



# **Ethiopian Academy of Sciences**

**Strategic Plan (2023 – 2027)**

**Addis Ababa, Ethiopia**

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## **1. Background**

The Ethiopian Academy of Sciences (EAS) has been established and was first founded on March 27, 2010, by a group of scholars drawn from various disciplines and professions. It is an autonomous, non-profit, and non-governmental organization established in March 2010 and later officially recognized by Proclamation No. 783/2013 in March 2013. The very initiative to establish EAS was pronounced by a group of prominent scholars who wish to promote the Sciences and bring about development, prosperity, and improved health services for the peoples of Ethiopia. The main objective of the Academy is to promote and support a culture of science, scientific research, science education, technology transfer, and innovation. Its core activities include conducting consensus studies, providing evidence-based advice to the Government and other stakeholders, popularizing science, capacity building, information dissemination, public lectures, and networking.

Sound Strategic planning is crucial to an institution as it helps to set the future direction of the organization and provides a roadmap to achieve goals and objectives. It also serves as a useful guide for day-to-day decisions and also for evaluating progress and changing approaches when moving forward. A well-thought-out strategic planning endeavor seeks a response to three fundamental questions: Where is the institution currently positioned? Where does an institution aspire to be in the future? How an institution intends to get there? Classic and modern strategic planning approaches and models implicitly and explicitly attempt to seek responses to these questions.

From the outset, EAS has developed a culture of formulating a viable strategic plan and cascading future annual plans. This has helped EAS to become a well-organized entity. The strategic planning team began its task by conducting an in-depth review of two round strategic plans (2011-2015; 2016-2020), annual reports, procedural manuals, and self-evaluation reports of the Academy. Over the past ten years, EAS registered commendable achievements along the five recurring strategic goals. It is worth mentioning that EAS has comfortably developed a culture of implementing its strategic plans through annual plans that include specific activities and resources required for their implementation. Moreover, it has instituted an enduring culture that each year's achievements are compared against the five Core Programs indicated in the Strategic Plans.

The Third Strategic Plan is the result of extensive work by the consulting team and participation from the Ethiopian Academy of Sciences' community to contribute toward the

full realization of the Academy's potential to explore and effectively utilize new opportunities to attain its overarching vision. With the intent to formulate a relevant and dynamic strategic plan, the team has conducted an internal and external analysis using SWOT and PESTLE framework. Reviewed previous strategic plans and proclamations and bylaws of EAS, reviewed annual and self-evaluation reports conducted a thorough review of selected external benchmarking Academies of Sciences located in Africa, Asia, and Europe. Benchmarking of local comparable organizations such as the Ethiopian Public Health Association (EPHA), Ethiopian Economics Association (EEA), Ethiopian Agricultural Transformation Agency (Agricultural Transformation Institute/ATI), and Ethiopian Red Cross Society (ERS) was also done.

This strategic plan has duly considered local needs and global advancements in sciences, technology, innovation, and humanities including creative arts. Moreover, the plan has been developed using a participatory approach where commendable inputs have been gathered from resource persons, domain experts, governmental stakeholders, fellows, work groups, secretariat officers, professional associations, and members of international development and research communities. The lessons learned from the previous two rounds' strategic plans and insights drawn from similar sister academies of sciences from around the world have helped tremendously to shape this strategic plan. Undoubtedly, the systematic execution of this strategic plan will transform EAS and meets the expectation of internal and external stakeholders.

## **2. Strategy Formulation**

The information gathered from the internal and external environment analysis coupled with the intent of the Academy's management and fellows provided the basis to formulate the vision, mission, core values, Strategic themes, and strategic objectives as stated below. Moreover, a critical review of the vision and mission statements, mode of governance and management, strategic goals, and objectives of the benchmarked Academies of Sciences served as a reference while developing the core elements of the strategy, such as vision, mission, strategic goals, etc.

### **2.1. Vision**

“To advance scientific culture aligned with the sustained enhancement of individual and collective well-being”

## **2.2. Mission**

“To foster scientific knowledge, innovation, and indigenous culture with a view to the attainment of the developmental and transformational aspiration of the people of Ethiopia”

## **2.3. Core Values**

- Accountability
- Originality in scholarship
- High ethical standards and integrity
- Evidence-based decisions and recommendations
- Institutional autonomy
- Stewardship
- Equity and impartiality
- Tolerance and respect for diversity

## **3. Situational Analysis**

In the course of formulating this strategic plan, a thorough situational analysis was conducted using a SWOT analysis to understand the strength, limitations, and opportunities at the disposal of the Academy. The macroeconomic, social, technological, and legal environments were scanned using the PESTEL analysis. These analyses have helped to develop key enablers and barriers that entail the strategic issues.

