

MADIBA, the first vaccine factory in Senegal become the heart of the Royal Belgian Economic Mission.

Dakar, Senegal, 25 May 2023 - The Belgian economic mission, led by Princess Astrid of Belgium, is visiting the MADIBA facilities where the Institut Pasteur de Dakar and My Engineering, a company based in Louvier, are developing the first vaccine production unit in Senegal to strengthen vaccine autonomy in sub-Saharan Africa.

Her Royal Highness Princess Astrid is leading the first delegation of Belgian companies focusing on biopharmaceutical production in the land of the Terranga, Senegal, from 21 to 25 May. The Minister of Foreign Affairs, Hadja Lahbib, the Vice-President of Wallonia, Willy Borsus, and the Brussels Secretary of State, Pascal Smet, are officially accompanying the delegation. The economic mission is organised by the Foreign Trade Agency (AWEX), the three regional agencies responsible for promoting foreign trade and investment, and the Federal Public Service of Foreign Affairs.

The aim is to promote Belgo-Senegalese cooperation and to support the African continent in its drive to achieve greater pharmaceutical independence. For now, Africa imports 99% of the vaccines it needs, a need reinforced by the impact of the coronavirus pandemic.

The MADIBA project

Diamniadio, strategically located between the Senegalese capital Dakar, the international airport and the Ndayane "Port of the Future", is home to the Manufacturing in Africa for Disease Immunisation and Building Autonomy (MADIBA) project.

It includes a manufacturing platform dedicated to the production of vaccines against epidemics, a large-scale production site for vaccines against yellow fever, measles and rubella, and a training centre for new-generation vaccines. Once the production plant is completed and operating at full capacity, it should be able to produce up to 300 million doses of vaccine each year for the African continent, thereby meeting the targets set by the African Union and the African CDC (Africa Centers for Disease Control and Prevention) to produce and supply more than 60% of the doses of vaccine needed on the continent by 2040.

The MADIBA project is the fruit of close collaboration between Senegal and Belgium over the last 2 years. The Institut Pasteur de Dakar, Unizima and My Engineering: each partner brings unique expertise to the project, with the common objective of creating an infrastructure for manufacturing pharmaceutical substances and products in compliance with Good Manufacturing Practice (GMP). This facility will use state-of-the-art equipment to optimise production, product quality and overall efficiency.

In addition to building the production unit, the MADIBA project has a strong commitment to contributing to the transfer of knowledge, training and skills development to ensure the project's sustainability and promote long-term local economic development.

Expertise "made in Belgium" for export

Unizima is an international expert in the management of innovative bioproduction projects and the transfer of technological know-how. Their aim is to build and train local capacity and ensure the sustainability of the project.

The Univercells subsidiary will then provide support in terms of recruitment, planning and procurement, deploying experts on site to strengthen technical capabilities and operational readiness.

My Engineering, a Walloon company based in La Louvière, specialises in the engineering of pharmaceutical infrastructures and is providing its expertise to the Institut Pasteur in Dakar for the design and construction of this state-of-the-art facility. My Engineering is ensuring that the production unit complies with the most stringent international standards in terms of quality, safety and efficiency. Working closely with the Institut Pasteur to create a modular, flexible production environment capable of adapting to changing pandemic and global health needs.

The choice of modular construction proved particularly relevant. The modules were built in a factory and transported by ship, enabling the production unit to be set up quickly and efficiently. This innovative approach enables us to respond flexibly to changes in demand for vaccines, and should guarantee continuous, reliable production to meet the needs of the local and regional population.

The visit of the Belgian royal delegation to Senegal was an opportunity for My Engineering to present its central role in the implementation of the MADIBA project.

International support

Continuing the vision of being a unique manufacturing facility in the region, in October 2022 **the Bill & Melinda Gates Foundation** provided financial support to the Institut Pasteur de Dakar for a programme to develop and manufacture a measles and rubella vaccine in-house, within MADIBA's own facilities. This low-cost vaccine will be produced using Batavia Biosciences' Hip-Vax intensified production process and Univercells Technologies' NevoLine™ and scale-XTM platforms.

MADIBA represents a significant step forward in vaccine production in sub-Saharan Africa, demonstrating the commitment of Belgian and Senegalese players to strengthening the continent's autonomy and capacity to respond to public health needs. This fruitful collaboration marks a major milestone in the fight against pandemics and demonstrates the importance of a global approach based on solidarity to guarantee equitable access to vaccines and health security for all.