

REPUBLIC of SENEGAL

National Strategic Plan for Research and Innovation 2023-2032

SUMMARY

His Excellency, the President of the Republic of Senegal, in his vision set out in the PSE (Plan Sénégal Emergent), instructed the development of the National Strategic Plan for Research and Innovation (PSNRI) 2023-2032. The PSNRI, which rests on five pillars, will propel Senegal as a flagship country for African research and innovation throughout the world. It will be implemented through the following key measures:

1. Governance

- Conduct PSNRI workshops for academics, researchers and institutions;
- **Promulgate the Research and Innovation (R&I) orientation Law**, a draft of which is already underway and should be finalized and ratified before the end of the year;
- Approve the **decree creating the National Council for R&I (CNRI)**, chaired by the Head of State; the date of the first meeting of the Council will be announced, and will serve as an opportunity to present the strategy to a broad and international audience, with strong supporting communication;
- **Set up the National Observatory for R&I (ONRI)** and select the administrative committees of the sector observatories; the ONRI, through its five pillars, will be a consultative framework for multi-sector meetings, analyses and proposals (think-tank function);
- **Restructure** the Direction Générale de la Recherche et de l'Innovation (DGRI) into three departments (instead of four) and provide it with the human, financial and technical resources it needs to fully play its role as coordinator of the PNSRI;

2. Resource mobilization and allocation

- Approve the draft **decree creating the National Fund for R&I (FNRI)**;
- Create the FNRI, set up the organizational framework and launch activities to mobilize financial and technical resources;
- Activate sources of financing for the FNRI, such as (i) the State's allocation budget, (ii) contributions from the economic, industrial, oil and mining sectors, (iii) the flat-rate contribution payable by employers (CFCE), and (iv) the telecommunications user fee (RUTEL).
- Push up the **fundraising strategies (Obj: 600 billion XOF by 2027)**.

