



Republic of Zambia

**Ministry of Education, Science, Vocational  
Training and Early Education**

**Science and Technology Innovation  
Youth Fund**

# **Guidelines**

2013

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## **DEFINITION OF TERMS**

- Ethics:** A system of moral principles
- Grant:** Money given to the innovator to develop the innovation and it is not to be paid back.
- Innovation:** A new idea or process that changes a way of doing something and can be commercially successful
- Innovator:** A person or an organisation who is one of the first to introduce into reality something better than before
- Intellectual Property:** Creations of the human mind e.g. inventions, artistic works, images used in commerce
- Intellectual Property Rights:** Rights that allow the creator or owner of a patent, trademark or copyright to benefit from his or her own work or investment
- Invention:** A new product or process which solves a technical problem
- Inventor:** A person who actually devised the invention and includes the legal representative of an inventor, but does not include a person to whom an invention has been communicated to either from within or outside Zambia
- Patent:** An exclusive right granted for an invention, which is a product or a process that provides a new way of doing something or offers anew technical solution to a problem.
- Youth:** For the purpose of this Fund, a Youth is any person below the age of 35 years

## **ACRONYMS**

CBU	Copperbelt University
CEEC	Citizens Economic Empowerment Commission
DBZ	Development Bank of Zambia
ERC	Ethics Review Committee
JETS	Junior Engineers Technicians and Scientists
MDGs	Millennium Development Goals
M&E	Monitoring and Evaluation
MESVTEE	Ministry of Education, Science, Vocational Training and Early Education
MoF	Ministry of Finance
MSYD	Ministry of Sport and Youth Development
NISIR	National Institute for Scientific and Industrial Research
NSTC	National Science and Technology Council
NTBC	National Technology Business Centre
PACRA	Patents and Companies Registration Agency
R&D	Research and Development
RDI	Research, Development and Innovation
STIYF	Science and Technology Innovation Youth Fund
TDAU	Technology Development and Advisory Unit
TEVET	Technical Education and Vocational and Entrepreneurship Training
UNZA	University of Zambia
VET	Vocational and Entrepreneurship Training
YIF	Youth Innovation Fund
ZARI	Zambia Agriculture Research Institute
ZACCI	Zambia Chambers of Commerce and Industry
ZDA	Zambia Development Agency
ZBF	Zambia Business Forum

## **1.0. INTRODUCTION**

The Government of the Republic of Zambia created the Youth Inventors Fund (YIF) in 2007, aimed at assisting the youth to develop their scientific and technological innovations for possible commercialisation with specific focus on innovations that are relevant to the creation of wealth and employment. The Youth Inventors Fund will now be called the Science and Technology Innovation Youth Fund (STIYF), after reviewing the 2011 Guidelines. The Fund is focused at enabling the youth innovators play a more significant role in the development of key sectors of the economy.

It is the desire of Government that the Fund facilitates the development and piloting of youth innovations. The Fund is administered under the Ministry of Education, Science, Vocational Training and Early Education (MESVTEE) through a Fund Management Committee and a Technical and Financial Committee. The implementation of the Fund is done through the National Science and Technology Council (NSTC).

The commercially viable innovations may be supported through the Technology Business Development Fund (TBDF) managed by the National Technology Business Centre (NTBC), and any other funds that may be available.

### **1.1. Rationale**

The Government of Zambia recognised that the scientific and technological gap in Zambia was characterized among other things by low funding for Research, Development and Innovation (RDI). The Government further recognized that the country had lagged behind in technological advancement due mainly to poor development, diffusion, transfer, and commercialisation of scientific and technological innovations. Therefore, the Zambian Government developed the

Science, Technology and Innovation (STI) Policy, which advocates for the stimulation of technological innovations with potential for commercialization in Zambia and the need for a whole range of incentives and support mechanisms required to ensure the development, diffusion, transfer, and commercialisation of innovations in the key sectors of the national economy.

