

# Institut Pasteur de Dakar

## JICA TICAD side meeting on Vaccine Life Cycle Management in Africa

August 26<sup>th</sup>, 2022



# Serving Public Health in Senegal since 1896

- Senegalese Foundation
- Not-for-profit
- Of public interest



Biomedical  
Research



Public  
Health



Education  
& Training



Vaccine  
Manufacturing

# Advancing Public Health in Africa





# Unique regional and global value proposition in public health

## Strength in 5 core public health activities



### Bio-manufacturing

*Production of vaccines, diagnostics and, in the near term, reagents and therapeutics*



### Biomedical research and innovation

*Research on multiple infectious and epidemic topics, and innovation on new products*



### Epidemic Intelligence & Outbreak response

*Epidemiological surveillance, outbreak response, epidemic clinical trials, public health programs, etc.*



### Human Capital Development

*Training of peers, technicians, outbreak workforce, masters, PhDs*



### Specialized and decentralized Laboratories

*Biomedical, food and environment safety laboratory testing; vaccine administration*

**Distinctive capability to produce yellow fever vaccines end-to-end in Africa – from drug substance to production and fill and finish. Expanding to vaccines for epidemics**

**1 of 5**

vaccine manufacturers in Africa and the only diagnostics and vaccine manufacturer

**3 new assets**

Under construction for vaccines and diagnostics biomanufacturing

**Knowledge and expertise to detect diseases and manage epidemic outbreaks in Africa**

**>25**

African countries supported in outbreak management

**7 out of the 11**

key functions of a public health institute

**Excellence in infectious disease research and education**

**10%**

of Senegal's publications

**1<sup>st</sup>**

Francophone institute in Africa for research publications

**+50**

PhDs, masters and technicians trained in infectious disease related topics

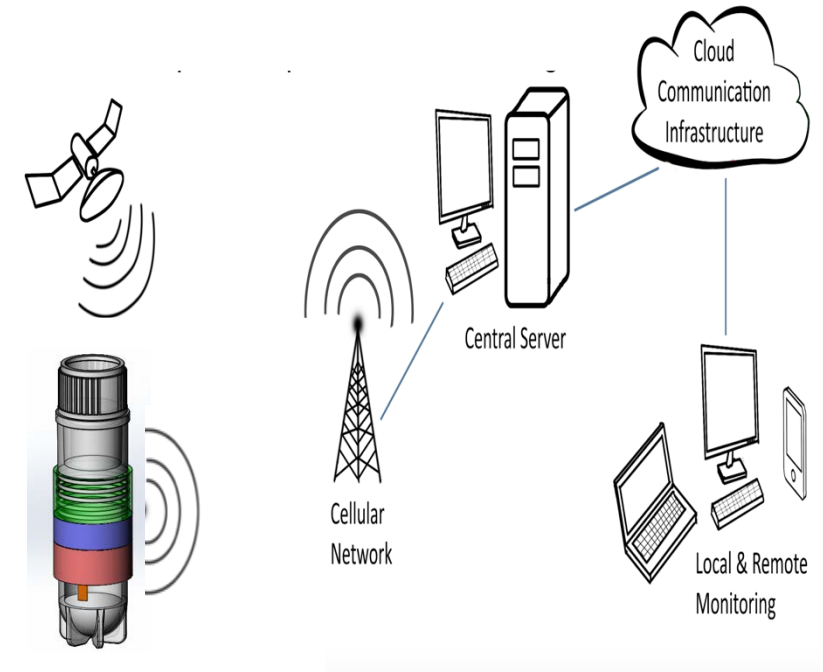
# Innovation at Institut Pasteur de Dakar



**Epidemic diagnostics**



**Mobile Laboratories for  
Outbreak response**



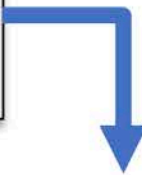
**Rethinking sample  
transport**



# MADIBA

Manufacturing In Africa for  
Disease Immunization &  
Building Autonomy

Modular  
design



Assembly &  
& transport

Site  
installation



Fast start &  
operational  
excellence

**\$220 m**  
Investment required

**\$150 - 180 m**  
Expected revenues

**300 m doses**  
Manufacturing capacity

**200 FTE**  
New jobs created

# Project MADIBA

***The MADIBA project is an opportunity to manufacture and supply high quality, affordable and relevant vaccines for Africa in Senegal with IPD as a center of excellence***

## Components of the project

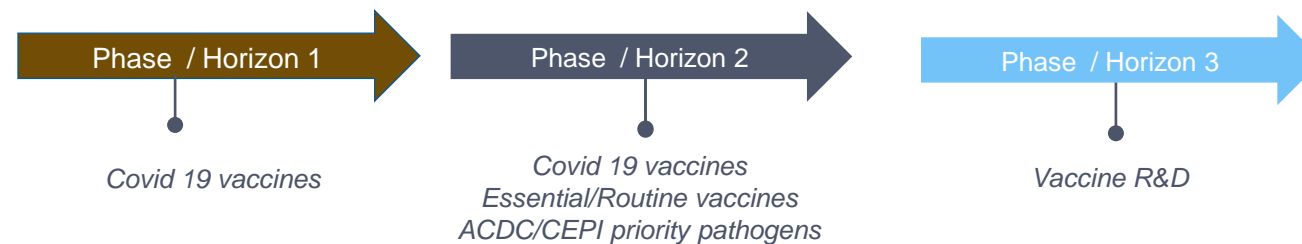
**Drug Substance (DS)** : MADIBA require the capacity to make vaccines from scratch and as will require a vaccine substance production facility

**Fill and Finish (FF)** : Given the urgency to increase supply of vaccines against Covid-19 in Africa, the priority is for the new facility to be equipped and able to Fill & Finish bulk vaccine of a WHO approved COVID vaccine

**Technology** : Innovative technology with dual options of pouches and vials

**Vaccine commercialization** : Vaccines produced will be marketed through purchase agreements to be signed with potential buyers (e.g. UNICEF, COVAX, ECOWAS etc.)