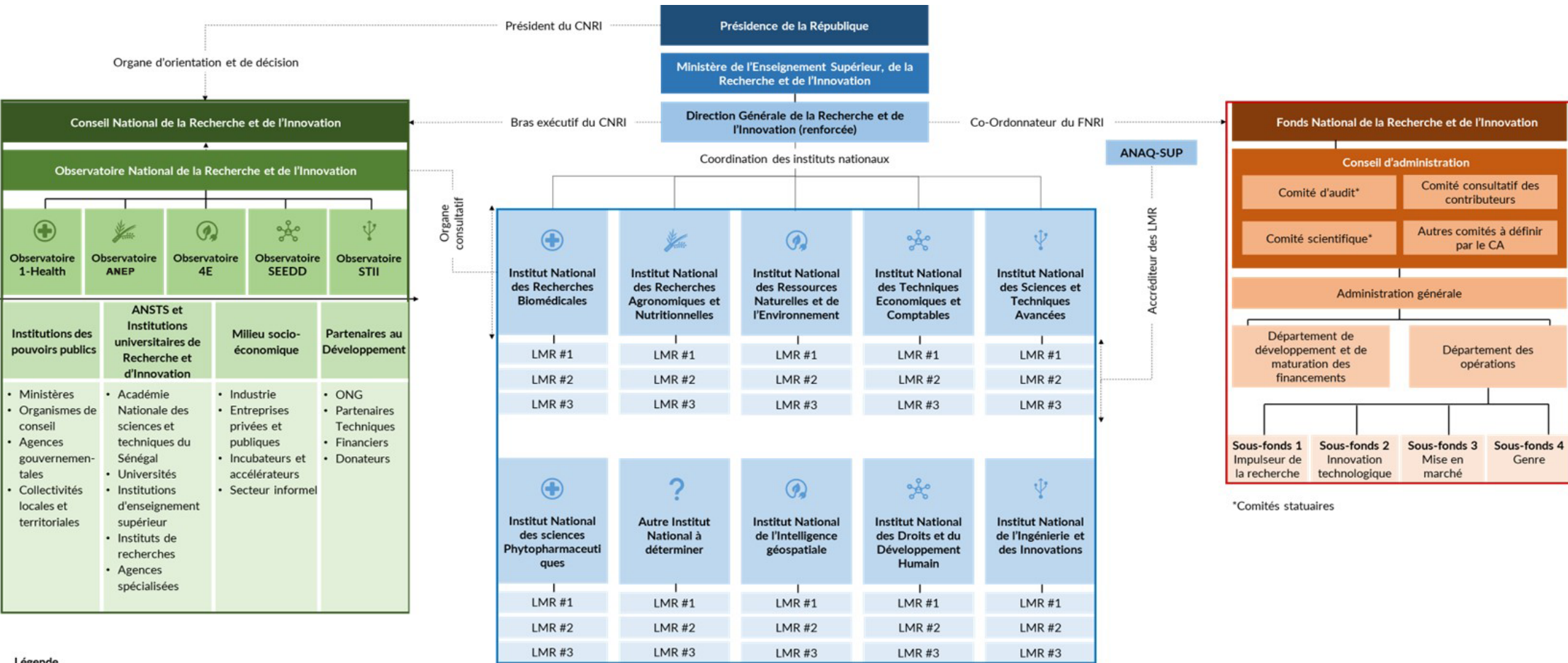
3. Strengthening the ecosystem

- Set up an interministerial committee to bring together ministries in charge of higher education and R&I, education, training and professional insertion, to strengthen educational programs in R&I;
- Finalize infrastructure projects in support of R&I, some of which are at an advanced stage: the **City of Knowledge**, science and technology parks in partnership with the private sector, the **Virtual University of the African Diaspora**, business innovation support centers in higher education and research institutions, and the Digital Technology Park;
- Set up the Organizing Committee for the **Biennale for Innovation and Research in Africa** (last quarter of 2023);
- Develop platforms for exchanging information on opportunities for financing and adding value to R&I activities, and for protecting intellectual property assets;
- Pursue the development of **Senegal's space program with the construction of the Centre de réception et de traitement des données géospatiales** and an ambitious, sustained communications strategy.
- Operate the **two electron microscopes**;
- Start the **Super-Calculator**;
- Set up a special « *Centre de Recherches et d'Essai* » (**CRE**) program;

THEORY OF CHANGE

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| VISION | Set up research and innovation as catalysts for sustainable development, industrialization and entrepreneurship for an emerging Senegal by 2035. | | | | | |
| MISSION | Create a research and innovation environment underpinned by inclusive governance. | | | | | |
| MAIN RESULTS (long-term) | <ul style="list-style-type: none"> ▪ The most attractive market in West Africa, with over 600 billion CFA francs of funds invested. ▪ Global Innovation Index from 23.3 in 2021 to 30 in 2032, to rank in the top 3 in sub-Saharan Africa. ▪ Reduce the 75% gap between research and the market to convert inventions into products. | | | | | |
| RESULTS (intermediates) | <ul style="list-style-type: none"> ▪ Mobilization of 600 billion CFA francs by December 31, 2027. ▪ Public investment in R&I of at least 1% of GDP by 2027. ▪ Private investment (companies and non-profit organizations) in R&I to reach 2% of GDP by 2027. | | | | | |
| RESULTS (short-term) | <ul style="list-style-type: none"> ▪ At least 25% of R&I projects will be led by women by December 31, 2025. ▪ At least 25% of R&I projects will involve the private sector by December 31, 2025. | <ul style="list-style-type: none"> ▪ At least five major R&I announcements in each priority sector. ▪ At least ten green infrastructure projects. | <ul style="list-style-type: none"> ▪ 25% of R&I output converted into some form of commercial value. | <ul style="list-style-type: none"> ▪ At least 50 patents as of December 31, 2025. ▪ 100 startups by December 31, 2025. | <ul style="list-style-type: none"> ▪ Five functional observatories with identified indicators. ▪ One Health: Human and animal health <ul style="list-style-type: none"> - ANA: Agriculture, Nutrition, Food - 4^E: Water, Energy, Environment, Space - SEDD: Societies, Economy, Law, Development - STII: Science, Technology, Engineering, Innovation | |
| AREAS OF FOCUS | Federative and inclusive governance with an adapted organization. | Consistent and appropriate funding along the entire R&I value chain. | Dedicated and inclusive human capital, with expertise aligned with sector priorities. | Facilitated and stimulating environment. | Digital and spatial technologies as accelerators of economic transformation | |
| ACTIONS | <ul style="list-style-type: none"> ▪ Set up a National Council for Research and Innovation (CNRI). ▪ Review and strengthen the General Directorate for Research and Innovation (DGRI). ▪ Set up the National Observatory for Research and Innovation (ONRI). ▪ Enact an R&I orientation law. | <ul style="list-style-type: none"> ▪ Create a National Fund for Research and Innovation. ▪ Set up an organizational and governance framework for the FNRI. ▪ Create sub-funds for systemic R&I financing. ▪ Develop a resource mobilization strategy and organize an international road-show. ▪ Set up a system for collecting financial information on funds mobilized for R&I. | <ul style="list-style-type: none"> ▪ Strengthen the pre-school and primary school curriculum. ▪ Promote scientific series in secondary schools. ▪ Strengthen collaboration between the private sector and universities. ▪ Enhance career pathways of teaching and research staff. ▪ Promote the inclusion of women. ▪ Launch the Virtual University of the African Diaspora. | <ul style="list-style-type: none"> ▪ Develop and run a marketplace for R&I. ▪ Launch the Start-up Act by signing implementing decrees. ▪ Modernize intellectual property law. ▪ Install dedicated infrastructure and equipment to strengthen laboratories. ▪ Organize the Biennale de la Recherche, de l'Innovation et de l'Industrialisation en Afrique. | <ul style="list-style-type: none"> ▪ Create digital, sustainable and intelligent cities. ▪ Build digital parks to attract international companies. ▪ Promote R&I as a factor in technical progress. ▪ Continue Senegal's space program. ▪ Create a platform for innovative e-government solutions. | |