In the recent past, efforts to address the scientific and technological development and commercialisation gap have focused on establishing institutional framework and on research activities that are taking place in recognised research institutions. However, Government has recognised that there are a lot of innovations developed by ordinary Zambians, especially the youth, and many local research results that have not been commercialised. In instances where such has been done, diffusion has been very little; hence the impact of research and development has been very low. One of the main constraints has been lack of financial resources to support youth innovators and possible entrepreneurs to take up such technologies. To this effect, the Science and Technology Innovation Youth Fund seeks to support development of innovations from the youth with a view to commercialisation for **employment and wealth creation.**

## **1.2. Objectives**

### **Overall Objective**

The overall objective of the Science and Technology Innovation Youth Fund is to create employment and wealth through Science and Technology Innovation by the youth.

### **Specific Objectives**

The specific objectives of the STIYF are:

- i. to support the development and piloting of scientific and technological innovations by the youth;
- ii. to promote a culture of innovativeness among the youth; and
- iii. to promote the acquisition and use of Intellectual Property Rights (IPR) by youth innovators.

## **2.0. MANAGEMENT STRUCTURE**

The Management structure will comprise two committees, namely the;

- i. Fund Management Committee (FMC), and
- ii. Technical and Financial Committee (TFC)

The Department of Science and Technology (DST) in the MESVTEE shall be Secretariat to the FMC while NSTC shall be the Secretariat to the TFC.

### **2.1 The Fund Management Committee**

This is the main Committee of the Fund and it shall be responsible for:

- i. Mobilizing and managing the funds;
- ii. Approving the thematic areas of focus based on the national priorities;
- iii. Approving the projects to receive support from the Fund;
- iv. Considering and approving the reports and recommendations of the Technical and Financial Committee and decide on follow up action
- v. any other responsibility as assigned by the Government

The Committee shall comprise the following members:

1. Permanent Secretary, MESVTEE as Chairperson
2. Director, Budgets – Ministry of Finance
3. Director, Economic Empowerment – Citizens Economic Empowerment Commission
4. Director, Micro, Small and Medium Enterprises Division - Zambia Development Agency

5. Director, Planning and Development - MESVTEE
6. Director, Vocational and Entrepreneurship Training - MESVTEE
7. Director, Youth Affairs - Ministry of Sport and Youth Development
8. Zambia Business Forum
9. Executive Secretary – NSTC
10. Director, Science and Technology – MESVTEE as Secretary

## **2.2. The Technical and Financial Committee**

This Committee shall report to the Fund Management Committee and shall be responsible for:

- i. Calling for scientific and technological innovation proposals;
- ii. Identification of science and technology innovations by the youth
- iii. Assessing and selecting the proposals in terms of technical feasibility and financial viability;
- iv. Assessing the institutions of affiliation in terms of infrastructural, human resources and financial capacities and capabilities;
- v. Recommending Institutions of Affiliation for innovators;
- vi. Considering progress reports including monitoring and evaluation of approved projects;
- vii. Creating awareness on innovation and the existence and objectives of the STIYF at all levels of society;
- viii. Any other responsibility as assigned by the Fund Management Committee

The Committee shall comprise the following members:

1. Chief Science and Technology Officer (Technology) – MESVTEE
2. Dean, School of Engineering - CBU
3. Manager, TDAU
4. Manager, Research and Development – NISIR
5. Chief TEVET Officer (Entrepreneurship) – MESVTEE



6. Manager, Technology and Marketing – NTBC
7. Manager Administration and Finance – NSTC
8. National JETS Secretary
9. Examiner, Patents - Patents and Companies Registration Agency (PACRA)
10. Engineering Institution of Zambia (EIZ)
11. Zambia Association of Manufacturers (ZAM)
12. Zambia Information and Communication Technology Authority (ZICTA)
13. Manager Programme Development and Implementation – NSTC as Secretary

The TFC shall choose a Chairperson from among its members.

