

# **Ethiopian Academy of Sciences**

## **Strategic Plan**

### **2011 – 2015**

#### **1. Context**

Academies of sciences have their origin in the recognition that science and technology have a pivotal role to play in improving the social and economic life of nations. Academies play a critical role as a strong public voice for the promotion of both scientific excellence and science-based development. They shoulder the primary responsibility of demonstrating that a strong scientific base strengthens nations by enabling citizens to address critical economic, environmental, and social issues in systematic and effective ways, thereby improving the quality of life of its citizens.

Economic development, which is viewed as the principal means to this objective, can only be attained if science, technology, and innovation are given due attention, as they have a major role to play in achieving the Millennium Development Goals (MDGs), particularly in terms of education and building the capacity of the citizens of a nation. Ethiopia, like most developing countries, faces a major challenge in attaining the MDGs. This understanding is the foundation for the establishment of the Ethiopian Academy of Sciences. Academies of Sciences advance adoptive and innovative research and enhance the quality of the decision-making processes and the policies that chart a nation's future.

In Ethiopia, the agricultural sector is the source of livelihoods for 85% of the population. Understandably, therefore, the Ethiopian government's priority area of investment has been on rural and agricultural development. As the productivity and efficiency of the agricultural sector is very low by any standard, the application of science and technology is essential to change this undesirable situation. The Ethiopian Government recognizes the significance and vital role of the sciences and of scientific research. A good illustration of this commitment is the elevation of the status of the Science and Technology Commission to that of a ministry.

A large number of Ethiopians have attained hallmarks of excellence in their respective fields of specialization. Many have made significant contributions to scientific research and innovation in Ethiopia, and some have even become members of regional or global science academies and academies of other countries. There are also a large number of professional associations representing a wide array of disciplines in the humanities, social sciences, natural sciences, engineering, health, agriculture, etc. The role these individuals and associations play in the

development of their specific fields and towards the betterment of society at large is quite substantial.

It is in light of the above considerations that the Ethiopian Academy of Sciences (EAS) was officially launched on 10 April 2010. The launch of the Ethiopian Academy of Sciences marks the culmination of five decades of striving by Ethiopian academicians. The idea of launching an Ethiopia Academy of Sciences was first mooted in the 1960s by the late Dr. Aklilu Lemma. Concerted efforts began to be made after May 2008 with the establishment of an Ad Hoc Committee, which organized a National Conference on the establishment of an Ethiopian Academy of Sciences on 13 February 2009. The conference was attended by some 250 academics, experts and representatives of professional associations and was concluded with the setting up of a Launching Board for the Academy.

The Maiden Meeting of the Ethiopian Academy of Sciences was held on 27 March 2010, when the 49 Founding Fellows of the Academy, drawn from a variety of disciplines, approved the draft Statute and selected the nine-member Governing Board.

The Academy has the objective of promoting the development of all the sciences by, among other things, organizing conferences and workshops, awarding prizes for excellence and publishing its own journal and other periodicals and books.

The EAS Strategic Plan 2011-2015 is an important document that will guide its future programs and activities. The Strategic Plan will also serve as a public relations tool to inspire confidence and motivation among members and partners when undertaking EAS activities. Through this Strategic Plan, EAS hopes to articulate its niche and mobilize additional resources. The Plan will also form the basis for undertaking monitoring and evaluation of progress made in fulfilling the EAS mandate.

## **2. Vision**

The vision of EAS is to realise the development of scientific culture and scholarship in Ethiopia, and the improvement of the quality of life of its people.

## **3. Mission**

The mission of EAS is to foster scientific culture and innovation, and advance the knowledge of the sciences, including indigenous knowledge.

## 4. Core Values

The core values that inspire EAS and guide its operations are:

- tolerance, respect for diversity and equity;
- high ethical standards and impartiality;
- merit-based decisions and recommendations;
- intellectual integrity and originality; and
- institutional independence.

## 5. Objectives

The statutory objectives of EAS are the following:

- To promote the advancement of basic and applied sciences and to enhance innovative technologies;
- To promote, support and recognize excellence in scientific research performed by Ethiopian scientists;
- To promote contacts among Ethiopian scientists, and between them and the world scientific community;
- To strengthen the global position and role of scientific research performed by Ethiopian scientists;
- To advise the Government of Ethiopia on issues pertaining to the quality and relevance of the sciences, particularly on issues related to science education in Ethiopia;
- To encourage that scientific research in Ethiopia is conducted in areas or on questions of special importance to the nation and its economy;
- To organize public fora and other appropriate programs for the dissemination of major findings in the sciences; and
- To enable women and other underprivileged and marginalized groups to participate in and benefit from scientific works and discoveries.

