seen going out from the campus through the bush path with a 14" flat screen TV.

Resolution:

It was taken to the security office but no one came to claim it, so it is still in their custody.

11.4 Recommendations

- i. The Centre should, as a matter of urgency, fence the entire premises in order to minimise most of its security challenges.
- ii. The Centre should engage the Abuja Electricity Distribution Company for possible increase in power supply to the Centre. The Centre's Management should introduce more solar lightning to illuminate the Centre.
- iii. The Centre should procure a patrol vehicle and communication gadgets for the Security unit to improve the capacity of the Unit.
- iv. The Centre should establish a Fire service station with modern fire-fighting gadgets and display fire escape route plans and emergency procedures on notice boards of each department and common areas.
- v. The Centre should create a common platform with some public institutions close to it and engage the Nigerian Police to establish a police station or outpost close by to support these government agencies security-wise.

CHAPTER TWELVE

TERM OF REFERENCE (X)

To examine the processes and structures of the mechanisms for the discipline of students in the National Mathematical Centre in order to ascertain compliance with due process of the rule of law.

12.1 Discipline of Students

The National Mathematical Centre is an Inter-University Centre and has no regular students but whenever there is a programme/activity, there are rules guiding the conduct of the participants/students.

12.2 Disciplinary Structures and Procedures for Students

Participants of the Centre's academic programmes are kept on campus for a period ranging from one week to three months.

Code of Conduct to Guide Participants' Behaviour

- a. Participants need to be duly nominated to participate in any activity.
- b. Participants must be duly registered to participate.
- c. Participants sign attendance daily.
- d. Attendance of all activities is compulsory.
- e. No phone calls during training sessions.

- f. No booing of participants for incorrect answers.
- g. Activities given by facilitator must be attempted by all.
- h. Participants must not report late or leave early.
- i. Participants are expected to train other colleagues after passing out successfully.
- j. Training sessions are not to be disrupted by any means.
- k. Good conduct is expected of all participants during the Course.
- I. Certificate of attendance will be issued to participants who have the minimum attendance.