### **2.3. Funds for Committee Operations**

The costs related to servicing the operations of YIF Committees handling Fund matters shall have separate budget lines; the one for the FMC will be held at MESVTEE while that for the TFC will be held at NSTC.

### **3.0. IMPLEMENTATION MECHANISMS**

#### **3.1. Thematic Areas of Support**

The Science and Technology Innovation Youth Fund shall provide financial support to youth innovators for the development of their technological innovations in the following thematic areas:

- i. Agriculture
- ii. Industry
- iii. Environment
- iv. Human and Animal Health
- v. Information and Communication Technology
- vi. Renewable and alternative Energy

#### **3.2. Eligibility**

The Fund shall be available to Zambian youth with scientific and/or technological innovations. The youth shall be eligible as individuals or as groups. The innovations to benefit from the Fund should be locally developed or adapted, and should as far as possible utilise local raw materials. Eligible innovations shall also be those addressing the objectives of the National Development Plans, the National Science, Technology and Innovation Policy and the Millennium Development Goals.

#### **3.3. Institutional Affiliation**

Innovators that receive grants under the STIYF shall be affiliated to recognized institutions, which will provide technical support and financial oversight to facilitate the development and piloting of the proposed innovation. The STIYF Technical and Financial Committee shall recommend institutions to which the innovator shall be affiliated.

#### **3.4. Contractual Agreement**

After a project has been approved for funding by the STIYF Fund Management Committee, a contract shall be drawn up, specifying the terms of disbursement of the grant, the responsibilities of the innovator

and the Institution of Affiliation including dates of submission of reports. The approved proposal shall form part of the Agreement. A similar contract shall be entered into for the piloting phase of the project.

### **3.5. Funding**

- i. The Science and Technology Innovation Youth Fund will operate as a grant. The grants will be up to One Hundred and Fifty Thousand Kwacha (**ZMW150,000.00**) per proposal. However, special consideration would be made for those viable projects that need more funds.
- ii. The grant shall be disbursed by MESVTEE through the NSTC once projects recommended by the Technical and Financial Committee have been approved by the Fund Management Committee. Funds shall be disbursed in **instalments**, to **Institutions of Affiliation**,
- iii. Recipients of the grant for the development of innovations from the STIYF shall be required to sign financing agreements which will oblige them to use the funds as agreed. The grant shall be administered under a tripartite arrangement involving NSTC, the Innovator and the Institution of Affiliation.
- iv. The grant shall support the following:
  - a. Project development
  - b. Piloting of developed innovations
  - c. IPR costs
  - d. Administrative costs
- v. The Institutions of Affiliation shall access funds for administrative costs for innovations being supported under the Fund. The funds for administrative costs shall not exceed 5% of the total project budget.
- vi. Projects that have been developed and are recommended for piloting can apply for a further grant to facilitate the piloting. Recipients of the

grant for piloting of innovations shall be required to sign a financing agreement which will oblige them to use the funds as agreed. The Agreement shall involve NSTC, the Innovator, the Institution of Affiliation and NTBC.

### **3.6. Ethics Requirement**

Innovations that require ethics clearance shall be referred to appropriate ethics committees by the applicant, for ethics approval before submitting the application for funding.

### **3.7. Intellectual Property Management**

#### **3.7.1. Ownership**

The project proposal shall indicate who shall be the owner(s) of the innovation

#### **3.7.2. Benefit Sharing**

- i. Benefit sharing between the Innovator, the Institution of Affiliation and the Funder shall be agreed upon prior to the commencement of the project and shall be spelled out in the contractual agreement.
- ii. Benefit sharing between the Innovator, the Institution of Affiliation and the commercializing institution shall be agreed upon at the point of piloting the innovation

#### **3.7.3. Protection of Innovations**

Innovators will be encouraged to protect the innovations according to the Intellectual Property laws of Zambia.