## 6. Situational Analysis

This Strategic Plan is designed to assist EAS chart its core programs for the next five years. As a newly established academy, EAS made careful considerations in understanding the context in which EAS intends to work. These considerations involved the assessment of EAS partnerships and stakeholders as well as its existing strengths/opportunities and challenges/risks.

### 6.1 Strengths/Opportunities

- Demonstrable commitment and enthusiasm of EAS members;
- Multi-disciplinary expertise and diversity of membership;
- Rich literate culture for the generation of knowledge;
- Rich indigenous knowledge base;
- Large and supportive Ethiopian Diaspora;
- Many professional associations and potential partner institutions;
- Commitment of the Ethiopian government to the development of science and technology; and
- Goodwill and enthusiasm of other academies and networks of academies.

### 6.2 Challenges/Risks

- Obtaining sustainable funding to implement EAS activities;
- Securing government statutory act with reasonable speed;
- Inadequate appreciation of science by society; and
- Maintaining a broad and multi-faceted interpretation of the sciences.

## 7. Core Programs

Within its Strategic Plan 2011-2015, EAS will embark on the following core programs:

*Program 1:* Increasing and strengthening the visibility and relevance of EAS

*Program 2:* Providing consensus building platforms on critical national issues

*Program 3:* Promoting Science, Technology and Innovation

*Program 4:* Recognizing excellence

*Program 5:* Building institutional capacity and sustainability of EAS

## **7.1 Core Program 1**

### ***Increasing and strengthening the visibility and relevance of EAS***

Members of the EAS Governing Board as well as other members will continue to contribute their insight and influence toward building an intellectually and ethically sound Academy. It is hoped that both personnel and members of EAS will strive to ensure that all programs and activities deliver on the Academy's mission to the fullest extent possible. This coherence will help better represent EAS to its stakeholders while increasing its visibility and relevance. In order to attain this, the following avenues shall be explored:

- 7.1.1 Strengthening the EAS secretariat by employing and retaining professional staff, developing a website, enhancing information technology infrastructure, and designing the appropriate logo, among other things.
- 7.1.2 Disseminating information on the relevance of EAS to the public, research institutions, universities and professional associations. This will be done through circulation of the Strategic Plan and newsletters, organising press conferences, as well as airing of radio programs on EAS activities and scientific issues.
- 7.1.3 Undertaking an active membership drive so as to induct new members, while taking gender and discipline balance into account, and communicating regularly with existing members.
- 7.1.4 Enhancing its networking function by fostering linkages with government ministries and educational and research institutions within the country as well as with other national, regional and international academies/organizations.
- 7.1.5 Organizing a multi-disciplinary biennial congress of science that brings together scholars from Ethiopia and abroad. The congress will deliberate on advances in the sciences with special reference to Ethiopia.

## **7.2 Core Program 2**

### ***Providing consensus- building platforms on critical national issues***

Consensus building is important because critical national issues affect diverse groups of people with different interests, and yet society is interconnected. The parties affected by decisions need to be taken on board as much as the parties making the decisions. It would thus be extremely difficult and often ineffective to try to resolve controversial issues without widespread consultations. Consensus building is a proven way of creating an avenue for the public, the government and the Academy to collaborate in resolving complex but critical national issues in ways that are acceptable to all. It is for this reason that EAS would provide consensus-building platforms where a variety of stakeholders would make input into the decision-making process and thereby own the implementation of such decision(s).

EAS hopes to provide consensus-building platforms that will help all parties concerned to establish a common understanding and framework for developing solutions that work for the

national good. The process will also foster the exploration of joint gains and integrative solutions and permit stakeholders to deal with interrelated issues in a single forum. This in turn will allow stakeholders to make trade-offs between different issues, and allow the development of solutions that meet peoples' needs more completely than decisions that are made without such widespread participation.

To carry out this mandate, EAS will facilitate and provide consensus-building platforms on critical national issues through the following sequential process:

- Identifying topics of national concern;
- Commissioning experts to undertake consensus studies;
- Holding public fora and/or debates; and
- Producing and disseminating policy briefs.

