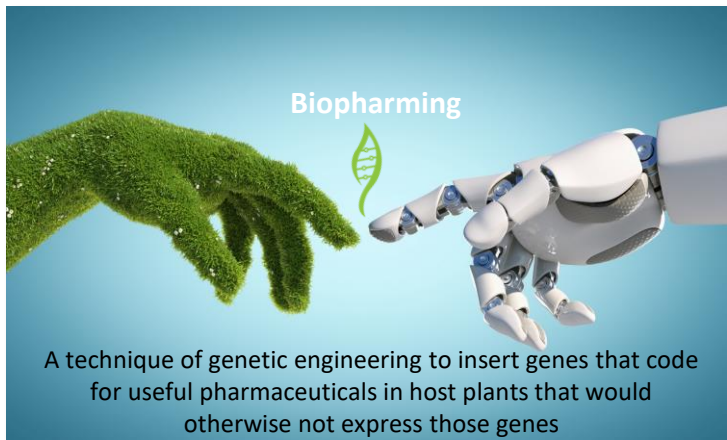


Our mission is to measurably contribute to building Africa's biosecurity to reduce the burden of disease across people, animals and plants by leveraging the competitive performance of our plant-based protein expression platform.



Health and Food Security – A Double-Edged Sword

- By 2030, [53% of the global population facing hunger will be concentrated in Africa](#). The prevalence of moderate or severe food insecurity in Africa (58%) is nearly double the global average.
- Almost two thirds of Africa's working population relies on agriculture, [yet increasing disease outbreaks](#) within human, plant and livestock animals pose a growing threat to food and health security.
- [About 45% of all child deaths](#) in Africa are linked to malnutrition.
- 69% of deaths in Africa are due to infectious diseases
- Scientists estimate that almost [6 out of every 10](#) known infectious diseases in people are zoonotic i.e. can be spread from animals
- 60% of pathogens identified by WHO as having the greatest outbreak potential, have no diagnostic test available.
- Africa imports [99% of its vaccines and 70% to 90% of its medicines and medical devices](#). This represents a severe risk in supply chain blockages. COVID-19 exposed Africa's vulnerabilities in times of health crises.

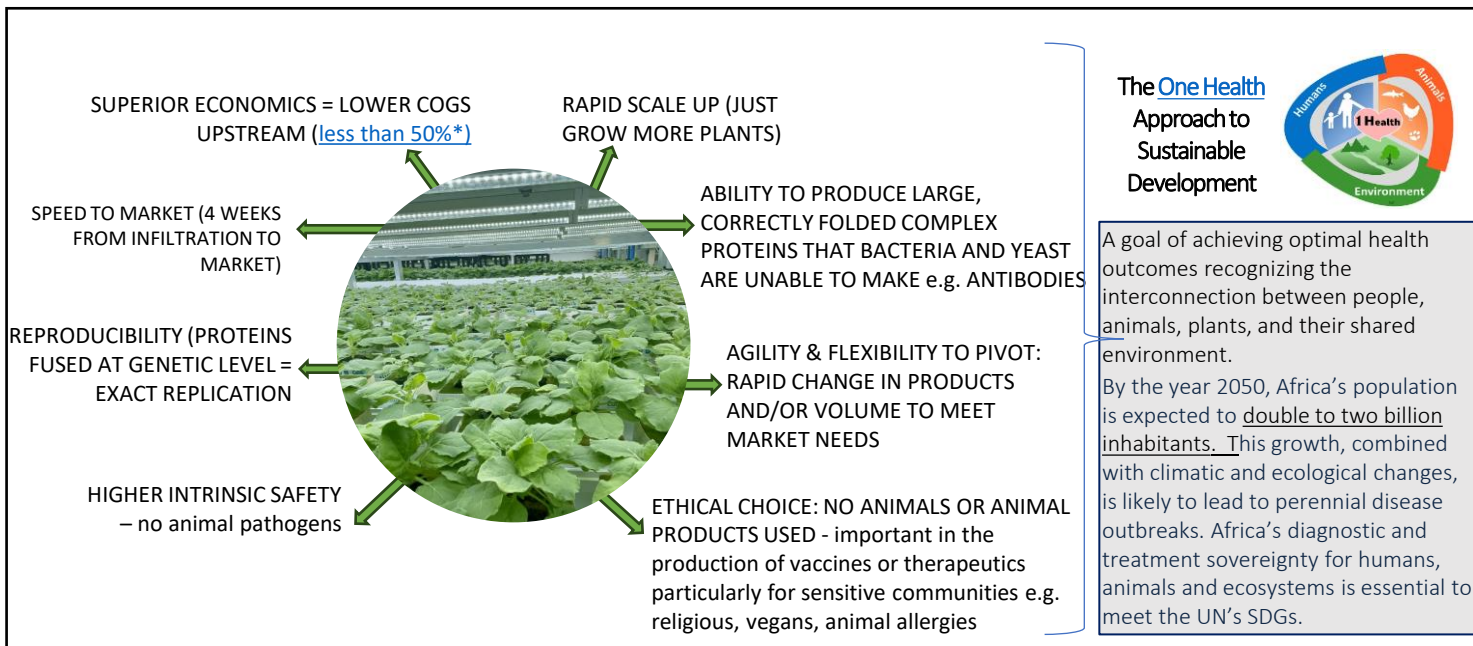
Supporting Africa's Manufacturing Independence in Health: Detect. Treat. Prevent.



