



# **REPUBLIC OF ZAMBIA**

### **REPORT**

# OF THE

# COMMITTEE ON EDUCATION, SCIENCE AND TECHNOLOGY

### ON THE

# ZAMBIA ACADEMY OF SCIENCES BILL, N.A.B. NO. 17 OF 2020

# FOR THE

### FIFTH SESSION OF THE TWELFTH NATIONAL ASSEMBLY

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REPORT OF THE COMMITTEE ON EDUCATION, SCIENCE AND TECHNOLOGY ON THE ZAMBIA ACADEMY OF SCIENCES BILL, N.A.B. NO. 17 OF 2020 FOR THE FIFTH SESSION OF THE TWELFTH NATIONAL ASSEMBLY

### 1. MEMBERSHIP OF THE COMMITTEE

The Committee consisted of Mr G K Mwamba, MP (Chairperson); Ms A M Chisangano, MP (Vice Chairperson); Prof G Lungwangwa, MP; Mr S Tembo, MP; Mr K H S Kamboni, MP; Mr E Machila, MP; Mr K Sampa, MP; Mr P C Mecha, MP; Mr H S Chansa, MP; and Mr M Mutelo, MP.

The Honourable Mr Speaker National Assembly Parliament Buildings **LUSAKA** 

Sir.

The Committee has the honour to present its Report on the Zambia Academy of Sciences Bill, N.A.B. No. 17 of 2020 for the Fifth Session of the Twelfth National Assembly referred to it by the House on Tuesday, 21st October, 2020.

### 2. FUNCTIONS OF THE COMMITTEE

The functions of the Committee are as set out under Standing Order 157 (2). Among other functions, the Committee is mandated to consider Bills that may be referred to it by the House.

### 3. MEETINGS OF THE COMMITTEE

The Committee held seven meetings to consider the Zambia Academy of Sciences Bill, N.A.B. No. 17 of 2020.

### 4. PROCEDURE ADOPTED BY THE COMMITTEE

In order to acquaint itself with the ramifications of the Bill, the Committee sought both written and oral submissions from the stakeholders listed at Appendix II.

### 5. OBJECTS OF THE BILL

The objects of the bill are to:

- (a) provide for the promotion of technological discovery and innovation;
- (b) establish the Zambia Academy of Sciences and provide for its functions;
- (c) provide for the investigation of matters of public interest relating to science and technology;

- (d) provide for the promotion of research and its utilisation in the development of science and technology; and
- (e) provide for matters connected with, or incidental to, the foregoing.

### 6. BACKGROUND TO THE BILL

The Committee was informed that the Zambia Academy of Sciences was established on 13<sup>th</sup> July, 2005, within the administration of the National Science and Technology Council (NSTC). The Academy was registered as a society (non-profit organisation) in the same year, and admitted to the Network of African Science Academies (NASAC) in 2006. The purpose of its establishment was for the advancement of science, including life and physical sciences, medicine, engineering, mathematics, social science and technology, as the vehicle for the attainment of sustainable development for the nation. In order to enhance innovations in the various science fields, the Academy developed policy documents in 2016 which were to be operationalised through the Zambia Academy of Sciences 2016-2019 Strategic Plan. To effectively implement the policies and Strategic Plan, a need arose to strengthen the legal framework of the Zambia Academy of Sciences.

In this regard, the Zambia Academy of Sciences Bill, N.A.B No. 17 of 2020, sought to provide for the promotion of technological discovery and innovation, establish the Zambia Academy of Sciences and provide for its functions, provide for the investigation of matters of public interest relating to science and technology, and promote research and its utilisation in the development of science and technology.

### 7.0 SALIENT PROVISIONS OF THE BILL

The salient features of the Bill were as set out below.

### 7.1 Clause 1 – Short title and commencement

This clause provided for the short title of the Bill. The Bill may be cited as the Zambia Academy of Sciences Bill, 2020. Additionally, this Bill, once enacted, shall come into operation when it was assented to and published in the Government Gazette.