Moreover, important lessons were drawn from three benchmarked sister Academy of Sciences from other countries, namely, the Academy of Science of South Africa (ASSAf), the Chinese Academy of Science (CAS), the Royal Academy of Science, and one international organization, i.e., Inter-Academy Partnership (IAP). The South African Academy of Science mobilizes its diverse members to embark on national and global issues of concern that are multidisciplinary, multi-sectoral, and transboundary. Similarly, the Academy needs to strive to create a global center of excellence in specific domains like biodiversity or clean energy. The Chinese Academy of Science (CAS) employs a decentralized structure with several autonomous and semi-autonomous entities under its umbrella. This is a good lesson the Academy needs to consider when revisiting its existing organizational structure. Although the Academy is the youngest entity, it can easily draw insights into how the Royal Society UK developed prestige and diversified in income-generating schemes over time. The IAP strives to build progressive and more resilient global academies. This is one of the lessons the Academy

might consider to become a resilient and viable academy forging collaboration and partnership with local institutions in resource constraint settings.

Analysis of the information gathered through the different ways was critical to identify strategic issues, strategic themes, and relevant program areas with clear objectives that position the Academy in the dynamic operating environment. The Key outputs of the analysis are as follows.

### **3.1. Strengths**

EAS has:

- Acquired institutional freedom and autonomy;
- Achieved diverse membership base and expertise;
- Established good network and collaborative linkage with international like-minded entities;
- Secured its physical facilities and infrastructure;
- Instituted a culture of short-term and long-range planning;
- Attracted leading scientists locally and from the Diaspora community;
- Secured annual budget subvention from the government;
- Introduced and facilitated the implementation of a national system of evaluation and accreditation of scholarly journals;
- Translated more than 12,000 scientific words into the Amharic language dictionary with important explanations;
- Managed to conduct several consensus studies on various areas;
- Organized several public lectures and dialogue forums;
- Conducted three science congresses effectively;
- Established Ethiopian Young Academy of Sciences (EtYAS) and actively working.

### **3.2. Opportunities**

- Continued government support and recognition;
- Increasing recognition of the Ethiopian government for science, technology, and innovation for socio-economic transformation;
- Increasing demand for evidence-based policymaking, strategy formulation, and planning and implementation by government organizations;
- Potential support from scientists in the Diaspora community;

- Availability of various professional associations and organizations for potential partnership.

### 3.3. Limitations and Risks

- Volatile macroeconomic and political environment;
- Financial constraints;
- Limited participation of fellows to strengthen the Academy;
- Inadequate institutional mechanism, organizational structure to integrate the working groups;
- Inadequate visibility and publicity of the Academy and its activities;
- Inadequate execution capacity at the Secretariat level;
- Weak linkage with universities, research institutions, and professional associations;
- Inability to identify and nurture the unique capabilities of the academy ;
- Although highly expected by its stakeholders, the Academy is not in a position to publish journals now as it requires many inputs including financial resources.

## 4. Strategic Themes

The situational analysis culminates with a long list of potential strategic issues. Based on the series of deliberations at the level of the Academy, the following key strategic themes have been identified as the focal strategic themes of the Academy for the forthcoming five years.

Strategic Themes	Strategic Results
1. Build institutional capacity and ensure sustainability	Internal human, information, and organizational capacities and governance system built
2. Create consensus-building platforms and provide evidence-based policy advice	Problem-solving consensus studies undertaken; stakeholders participated and prioritized topics selected; Continuous public dialogues forums provided
3. Promote science, technology, innovation, culture and arts	Science, technology, and innovations promoted Build capacity and linking it to start-ups and local industries to enhance the utilization of indigenous knowledge and culture. Recognition and reward of excellence in innovation and scholarly activity made
4. Elevate the global position of the Academy	Interactions among Ethiopian Scientists and the World Scientific Community established and strengthen; Highly credible articles and major findings are shared in

	internationally reputable journals and forums;
5. Strengthen collaboration and partnership	Local, national, regional, and international partnerships formed; Created platforms for key stakeholders' knowledge and experience sharing;
6. Expand financial resources	The financial sustainability of the Academy ensured

***Strategic Theme #1: Build institutional capacity and ensure sustainability***

Capacity impediments of the Academy are well acknowledged throughout this strategic planning process. A holistic capacity enhancement program is believed to be one of the focal areas of the Academy in the foreseeable future. Emphasis is given to human resource and physical infrastructure development, acquiring appropriate information and communication infrastructure, and improvement of work procedures and governance systems.

