AFRICAN INSTITUTE FOR ECONOMIC DEVELOPMENT AND PLANNING

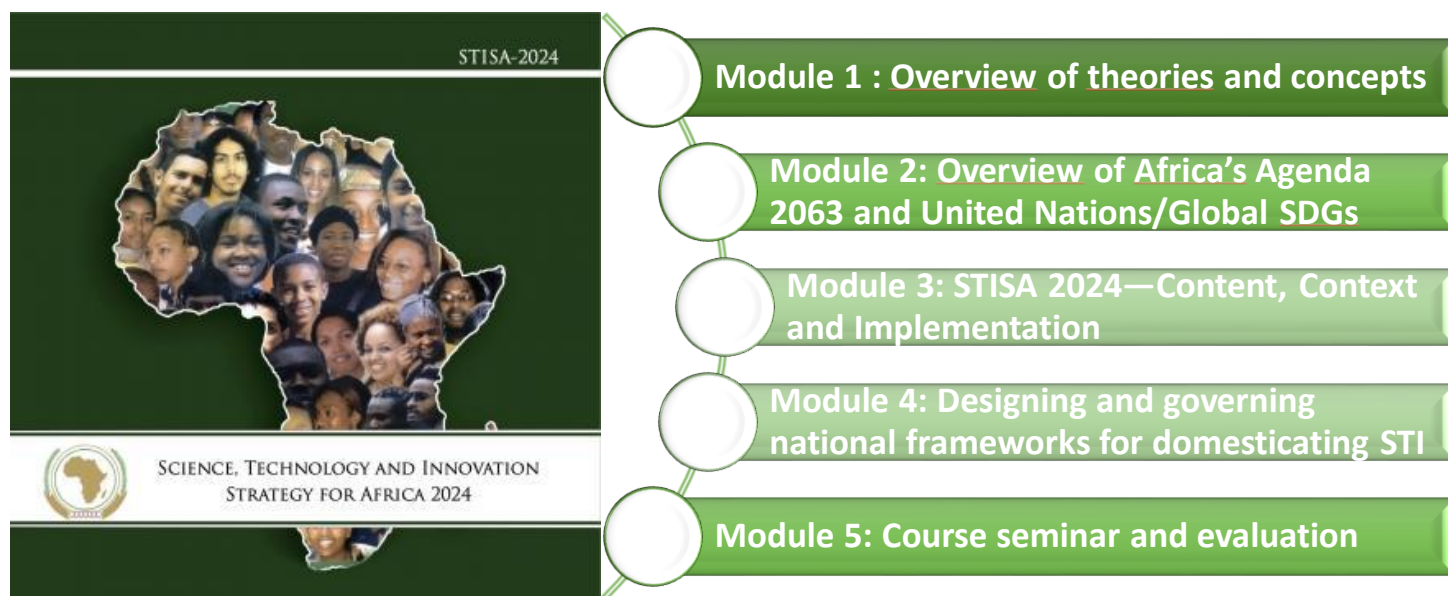**AUC-HRST**

Accelerating the implementation of the "Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024)"

Module 1 : Overview of theories and concepts

Module 2: Overview of Africa's Agenda 2063 and United Nations/Global SDGs

Module 3: STISA 2024—Content, Context and Implementation

Module 4: Designing and governing national frameworks for domesticating STI

Module 5: Course seminar and evaluation

ACCELERATING THE IMPLEMENTATION OF THE "SCIENCE, TECHNOLOGY AND INNOVATION STRATEGY FOR AFRICA 2024 (STISA-2024)"

Call for Applications

Announcement in Brief

Type	:	Short Term Course
Programme Area	:	Science, Technology and Innovation
Beginning of the course	:	21 April 2021
Duration	:	5 Weeks
Language	:	Bilingual (English - French)
Location	:	Web Based E-Learning
Fees	:	Covered by UNECA
Application Deadline	:	05 March 2021
Specific target audience	:	STI Technocrats
Website	:	http://services.unidep.org/e-idep/
Applications	:	https://www.unidep.org/?apply