R&I GOVERNANCE



*Comités statutaires

Légende

- Santé humaine et animale
- Agriculture, nutrition et alimentation
- Eau, énergie, espace et environnement
- Société, économie, éducation, droit et développement
- Sciences technologiques, ingénierie et innovation
- A déterminer
- Lien de collaboration
- Lien de tutelle
- LMR Laboratoire Mixtes de Recherche

SHORT-TERM ACTION PLAN

| STRATEGIC PRIORITIES | SHORT-TERM ACTIONS |
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| <p style="text-align: center;">Governance</p> | <ul style="list-style-type: none"> ▪ Draft and pass an R&I orientation law. ▪ Update and promulgate the decree establishing the CNRI, taking into account the new recommendations. ▪ Restructure the DGRI into three directorates (instead of four) and provide it with the human, financial and technical resources it needs to fully play its role as coordinator of the Strategy; and neither create nor encourage the creation of parallel administrations with the same missions and objectives as the DGRI, in order to better coordinate and pool R&I actions and initiatives. ▪ Set up the ONRI and select the administrative committees of the sector observatories. ▪ Identify the final names of the first national institutes. |
| <p style="text-align: center;">Financing</p> | <ul style="list-style-type: none"> ▪ Approve the draft decree creating the FNRI. ▪ Create the FNRI and set up its organizational framework. ▪ Activate FNRI funding sources such as the State's budget, contributions from the economic, industrial, oil and mining sectors, the flat-rate contribution payable by employers (CFCE) and the telecommunications user fee (RUTEL). |
| <p style="text-align: center;">Human Capital</p> | <ul style="list-style-type: none"> ▪ Introduce science fairs into the elementary school curriculum in collaboration with higher education. ▪ Organize events in English in elementary school. ▪ Create an interministerial committee to bring together the ministries responsible for education, higher education, R&I, training and professional integration. ▪ Allocate a significant proportion of excellence scholarships to STEM promotion, with 50% of these scholarships awarded to women. ▪ Organize an annual career forum at universities. ▪ Conceptualize an entrepreneurship training program for scientists. ▪ Sign partnerships between universities and private incubators. ▪ Draft and promulgate a decree on the status of teaching and research staff. ▪ Make the partnership between CREs and UVS ENOs a reality. ▪ Draft a decree for the creation of the Virtual University of the African Diaspora. |
| <p style="text-align: center;">Promoting a facilitating and stimulating environment</p> | <ul style="list-style-type: none"> ▪ Develop a concept note and detailed budget for setting up the marketplace. ▪ Refine the mapping of R&I players and projects, and integrate it into a database. ▪ Develop a mapping of partnership and funding opportunities in line with the resource mobilization strategy. |

| STRATEGIC PRIORITIES | SHORT-TERM ACTIONS |
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| | <ul style="list-style-type: none"> ▪ Identify the resources and organization needed to manage and maintain the marketplace. ▪ Develop terms of reference for the technological platform, and launch a call for tenders for its implementation. ▪ Draft and promulgate a decree to modernize the law on intellectual property. ▪ Sign the implementing decrees for the effective launch of the Startup Act. ▪ Set up a new online platform for obtaining title protection for intellectual property assets. ▪ Conceptualize a model updating the Cité du Savoir project. ▪ Launch the organization of the African innovation and research fair for 2023. |
| Digital and Space | <ul style="list-style-type: none"> ▪ Identify high-potential digital areas for Senegal. ▪ Strengthen functional science and technology parks in partnership with the private sector. ▪ Set up business innovation support centers in higher education and research institutions. ▪ As part of the collaborative project with the Ministry of the Digital Economy, build bridges (CNRI's role). ▪ Further development of Senegal's space program. |