The Academy needs to attract senior experts from its more than 270 fellow scholars' membership pool and other professionals and strive to put in place competent remuneration packages to retain employees. Moreover, the Academy has to think of hiring scientists/researchers who can develop projects and win grants continuously. To this end, the Academy is expected to create income-generating activities and generate adequate revenues to strengthen its financial capacities and ensure sustenance. Parallel to this, the Academy has to produce appropriate human resource and financial management systems. The following strategic objectives are set out to enhance the Academy's capacity and governance mechanisms.

**Strategic Objectives**

- 1.1. Establish a performance management system and periodic appraisal system and mid-term evaluations of the Strategic plan and its programs;
- 1.2. Elect new Fellows with particular regard to gender and discipline balance;
- 1.3. Build effective communication with Fellows and stakeholders;
- 1.4. Strengthen the functions of the Working Groups and standing committees;
- 1.5. Enhance engagement of associate fellows in networking and capacity building;
- 1.6. Strengthen the Secretariat with well-qualified and competent human resources;
- 1.7. Strengthen and expand the capacity of the centers/units (enhance project implementation capacity of the academy);
- 1.8. Establish and improve the system and infrastructure of the Academy;
- 1.9. Establish EAS chapters;

- 1.10. Strengthen communication of the Academy's useful and relevant information using different languages and media;
- 1.11. Develop tools for gender and social inclusion and facilitate training, counseling, and encouragement for staff;
- 1.12. Improve the Academy's library services and Information, Communication, and Technology (ICT) system.

***Strategic Theme #2: Create consensus-building platforms and provide evidence-based policy advice***

The Academy is well endowed with a pool of diverse professional backgrounds and experience that can serve as a think-tank body. It is well-positioned to advise the government and other stakeholders in the course of formulating national growth and transformation policies and strategies. Furthermore, the Academy can easily mobilize the expertise required for its problem-solving studies and other activities from within its membership and outside. This also enables it to conduct project studies, and action research that drives and monitors policy implementation and depicts the path policymakers have to follow in the process of implementing policies and in the endeavors to attain the intended outcomes. Given the high number of qualified experts, the Academy is expected to chart various policy briefings and policy advice insights from the resulting research outcomes. Conducting the public dialogue or public lectures started as an individual initiative by the EAS working groups and has now culminated in a popular monthly lecture series organized by the EAS secretariat in consultation with the working groups. Those public lectures have become very important in promoting the culture of public dialogue and scientific debate.

**Strategic Objectives:**

- 2.1. Undertake consensus studies on matters of public interest to provide evidence-based advice to the government and stakeholders;
- 2.2. Undertake quality projects;
- 2.3. Provide well-considered expert opinions on critical issues;
- 2.4. Promote and support research on national and EAS-set priorities;
- 2.5. Promote public dialogue through workshops, symposia, and other platforms;
- 2.6. Organize public lectures and round table discussions on topical issues;
- 2.7. Disseminate informed views on critical issues through deploying EAS fellows.

### ***Strategic Theme #3: Promote science, technology, innovation, culture, and arts***

EAS is responsible for promoting science and innovation as critical drivers of socioeconomic development and transformation. Therefore, Ethiopian society must be cognizant of this fact and prepare to utilize science and innovation outcomes to rectify its everyday life challenges. This entails the Academy engaging in advocacy to sensitize society about the potential benefits of science and innovation. Moreover, the Academy is expected to use various mechanisms and platforms to disseminate science and technology-related innovations. The Academy also needs to establish procedures for recognizing extraordinarily talented achievers by instituting various award modalities. The award system should be designed to ensure that excellence is valued in key priority areas and to stimulate young scholars to embark on research and innovation ventures.