PROGRAM RATIONALE

It is axiomatic that science, technology and innovation (STI) are key drivers of economic change, social transformation and environmental sustainability. Indeed, the roles of STI in sustainable development are not in dispute. There is, now, a relatively large body of academic literature and policy reports on how STI contribute to the attainment of sustainable development, and ways and means of governing STI towards sustainability. At various institutional scales and levels of governance, major efforts are being made to harness sustainable development potentials (or benefits) of STI and minimize any risks associated with the introduction and deployment of technologies, particularly new ones.

African countries have instituted a wide range of national, regional and continental initiatives for promoting and governing STI for sustainable development[1]. Many of these initiatives are well documented in reports such as AAS (2018)[2] and UNECA et al (2016)[3]. At national level, many African countries have formulated and adopted policy frameworks for STI and some have established agencies dedicated to funding STI projects and programmes. By 2020, at least 25 African countries have national STI policy frameworks, and several (including Namibia, Uganda and Swaziland) are in the process of reviewing and revising their old ones. In most countries, there are parliamentary portfolio committees for STI expected to ensure that national annual expenditure budgets have allocations for STI in general and R&D in particular. These committees are also responsible for providing oversight to the implementation of national STI policy frameworks.

Regional Economic Communities (RECs) have STI protocols and programmes, and some such as the East African Community (EAC) and the Southern Africa Development Community (SADC) have agencies or offices dedicated to STI issues or matters[4]. SADC adopted a protocol for STI in 2008 and the EAC established the EAC Commission on STI in 2015. Mugabe (2011) reviews the STI content or provisions in treaties establishing African RECs. He concludes: "African regional economic and trade treaties recognize the importance of STI in promoting regional integration and development. The integration of these considerations into regional agreements is informed by the understanding that individual African countries' economies are small and unable to marshal scientific and technological resources for development. Many countries are poorly endowed with the human, physical and financial resources necessary to develop and harness knowledge and innovation for economic change and growth. Cooperation in STI is thus necessary to enable the countries to pool and share their scarce resources such as R&D infrastructure and skilled human resources." [5]

At the continental level, measures for promoting STI are in the 2000 Constitutive Act of the African Union (AU) and various initiatives of the AU, the African Development Bank (AfDB), the United Nations Economic Commission for Africa (UNECA) and the AU Agency for Development (AUDA)-NEPAD and other organizations. Article 13(i) of the Constitutive Act of the AU

---

[1] See AAS (2018), *Africa Beyond 2030: Leveraging Knowledge and Innovation to Secure Sustainable Development Goals*. African Academy of Sciences (AAS), Nairobi.

[2] AAS (2018), op. cit.

[3] UNECA, AU and AfDB (2016), *Innovation, Competitiveness and Regional Integration*, chapter 5. United Nations Economic Commission for Africa, African Union and African Development Bank, Addis Ababa.

[4] Mugabe, J., O., (2011). *Science, Technology and Innovation in Africa's Regional Integration: From Rhetoric to Practice*. ACODE Policy Research Series, No. 44, 2011. Kampala.

[5] Mugabe, J., O., (2011), op. cit., p. 19.

provides, inter alia, that the Executive Council of the AU shall coordinate and make decisions on policies in the areas of science and technology that are of common interest to the member states. Article 14(d) establishes a specialized committee (i.e. Committee on Industry, Science and Technology, Energy, Natural Resources and Environment) to deal with issues of science and technology among others. The Committee's functions include preparing AU projects and programmes dedicated to STI.

