## REPUBLIQUE DU SENEGAL



## MINISTERE DE L'ENSEIGNEMENT SUPERIEUR, DE LA RECHERCHE ET DE L'INNOVATION

## DIRECTION GENERALE DE LA RECHERCHE ET DE L'INNOVATION

The Speech of Director General of Research and Innovation, Ministry of Higher Education, Research and Innovation of Senegal, International Spatial Forum, Nairobi, 13 February 2018.

February 2018.

Madam Honourable Minister of Defence of Kenya,

Honourable Minister of Higher Education and Scientific Research of Sudan,

Honourable Ministers,

Mister, the President of Italian Space Agency,

Mister, the President of International Astronautical Federation,

**Distinguished Heads of Delegation** 

Distinguished participants in your grades, respective titles, any protocol observed,

It is with a real pleasure for Senegalese delegation and I, to represent, in this important Forum the Honourable Minister of Higher Education, Research and Innovation of the Republic of Senegal. I am so much happier for the object that brings us together touches on of the utmost important topic which is the sustainable socio-economic development of our continent, for its stability and for the happiness of its youth.

In Africa, institutions of higher education and research, researchers, teacher-researchers are imperatively called upon to play a greater role in the production of knowledge, the development of innovation, in order to meet the requirements of wealth creation, social protection, safeguarding the environment and creating jobs.

Following the example of African Union through its strategy Science Technology Innovation for Africa 2024 (STISA-2024), Senegal has taken the strategic option of making Science, Technology and Innovation a key levers of economic, social and cultural development. This willingness has been demonstrated by unprecedented investment efforts after National Concertation on the Future of Higher Education and Research (CNAES) and the presidential decisions that are the foundations of the ongoing reforms. One of the flagship activities of these reforms, after the establishment of the General Directorate of Research and Innovation, is the construction of the Diamniadio City of Knowledge, new city, at the exit of Dakar and a short distance from the new international airport Blaise Diagne. The City of knowledge is being built on a site of 14 ha and will include five spaces:

- Governance and Evaluation;
- Technical infrastructure, sharing and learning;

- Promotion of Scientific Culture
- Training and apprenticeships
- Research, Innovation and Technology Transfer, with Shared Research Platforms and the National Center for Scientific Computing (CNCS), which will be in charge of the management of the High Performance Calculator (HPC) being acquired and which is an important component of the Institute of Advanced Science and Technology (ISTA).
  Important component of the Institute of Advanced Science and Technology (ISTA).

ISTA will host Interuniversity Masters in the following areas: Nanoscience and Nanotechnology, Nuclear Physics and Applications, Nuclear Medicine, Cyber Security, Molecular Genetics, Space Science and Technology and Remote Sensing, Atmospheric Physics and Oceanography, Big Data, Internet of Things, objects, robotics and artificial intelligence, scientific computing, numerical simulation and modelling. The ambition pursued in the short and medium term is to stimulate in this context the development of technologies that can accompany important qualitative changes in our economy.

In addition to the projects developed in Universities and other Higher Education Institutions to orient the system towards STEMS and short vocational training, this research ecosystem dedicated to STI will quickly attend the realization of the activities of a national program for the development of space sciences and technologies, which are being developed. Thereby, Senegal demonstrates, its ambition to take full advantage of the benefits and power of space science and technology as a whole (remote sensing, earth observation, algorithms, spatial data processing, technical infrastructures for acquisition, storage and data processing, GIS, geomatics, etc...) and in the development of value-added services, significant niche of jobs especially in new trades. It is also necessary to mention the implementation of the infrastructures of the promotion of the scientific culture within the city of knowledge, including a mini astronomical observatory and a planetarium next to a multimedia library and spaces for demonstration and scientific animation.

Thus, Senegal is organizing to take advantage of the "space" sector and ensure the achievement of the objectives of the three pillars of Senegal Emergent Plan (PSE) (structural transformation of the economy and growth, ii) human capital, social protection and sustainable development; iii) governance, institutions, peace and security) for its sustainable

socio-economic development through the many opportunities for innovation offered by

"space".

Senegal's space program is divided into 3 components:

- Development and implementation of training programs (joint university programs,

certification, etc..) and capacity building;

Development of a local space economic footprint, with a Research and Development

Center for manufacturing, assembly, integration, testing and maintenance that supports

the development of a local industry (startups) and an ecosystem, and the creation and

commercialization of additional services including digital applications;

- Mastery of space technologies and expertise, mastery of technologies that can be used

in many economic sectors (agriculture, mining, railway or naval maintenance, coastal

engineering, environment, data science, etc ...),

The dynamic and pro-active approach that Senegal has chosen to implement, by ensuring the

coherence of the entire system of higher education, research and innovation (ESRI) (in deep

reform). The wealth production device is the willingness of the most senior Authorities, to see

Senegal play a major role in the mastery and development of Science and Technology

especially the space sector, and take its place resolutely in the sustainable development of our

continent.

This is an opportunity for me and the Senegalese delegation to express, on behalf of the

Minister of Higher Education, Research and Innovation, our sincere gratitude to the

Government of Kenya for the hospitality. Our thanks also go to the organizers of the Forum

for their unfailing commitment to the success of our conference. No doubt this Forum will be

the Founder of a new impetus for Space Science, Technology and Innovation in Africa.

Thank you for your kind attention.

Nairobi February 13, 2018

By Prof. Amadou Thierno Gaye

General Director of Research and Innovation of the Ministry of Higher Education, Research

and Innovation of Senegal

3