## Phases of the project



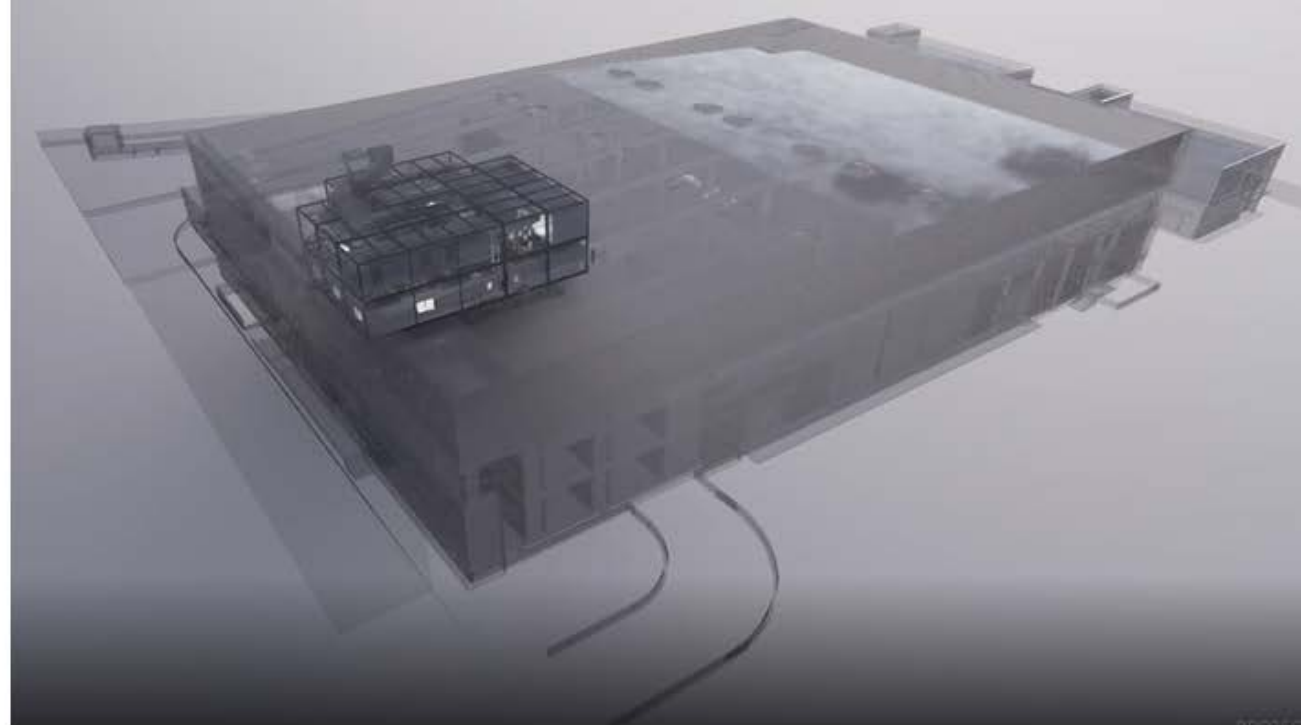
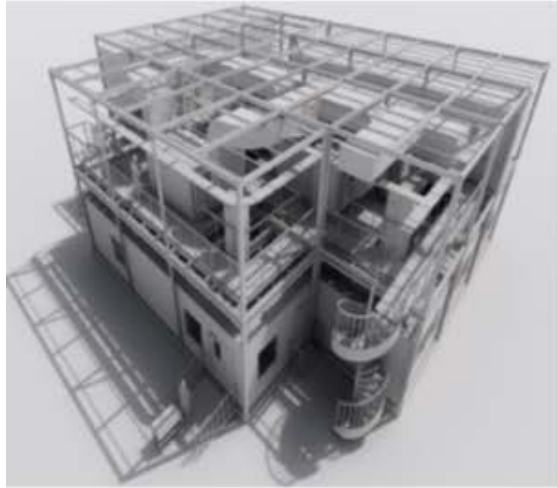


# MADIBA and AfricAmaril vaccine manufacturing facilities





## Modelling of the Drug Product facility







# Construction and Site Update

## Recent pictures




## Details – Last Update

- **MADIBA Building**
  - Steel work completed
  - Exterior masonry completed
  - Civil works on the basement ongoing
  - Interior work construction ongoing
  - Utilities construction ongoing
  - External spaces and streets ongoing
- **Annex buildings construction ongoing**
- **QC building main civil works completed**



Infrastructure  
(layout and  
structure)



Modular  
Structures  
and  
Filling Machine



- **Keyplants modules installed in final position**
- **Assembly works ongoing**

Thank you



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