### **7.3 Core Program 3** ***Promoting science, technology and innovation***

In Ethiopia, as in most developing countries, economic development can be enhanced through sound policy resulting from science, technology and innovation. Science, technology and innovation can play a critical role in development when the integrity of the enterprise/research institutions, universities, publications, research priorities, and the education of innovative scientists, as well as those active in science, is preserved. Based on this premise, EAS believes that the Ethiopian society as a whole must take steps towards creating, mastering and utilizing the resources of science, technology and innovation for developmental purposes. EAS will accordingly make its contribution to the promotion of science, technology and innovation through advocacy using the following means:

**7.3.1 Public Lectures:** EAS will convene public lectures by its Fellows and other distinguished scholars. These lectures will address fundamental issues under the various disciplines covered by EAS.

**7.3.2 Publications:** EAS will produce several publications, including an annual Prime Journal, bi-annual newsletters, and books for the popularization of science. All the publications of EAS will be managed and organized by a Standing Publications Committee.

**7.3.3 Popularizing science activities:** This will include, among other things, organizing science exhibitions, engaging with the media, and arranging “meet-the-scientist” events.

### **7.4 Core Program 4** ***Recognizing excellence***

EAS intends to establish a tradition of honouring exceptional achievers by designing a policy of offering a few but regular awards in the various fields of science. The Academy is convinced that these awards must be sustainable to achieve the desired maximum impact of recognizing

excellence in the country. Consequently, each of the awards will be well defined to cover priority areas of Academy/national concerns and that it will be modest in monetary but prestigious in honorary terms. In this way, EAS aims to mobilize the Ethiopian science and technology community towards the goal of attaining world-class status and to encourage such achievements and/or contributions to science and development.

The principal awards envisaged during the period of this Strategic Plan will include the following three categories:

**7.4.1 *Special Awards:*** In aiming to recognize, promote and support scientific excellence, EAS will make special awards to scientists that have made outstanding contributions to their specific fields and/or sciences in Ethiopia.

**7.4.2 *Young Scientists' Award:*** This award will be open to both male and female young scientists below the age of 40 years, and is designed to recognize the scientific achievements of young researchers working and living in Ethiopia, and to encourage them to continue to strive for excellence in their scientific careers.

**7.4.3 *Competitive Awards:*** EAS will organize competitions that specifically aim to enhance the quality and standard of scientific output within Ethiopia. To this end, EAS will give awards to a maximum of five outstanding PhD theses in the fields comprising Natural Sciences, Engineering Sciences, Health Sciences, Agricultural Sciences and Social Sciences and Humanities.

## **7.5 *Core Program 5:*** ***Building the institutional capacity and sustainability of EAS***

Sustainability is an ongoing challenge for many science academies in Africa. Those academies that have been most successful in meeting this challenge have employed a range of mechanisms to diversify their resource bases in tune with their organizational needs.

EAS hopes to attain greater sustainability through partnership with the Ethiopian Government, as well as through engaging in multiple collaborative projects with a diverse portfolio of partners. EAS will additionally encourage promotion of greater opportunities for philanthropy and the cultivation of volunteerism among its membership.

EAS aspires to build and develop its resource base in order to strengthen its institutional sustainability for the period of the Strategic Plan. To this end, EAS will:

- Undertake a vigorous resource mobilization campaign;
- Acquire its own premises;
- Institutionalise its operations; and

- Strive for the passing of an act of parliament that will guarantee government budgetary allocation.

## ***8. Monitoring and Evaluation***

EAS will implement independent monitoring and evaluation (M&E) of its activities against annual work plans and budgets. Monitoring will be done continually, while evaluation will be done annually by the EAS Governing Board and at the end of the Strategic Plan period by an independent body. Budgetary provisions shall be made in the annual work plans to facilitate M&E processes.

The M&E processes will be participatory in nature involving the Governing Board, staff, and stakeholders targeted by the EAS programs. The involvement of the aforementioned key actors in program design, implementation, actual monitoring and evaluation, will be critical in improving quality of service provided by EAS and in addressing local development needs. While undertaking its M&E, EAS will strive to increase the sense of national and local ownership of its programmatic activities and ultimately ensure more measurable and sustainable impact.

The M&E process is also intended to ensure that, towards the end of the implementation of the Strategic Plan, there will be a final evaluation to review the EAS programs, linkages and partnerships, and its governance and management systems. It is during that evaluation process that key elements of the next strategic plan will be discussed and the progress and constraints of this Plan's implementation assessed.