### 7.2 Clause 2 - Interpretation

This clause defined the key words and phrases used throughout the Bill in order to make the law easier to understand by citizens and those tasked to implement the law.

# 7.3 Clause 3 – Establishment of the Zambia Academy of Sciences

The clause provided for the continuation of the existence of the Zambia Academy of Sciences registered under the *Societies Act, Chapter 119 of the Laws of Zambia* as a statutory body under the Bill.

# 7.4 Clause 4 – Seal of Academy

The clause provided for the seal of the Academy which was a device determined by the Academy and kept by the Executive-Director. The clause further provided for the manner in which the seal would be authenticated.

# 7.5 Clause 5 – Functions of Academy

The clause set out the functions of the Academy. These included the mandate to:

- (a) investigate, examine and report matters of public interest concerning science and technology on its own initiative or at the request of Government, its agencies and the private sector;
- (b) provide independent advice in the development, promotion and utilisation of science and technology;
- (c) provide financial and technical support for research and innovation in collaboration with national, regional and international organisations; and
- (d) establish and strengthen cooperation with national, regional and international institutions that promoted science.

Clause 5 further mandated the Academy to collaborate with an existing statutory corporation in the exercise of its functions.

# 7.6 Clause 6 – General Assembly

The clause provided for the composition of the members of the General Assembly which was the governing body of the Academy.

### 7.7 Clause 7 – Functions of General Assembly

The clause set out the functions of the General Assembly, which among others, were to:

- (a) determine the general policies of the Academy;
- (b) elect the Governing Council of the Academy; and
- (c) approve the Academy's annual budget.

### 7.8 Clause 8 – Academy constitution

This clause mandated the Academy to adopt a constitution of the Academy which would regulate the conduct of the affairs of the Academy. The clause further provided the matters that were to be prescribed in the constitution including the criteria for membership in the Academy, and the election, qualifications and tenure of office of the President, Vice-President and any other elective office of the Academy.

### 7.9 Clause 9 – Governing Council

The clause constituted the Governing Council of the Academy for the proper management of the affairs of the Academy and provided for the composition of the council.

### 7.10 Clause 10 – Functions of the Governing Council

The clause sets out the functions of the Governing Council relating to the quorum, attendance and decisions of the council.

### 7.11 Clause 11 – Proceedings of the Governing Council

This clause provided for the proceedings of the Governing Council and further empowered the council to regulate its own procedure.

### 7.12 Clause 12 – Executive Director and other Staff

The clause empowered the Governing Council to appoint an Executive-Director responsible for the day-to-day administration of the Academy. The clause further empowered the Academy to appoint other necessary staff for the performance of the functions of the Academy under the Act.

### 7.13 Clause 13 – Allowances

The clause mandated the Governing Council to pay a member of the Governing Council or committee an allowance as the Governing Council may determine.

### 7.14 Clause 14 – Clause 14 – Disclosure of Interest

The clause mandated a person present at a meeting of the Governing Council or committee to disclose any interest which that person may have on any matter which was the subject of consideration at such meeting.

# 7.15 Clause 15 – Prohibition of Publication of, or Disclosure of Information to Unauthorised Persons

The clause prohibited and made it an offence to publish or disclose to any person the contents of a document, or communication or information which related to the person's duties under the Act or which had come to the knowledge of that person in that person's duties under the Act.

### 7.16 Clause 16 – Funds of Academy

The clause provided for the composition of the funds of the Academy and the disbursements of the funds.

### 7.17 Clause 17 – Financial year

The clause provided the financial year of the Academy, as a period of twelve months ending on 31<sup>st</sup> December in each year.

### 7.18 Clause 18 – Accounts and Audit

The clause placed a duty on the Academy to keep proper books of accounts and other records relating to its accounts.

# 7.19 Clause 19 - Clause 19-Annual report and audited accounts

The clause placed a responsibility on the Academy to submit a report concerning its activities during the financial year to the General Assembly and the Minister not later than six months after the end of the financial year.