#### **Strategic Objectives:**

- 3.1. Recognize outstanding contributions in the fields of science, technology, and innovation;
- 3.2. Contribute toward public awareness and advancement of science, technology, innovation, and creative arts;
- 3.3. Promote a culture of research and knowledge management;
- 3.4. Popularize and disseminate STI knowledge and skill through different means;
- 3.5. Strive for improvement of the quality of sciences education in Ethiopia;
- 3.6. Facilitate innovation and technology transfer;
- 3.7. Support and strengthen scholarly forum with common objectives;
- 3.8. Strengthen and diversify activities of the science center;
- 3.9. Strengthen and diversify activities of the culture and creative art center;
- 3.10. Strengthen and diversify activities of the Academy Press;
- 3.11. Explore, identify, and promote indigenous knowledge.
- 3.12. Nurturing young professionals and giving capacity-building training for professionals.

### ***Strategic Theme #4: Elevate the global position of the Academy***

The Academy needs to strive to increase its global visibility by leveraging its strategic location and unique ecosystem to sister academies, and other relevant stakeholders through appropriate platforms, and networking which will enhance the global positioning of its fellow scholars to strengthen interaction among Ethiopian Scientists and between them and the World Science Communities.

### **Strategic Objectives:**

- 4.1. Recognize excellences for outstanding contributions;
- 4.2. Foster the visibility, relevance, positive image, and prestige of the Academy;
- 4.3. Publish and disseminate scientific findings and reports to the global community;
- 4.4. Establish and strengthen connections with global scientific communities having common objectives;
- 4.5. Organize and participate in international conferences, workshops, symposiums, and science congresses;
- 4.6. Mobilizing fellows and scholars to engage in pertinent studies of global issues;
- 4.7. Initiate joint projects on issues of common interest and global or regional implications.

### ***Strategic Theme #5: Strengthen collaboration and partnership***

Although the Academy has registered a commendable achievement in terms of building partnerships and linkage, the review and analysis conducted reveal that it could have done more to forge strong collaborative partnerships with local and international entities. Therefore, the Academy is expected to work harder to establish mutually beneficial linkages with the international and regional Academies of Sciences. Moreover, the Academy is supposed to exert more efforts to expand and strengthen its relationships with international donors and research establishments. The Academy will also strive to establish strong relationships with local universities, research institutes, and private companies.

### **Strategic Objectives:**

- 5.1. Identify national institutions and build collaboration and partnership;
- 5.2. Build collaboration and partnership with international organizations;
- 5.3. Foster collaboration with government organizations;
- 5.4. Foster collaboration with private sectors and professional associations;
- 5.5. Build up relationships with sister academies and networks;
- 5.6. Build up relationships with Embassies as well as locally available international organizations.

### ***Strategic Theme #6: Expand financial resources***

Financial constraint is one of the challenges that is impairing the Academy's activities and sustainable engagements. Now is the time for the Academy to solicit funding sources and strive to become involved in income-generating ventures. The Academy has the statutory right

to establish income-generating business entities and attract endowment funding. Therefore, the Academy needs to exert an unrelenting effort to establish a business development wing and start creating autonomous and innovative business entities that would engage in lucrative business ventures and generate additional income to support the duties of the Academy.

**Strategic Objectives:**

- 6.1. Establish an autonomous income-generating unit;
- 6.2. Develop a resource mobilization strategy;
- 6.3. Collect revenue from services and membership fees;
- 6.4. Generate resources through partnerships with international agencies;
- 6.5. Establish an “endowment fund”;
- 6.6. Explore the bilateral and multilateral agreements of the nation and drive business opportunities for the academy;
- 6.7. Generate project ideas and develop high-quality fundable proposals.

**5. Monitoring and Evaluation**

The Participatory monitoring and evaluation system instituted by the Academy will have paramount importance in closely tracking how action items outlined in the strategy are decomposed and included in the annual operational plans and subsequently assessing the progress during the mid-term evaluation of the strategic plan implementation.

The Academy pursues periodic performance evaluation and monitoring procedures. These consist of monthly, quarterly, semiannual, and annual performance evaluations to track progress whilst implementing the strategy. The well-established culture of evaluating performance at the work unit, workgroup, secretariat, and governing board level is also valid for monitoring strategic plan implementations. Further, the Academy is also checked and evaluated by independent bodies.