In 2014, Member States of the AU adopted the Science, Technology and Innovation Strategy for Africa (STISA-2024) that provides overall policy directions and priority areas for investment in STI. STISA-2024 is the overarching policy and programmatic framework with strategic measures for promoting STI to attain Africa's aspiration in Agenda 2063 and the global Sustainable Development Goals (SDGs). Its mission is to "Accelerate Africa's transition to an innovation-led, Knowledge-based Economy" by: (a) "[i]mproving STI readiness in Africa in terms of infrastructure, professional and technical competence, and entrepreneurial capacity"; and "[i]mplementing specific policies and programs in science, technology and innovation that address societal needs in a holistic and sustainable way." The strategy articulates six priorities and interrelated specific objectives.

Progress in implementing STISA-2024 and related national STI policy frameworks is generally slow. This is manifested in the few programmatic initiatives dedicated to the strategy, low levels of investment in STI (most African countries have not attained the 1% of GDP Gross Expenditure on R&D), relatively slow progress in establishing the African Science, Technology and Innovation Fund and launching programmes such as the ones to implement pharmaceutical manufacturing for Africa plan. Africa's contribution to the global pool of scientific knowledge and innovations is relatively low. Efforts to implement effectively implement the strategy are limited by low levels of knowledge of and information on STISA-2024, low levels of policy literacy, weak STI policy analysis capacity, insufficient monitoring, evaluation and accountability, and inadequate budgets for STISA-2024 implementation at national, regional and continental levels.

In response to AU Member States' request to help build capacity for accelerating the implementation of STISA-2024, and spur efforts to leverage STI to address contemporary challenges such as the COVID-19 pandemic, the UNECA and the AU Commission (AUC) are developing virtual training course on STI for Africa's development. The course is being designed to build and mobilize skills to analyse, formulate, monitor, evaluate and implement policies, programmes and projects for implementing STISA-2024 and related national and regional priorities in Africa. The course on 'Accelerating the implementation of the "Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024) in the COVID-19 pandemic' will be offered to senior to middle level officials in governments and inter-governmental agencies. Representatives of national and regional science academies and funding agencies, and if possible representatives of carefully selected civil society and private sector groups may be included in or eligible to participate in the course.

LEARNING OBJECTIVES

The proposed training course is being designed on the premise (or informed by) that literacy in and analytical skills for STI policy are in low or very short supply in Africa. Decision-makers in many African countries do not have adequate understanding of STISA-2024 and lack skills (as well as informational resources) to design, analyse and implement STI policies and related

programmes to achieve priorities articulated in the strategy. The training course's specific objectives are to:

a) Build decision-makers' understanding of STISA-2024, its historical origins, rationale and objectives, and ways and means of implementing at national levels to stimulate and impact on socio-economic transformation;

b) Enhance decision-makers' knowledge of and skills in methodological approaches to developing, reviewing, implementing, monitoring and evaluating STI policies and impacts of STI for sustainable development at local, sectorial and national levels;

c) Provide decision-makers with relevant conceptual tools or analytical frameworks for designing, implementing, monitoring and evaluating STI policies and strategies.

d) Expose African decision-makers to international best practices in STI policy design and governance.

The course will be designed and delivered in interactive and participatory ways. Using co-production approaches, participants will feed into and evaluate modules, themes and delivery modalities. For example, selected prospective participants will to requested to comment on themes and some may be asked specific questions (using emails or telephone calls) about their countries' and/or institutional capacity needs in STI policy, and priorities and needs in implementing STISA-2024.

The course will be delivered through interactive online sessions including virtual lectures (e.g. Blackboard/BBC or Webinar), focused small group discussions and a final seminar on accelerating the implementation of STISA-2024. Prior to the online lectures, participants will be expected to read recommended literature (including STISA-2024 and related AU decisions and carefully selected papers on STI in Africa) and prepare a 1,000 words outline of emerging issues and questions.