### **3.8. Legal and Institutional Framework**

The Fund shall initially operate within the legal systems governing MESVTEE and NSTC with a view of developing a separate legal identity once the Fund is fully operational.

## **4.0. APPLICATION, EVALUATION AND SELECTION OF PROPOSALS**

### **4.1. Application Process**

- i. A call for innovation proposals will be made and advertised in the public media and made available in various Institutions of learning and in Government district offices. The call will also be accessible on the NSTC website (<http://www.nstc.org.zm>).

Applicants shall submit innovation proposals by way of completing a **Prescribed Application Form (Annex I)**, to be accessed from the NSTC website and obtainable from NSTC, MESVTEE and other offices as will be specified in each call.

Applications shall be submitted either electronically to e-mail: [nstc@nstc.org.zm](mailto:nstc@nstc.org.zm), or mailed/delivered to the STIYF Secretariat at:

**National Science and Technology Council (NSTC)  
Curriculum Development Centre Building  
Haile Selassie Avenue, Longacres  
P. O. Box 51309  
Lusaka.**

- ii. The Technical and Financial Committee will also identify Innovations at fairs and shows during the year including those that may be recognized by the communities in which they operate as having positive impact on the people.

### **4.2. Evaluation and Selection of Proposals**

The TFC shall evaluate all proposals using the criteria given in Annex II. Project proposals scoring above 50% will be shortlisted for a qualitative evaluation. Where necessary, the TFC may request the applicant to give a verbal presentation of the proposal.

The TFC shall select proposals, which will be recommended to the Fund Management Committee for approval of funding. The decisions made by the FMC shall be final.

### 4.3. Summary of Application Cycle

There shall be one (1) application cycle per year as follows:

<b>Activity</b>	<b>Timing</b>
Call for Project Proposal	March
Deadline for Submission of Proposals to STIYF Secretariat	June
Evaluation of Proposals by the Technical and Financial Committee	July - August
Approval of projects by the Fund Management Committee	September
Notification of results to applicants, affiliation to institutions and official awarding of grants	October - December
Project Commencement	January – March of the following year

## **5.0. MONITORING AND EVALUATION AND REPORTS**

### **5.1. Monitoring and Evaluation (M&E)**

All funded innovation projects will be monitored at three levels. At the first level, the institution of affiliation under which the innovator is carrying out research will monitor the project. The second level will be undertaken by the NSTC, where necessary some members of the TFC may be involved. The MESVTEE will undertake M&E at the third level. Reports generated from the three levels will be submitted to the Fund Management Committee.

### **5.2. Reports**

#### **5.2.1 Inception Report**

Grant recipients shall be required to submit an Inception Report within three weeks of official award of the grant. This will give an account of the preparations put in place in order to start the project e.g. identification of sources of materials and specialised services, opening of a project account, and other logistics. The inception report will also give details of activities and budget for the initial phase of the project.

#### **5.2.2. Technical and Financial Progress Reports**

Technical and Financial Progress Reports shall be submitted at dates determined by NSTC. The Technical Reports shall highlight the following:

- i. Progress towards achieving the project objectives,
- ii. Any matter which may affect achievement of an objective,
- iii. Project Milestones if any, achieved in the period that the report covers,
- iv. Reasons for non achievement of milestones and suggested remedial measures to be taken,
- v. Technical problems encountered and plans to overcome them.

The Financial Reports shall highlight the following:

- i. Amount received in previous installment
- ii. Detailed expenditure
- iii. Total amount spent and balance
- iv. All payment vouchers

### **5.2.3. End of Project Report**

The grant recipient shall submit three bound copies of the final technical and financial report at the end of the project. The End of Project Report shall highlight the following:

- i. Project objectives,
- ii. Detailed explanation of how the innovation was developed and how it works
- iii. Extent of achievement of the original project objectives,
- iv. Project schedule and costs,
- v. Beneficiaries of the project,
- vi. Sectoral and national impacts of the project,
- vii. Technology transfer and commercialisation approach proposed

The grant recipient shall also submit a prototype of the innovation at the end of the project.