# 7.20 Clause 20 – Regulations

The clause empowered the Minister, in consultation with the Governing Council, to make regulations for the better carrying out of the provisions of the Act.

### 7.21 Clause 21 –Savings and transitional provisions

The clause set out the savings and transitional provisions relating to the Academy.

### 8.0 SUBMISSIONS AND CONCERNS BY STAKEHOLDERS

### **General Concerns**

- (i) Most stakeholders who appeared before the Committee supported the Bill. However, in supporting the Bill they stated that the Academy would be an important institution coming at the right time to safeguard public interest at a time when the country was experiencing growth in knowledge levels in the areas of science and technology, especially when there was need for guidance in the utilisation of this knowledge for the benefit of society, both present and future.
- (ii) Stakeholders pointed out that the Academy just like any other academy was a grouping of distinguished scholars, scientists, medical scientists, engineers, mathematicians and technologists, whose membership was by invitation and election by their peers in recognition and of their contribution in the field of science, and to the application of science for solving societal problems.
- (iii) Stakeholders who appeared before the Committee observed that the Zambia Academy of Sciences Bill would provide for technological discovery and innovation which was similar to the role of the National Science and Technology Council whose mandate was to promote science, technology and innovation for industrial development. In this regard, stakeholders stated that the Bill would create

duplication of Government departments' roles, and that this would lead to a challenge of separation of powers, responsibility and the management of science and technology in the country. Further, stakeholders stated that the Bill needed to involve various institutions deliberately created by the Government to engage in education research.

### **Specific Concerns**

# 8.1 Clause 2: Interpretation

Stakeholders expressed concern that the term 'Academy' was not clearly defined. In this regard, stakeholders submited that it should be defined as, "a learned body of scientists, engineers and artists that promoted standards in a particular discipline". Further, stakeholders observed that the definition of 'Young academy' needed to read as youth organisation affiliated to the Academy.

Stakeholders expressed concern that the definition in Clause 2 of the word 'technology' was not clear. Stakeholders were concerned that this had the potential to create conflict with the *Engineering Institute of Zambia Act, No 17 of 2010* which also incorporated technology in the functions of the Engineering Institute of Zambia.

Stakeholders also expressed concern that the definition of 'Science' in Clause 2 excluded other fields such as technology, engineering and mathematics. Some stakeholders observed that the use of the word 'technology' was not clearly defined. Stakeholders were concerned that this had the potential to create conflict with the *Engineering Institute of Zambia Act, No 17 of 2010* which also incorporated technology in the functions of the Engineering Institute of Zambia.

### 8.2 Clause 5: Functions of the Academy

Stakeholders observed that Clause 5 which sought to undertake the publication and dissemination of scientific and technological achievements in collaboration with the National Science and Technology Council and other organisations excluded other collaborative partners such as the National Science Centre and the National Institute for Scientific and Industrial Research. In this regard, Clause 5 should be revised to include collaboration with various stakeholders championing science, technology, engineering and mathematics.

Additionally, stakeholders observed that Clause 5 (1)(b)(d) and (2) of the Bill stated that the Academy would promote as well as support institutions that promoted science and collaborated with statutory corporations whose functions were related to science and technology respectively. Stakeholders observed that this was excluding other fields such as engineering and mathematics going by the institutionalised science, technology, engineering and mathematics (STEM) education which the country was implementing at secondary school level.

Other stakeholders observed that the provisions in Clause 5 left out some important functions, including:

- (i) recognise and honour distinguished scholars such as scientists, mathematicians, engineers and technologists for excellence merit;
- (ii) promote increased use of science and technology as instruments for sustainable development;
- (iii) promote and safeguard intellectual property rights for scientific discoveries and innovation; and
- (iv) promote and encourage interdisciplinary research on national problems such as the effects of Amy worms and Climate Change.

### 8.3 Clause 16: Funds of the Academy

Stakeholders were concerned that Clause 16 provided that the funds for the Academy would consist of monies that may be paid to the Academy by way of fees, grants or donations; and otherwise vested in, or accruing to, the Academy. In this regard, stakeholders submitted that the Bill should clearly state whether the Government would be providing grants to the Academy for its sustained operations.