CONTENT AND STRUCTURE

This training will focus on three key topics of policy priority for African governments :

❖ **Module 1: Overview of theories and concepts**
  ➢ Key concepts and definitions of STI, STI Policy and Sustainable Development
  ➢ The STI policy process and political economy of STI policymaking
  ➢ STI policy tools (e.g. technology assessment, foresights, roadmaps, mapping exercises)
  ➢ Frames: Mode 1: Research and Development (R&D), National Systems of Innovation (NSI) and Transformative Innovation Policy (TIP)

❖ **Module 2: Overview of Africa's Agenda 2063 and United Nations/Global SDGs**
  ➢ 2.1 Agenda 2063: History, aspirations and programmes
  ➢ 2.2 The SDGs: History, Goals and Targets
  ➢ 2.3 STI in Agenda 2063 and SDGs: Mapping linkages

❖ **Module 3: STISA 2024—Content, Context and Implementation**
  ➢ Historical Origins

- ➢ Rationale, Scope and Objectives
- ➢ Priority Areas and Issues
- ➢ Policy Foci and Programmatic Outlook
- ➢ Implementation Strategy and Political Economy Issues
- ➢ Mapping National, Regional and Continental STI Initiatives
- ➢ SWOT Analysis of Implementation of STISA-2024

❖ **Module 4: Designing and governing national frameworks for domesticating STI**
- ➢ 4.1 Designing and aligning national STI policy frameworks and strategies
- ➢ 4.2 Indicators and benchmarking STI for Agenda 2063 and SDGs
- ➢ 4.3 Monitoring, Evaluation and Learning (MEA) Tools
- ➢ 4.4 International Good Practices in STI Policy Design and Governance

❖ **Module 5: Course seminar and evaluation**
- ➢ 5.1 Presentation of policy analysis papers by participants
- ➢ 5.2 Online individual evaluation of the course

METHODOLOGY

This self-paced course will be delivered from 21 April to 26 March, 2021. Participants are able to self-assess their understanding of learning materials through built-in quizzes and exercises. Additional resources, including suggested readings are provided for participants who wish to deepen their knowledge of a course topic. The course will be delivered in English and French. The pedagogical team made up of a Course Director and the tutor will provide daily on-line assistance to participants at scheduled times. An Internet connection is required to interact with both Course Director and tutor.

The course will run over a period of five weeks. The sixth week will be dedicated to a final evaluation or exam that will assess participants' knowledge Additional resources such as bibliographies, web links and optional readings are provided for participants who wish to deepen their knowledge of the course topic.

TARGET AUDIENCE

The course targets decision-makers on the methodology for developing, reviewing, implementing and monitoring STI performance at local, sectorial and national level.

ADDITIONAL INFORMATION

Acceptance to the Course

Applicants to the course are expected to have, as a minimum, a bachelor's degree preferably where courses related to statistics, planning, project management ,monitoring and evaluation. In addition, two years of work experience will be required. Women candidates are strongly encouraged to apply.

Until the registration deadline, participants are accepted to the course on a rolling basis and subject to availability of slots.

Applications must be completed exclusively on IDEP online application platform at https://www.unidep.org/?apply

Certificate of Completion

A Certificate of Completion will be issued by IDEP to all participants who successfully complete the course-related self-assessments presented for each module.

Technical Requirements

Access to internet is an essential condition for participation. The following specifications, as a minimum in terms of hardware and software, are required to take this e-Learning course, please consult your Network Administrator or Systems person to ensure that you have the following:

- Platform: Windows 95, 98, 2000, NT, ME, XP or superior; Mac OS 9 or Mac OS X; Linux
- Hardware: 64 MB of RAM, 1 GB of free disk space
- Software:
    - Adobe Acrobat Reader
    - Adobe Flash Player
    - Microsoft Office (Windows or Mac) or Open Office
    - Browser: Google chrome, Firefox 36 or higher or Internet Explorer 7 or higher
- Modem: 56 K
- Note that JavaScript, Cookies and Pop-ups must be enabled

CONTACT INFORMATION

IDEP E-Learning and Knowledge Management Division
Tel: +221 33 829 55 00
Fax: +221 33 822 29 64
Email: elearning@unidep.org