### **5.2.4. Dissemination of results**

Grant recipients will be expected to present their findings at science fora. However, provisional protection or permission may be sought for information deemed proprietary where necessary.



**ANNEX I: APPLICATION FORM FOR THE SCIENCE AND TECHNOLOGY INNOVATION YOUTH FUND**



**Republic of Zambia**

**Ministry of Education, Science, Vocational Training and Early Education**

**SCIENCE AND TECHNOLOGY INNOVATION YOUTH FUND**

**APPLICATION FORM**

**SECTION 1: GENERAL INFORMATION**

Title of Innovation/Project:	
Indicate relevant thematic area of innovation (see details in section 3)	
Desired Starting Date:	Desired Completion Date:
Amount applied for in words:	
Amount in figures:	

**SECTION 2: DETAILS OF APPLICANT (if it is a group application, the group leader should fill in the section below and then provide details of other members on a separate sheet)**

Full name: (surname first)	
Date of birth	
NRC Number if applicable	
Gender:	
Address:	
Telephone No.:	
E-mail:	
Signature:	
Date:	

**SECTION 3: THEMATIC AREAS OF INNOVATION:**

1. Agriculture
2. Industry
3. Environment
4. Human and Animal Health
5. Information and Communication Technology
6. Renewable and alternative Energy

**SECTION 4: WRITTEN DESCRIPTION OF THE INNOVATION (Preferably typed)  
Clearly describe your innovation by answering the following:**

4.1. Describe the innovation and how it will work (Where applicable, attach separate diagrams)	
4.2. Where did you get this idea from?	
4.3. What problem in your community/country will your innovation solve	
4.4 Other than yourself and family, who else do you think will benefit from your innovation	
4.5. What materials will you use to make your innovation and indicate the source of the materials	
Material	source
<i>Add rows as required</i>	
4.6. explain whether your innovation will positively or negatively affect the environment (Environmental friendliness of the innovation)	

**SECTION 5: BUDGET**

List each item you will need to develop the innovation and indicate its cost

Item	Cost
<b>5.1. Materials (Please list and cost each of the materials required):</b>	
<b>Subtotal</b>	
<b>% of total budget</b>	
<b>5.2. Cost of fabrication/other services;</b>	
<b>Subtotal</b>	
<b>% of total budget</b>	
<b>5.3. Administrative costs (travel, etc);</b>	
<b>Subtotal</b>	
<b>% of total budget</b>	
<b>5.4. Other costs related to the project (please specify):</b>	
<b>Subtotal</b>	
<b>% of total budget</b>	
<b>5.5. Monitoring and evaluation cost at 5% of the total;</b>	
<b>5.6. Budget total</b>	

## ANNEX II: EVALUATION CRITERIA



Republic of Zambia

Ministry of Education, Science, Vocational Training and Early Education

### SCIENCE AND TECHNOLOGY INNOVATION YOUTH FUND

#### EVALUATION CRITERIA

	Criterion	Points
1	Description of the innovation and how it will work	20
2	Where did you get the idea from <i>(Originality / innovativeness / uniqueness of the idea)</i>	10
3	What materials will you use to make your innovation and indicate the source of the materials <i>(Extent of use of local materials)</i>	10
4	What problem in your community/country will your innovation solve <i>(Ability to identify a problem)</i>	20
5	Other than yourself and family, who else do you think will benefit from your innovation <i>(Socio-economic impact)</i>	15
6	Will the innovation positively or negatively affect the environment <i>(Environmental friendliness of Innovation)</i>	10
7	Clarity of presentation of the proposal	5
8	Breakdown of Budget <i>(How realistic is the budget)</i>	10
Total points		100