# 9.0 RESPONSES BY THE PERMANENT SECRETARY OF THE MINISTRY HIGHER EDUCATION TO THE CONCERNS RAISED BY STAKEHOLDERS

The Committee also interacted with the Permanent Secretary in relation to the Bill in a quest to clarify concerns raised by various stakeholders. The Permanent Secretary responded as set out hereunder.

With regard to the Zambia Academy of Sciences requiring a continuous grant from the Government for its sustained operations, the Permanent Secretary pointed out that the Zambia Academy of Sciences would be a self-sustaining body. In this regard, the Government would only provide an initial grant for its set-up, thereafter, the Academy would sustain itself.

Asked whether the Bill had provided for the independence of the Academy, the Permanent Secretary responded that the Academy was independent especially that the Academy was self-sustaining and had its own governance structure, was enough evidence to state that it was independent in its operations.

Commenting on the submission that the involvement of the Minister in approving donations and grants which the Academy was receiving from any source was close to interfering with the operations of the Academy, the Permanent Secretary explained that it was the duty of the Ministry to ensure that grants or donations which were coming especially from outside the country were in line with national financial regulations, and as such, the involvement of the Ministry responsible for finance in providing financial guide in the grants and donations of the Academy was not in any way interfering with the operations of the Zambia Academy of Sciences.

Asked to comment on whether the Bill had clearly defined the term "Academy", the Permanent Secretary explained that going by the functions of the Zambia Academy of Sciences, as contained in the Bill, the Academy was an independent advisory body on the development, promotion and utilisation of science and technology in the country.

With regard to where the Zambia Academy of Science should be domiciled, whether in the Ministry of Higher Education or it being domiciled in the Office of the Vice President, the Permanent Secretary stated that the Academy and the functions contained in the Bill were among the programmes which fell under the Ministry of Higher Education, and therefore, it would be prudent that the Academy was domiciled in the Ministry of Higher Education. The Permanent Secretary further stated that even from inception, when stakeholder consultations was taking place, it was already noted that the Academy would be domiciled in the Ministry of Higher Education.

### 10.0 COMMITTEE'S OBSERVATIONS AND RECOMMENDATIONS

Following the interactions with various stakeholders, the Committee supports the Bill and makes observations and recommendations as set out below.

- (i) The Committee observes that the definition of "science" in Clause 2 leaves out other fields such as technology, engineering and mathematics considering that the country is implementing science, technology, engineering and mathematics (STEM) in schools. The Committee, therefore, recommends that the definition of science should be revised so as to include technology, engineering and mathematics.
- (ii) The Committee expresses concern that the Bill does not provide for a function of recognising and honouring of distinguished scholars such as scientists, mathematicians, engineers and technologists for excellence merit. The Committee, therefore, recommends that a provision be made in the Bill for the Academy to be recognising and honouring distinguished scholars in various fields as a way of motivating upcoming scholars.

Additionally, the Bill should provide for:

- (i) Promotion of increased use of science and technology as instruments for sustainable development; and
- (ii) Promotion of interdisciplinary research on national problems such as the effects of Army worms and Climate Change..
- (iii) The Committee observes with concern that the composition of the Governing Council does not include the position of Executive Director. In this regard, the Committee recommends that the Governing Council includes a position of Executive Director as a non-voting member, and one who will be eminent in a particular field.
- (iv) The Committee observes that Clause 11(4) which states that five members of the

Governing Council could form a quorum for meetings has the potential to create confusion especially where non-office bearing members could meet and transact business. The Committee, therefore, strongly recommends that there is need to make it mandatory for the Executive Director or his/or her representative, for instance the legal counsel, to be present at every meeting.

- (v) The Committee observes that Clause 16 which provides for funds of the Academy does not provide for a sustained Government grant to the Academy. The Committee, therefore, strongly recommends that provision be made for a sustainable Government grant to be given to the Academy for its operation.
- (vi) The Committee is greatly concerned with Clause 16(2) which provides for approval of the Minister in the finances of the Academy, stating that this will compromise the independence of the Academy. The Committee, therefore, recommends that the provision be recast to read "the Academy may, subject to the approval of the Governing Council-
- (a) accept monies by way of grants or donations from any source in the Republic and, subject to approval of the Governing Council from any source outside the Republic". The insertion of this provision is aimed at ensuring that the Academy remains objective, independent, self-governing, and non-political in its operations.
- (vii) The Committee observes with concern that the Bill does not provide for the protection of intellectual property in relation to the works of the Academy. The Committee, therefore, recommends that a clause be inserted in the Bill which will guarantee protection of intellectual property of the Academy once the Bill is approved into law.
- (viii) The Committee is greatly concerned that the Academy which will comprise institutions of various disciplines and coordinating such a large national programme in the fields of engineering, technology, mathematics, medicine, among others, will be domiciled in a ministry. The Committee strongly recommends that the Academy should instead be domiciled in the Office of the Vice President as is the case with the Smart Zambia Institute.

### 11.0 CONCLUSION

The Committee wishes to express its gratitude to all the stakeholders who appeared before it and rendered both oral and written submissions. The Committee also wishes to thank you, Mr Speaker, the Clerk of the National Assembly and the permanent witness from the Ministry of Justice for the support rendered to it.

We have the honour, to be, Sir, the Committee on Education, Science and Technology mandated to consider the Zambia Academy of Sciences Bill, N.A.B. No. 17 of 2020 for the Fifth Session of the Twelfth National Assembly.

Mr G K Mwamba, MP (Chairperson)

Ms A M Chisangano, MP (Vice Chairperson)

Prof G Lungwangwa, MP (Member)

Mr S Tembo, MP (Member)

Mr K H S Kamboni, MP (Member)

Mr E Machila, MP (Member)

Mr K Sampa, MP (Member)

Mr P C Mecha, MP (Member)

Mr H S Chansa, MP (Member)

Mr M Mutelo, MP (Member)

November, 2020 **LUSAKA** 

# APPENDIX I - NATIONAL ASSEMBLY OFFICIALS

Ms C Musonda, Principal Clerk of Committees

Mr H Mulenga, Deputy Principal Clerk of Committees (FC)

Ms C K Mumba, Senior Committee Clerk (FC)

MrE Chilongu, Committee Clerk

Ms M Kalonga, Typist

Mr D Lupiya, Committee Assistant

### APPENDIX II-LIST OF WITNESSES

### **Ministry of General Education**

Dr Jabbin Mulwanda, Permanent Secretary - Administration

### **Ministry of Higher Education**

Dr Kayula Chansa, Permanent Secretary Mr S Mubanda, Director Planning Mr K Mutelekesha, Assistant Director Planning Mr B Mutale, Senior Planner

### **Ministry of Finance**

Mr M Chikuba, Permanent Secretary Mr D Banda, Assistant Director Mrs I L Mwenya, Principal Economist

### **Ministry of Justice**

Ms Nachimata Nchito, Parliamentary Counsel

# **Zambia Open University**

Prof Richard Siaciwena, Vice Chancellor

### **University of Zambia**

Prof Chuma Himoonga, Dean School of Law Mr Obrien Kaaba, Lecturer

### **Members of the Public**

Prof. J M Mwenechanya Prof. K J Mbata Prof. K Mwauluka Prof. P Jain

### **Copperbelt University**

Prof. N Ngoma, Vice Chancellor

### **Zambia National Education Coalition**

Mr G Hamusunga, Executive Director Ms I Mutwale, Education Manager

### **Engineering Institute of Zambia**

Eng. C Chola, Vice President Policy Public Relations and National Development Eng. L Chanda, Registrar and Chief executive Officer Mr R H Kalangu, Technical and Quality Manager

### **National Science Centre**

Mr S Nalube, Assistant Director Curriculum and Training Support