"To strengthen global health security, we must support an agenda to develop a sustainable, local manufacturing industry on the African continent. This will increase access to life-saving health products and reduce reliance on other regions, especially when pandemics and other health crises strike".
(World Economic Forum)

- Cape Biologix is based in Cape Town and more recently has established Mauritius as the HQ to build a large volume end-to-end manufacturing and distribution facility.
- The company has developed and commercialized the plant-based transient expression technology capable of producing **complex molecular structures** and protein assemblies.
- The technology converts thousands of plants into **highly productive single-use, biodegradable bioreactors** producing high value recombinant proteins such as monoclonal antibodies, antigens, growth factors, enzymes and peptides.
- These are used in **multiple applications** for example in drug discovery research, as reagents in diagnostic devices for human, animal and plant diseases, as inflammatory markers, as growth factors used in lab meat production, in cosmetics and in industrial applications.
- The company's strategy is to develop cGMP manufacturing capability to produce **bio-betters, vaccines and therapeutic candidates** of which there are several in R&D.
- Plant-based expression offers a **proven, disruptive, accessible and affordable** manufacturing alternative combining rapid expression, scalability, flexibility and superior economics compared to traditional systems such as mammalian cell culture, bacteria, yeast or in eggs.
- It also offers an **animal-free ethical** alternative process.

Advantages of Plant-Based Expression in support of the One Health Vision



Human Development requires a Healthy Foundation

Human Health

- Top 5 Concerns: Acute Respiratory infections, HIV/AIDS, Malaria, TB
- Africa focus: MPOX, Dengue, CCHFV, WNV
- Pandemic Concern: Ebola, Marburg, Lassa Fever, Meningococcal meningitis (40 states at risk)
- Neglected and Tropical Diseases prevalent in Africa

Animal Health & Zoonosis

- H5N1: Avian Influenza: Highly contagious and zoonotic
- Bovine TB: A slow-growing bacteria in cattle. Can jump to humans and other mammals
- African Swine Fever: Highly contagious causing severe losses
- Anthrax: Causes sudden death. Affects wide range of animals
- Brucellosis: Causes still births, abortions & infertility

Plant Health & Agriculture

- Cassava: CSV can lead to yield losses of up to 80%
- Coconut: LY and Bud Rot cause severe losses.
- Banana: BXW - if left uncontrolled within 10 years, Africa's production could decrease by 55%
- Both endemic and emerging plant diseases are spreading and require new tools for detection and surveillance monitoring

Group Structure



Cape Town

- Cape Bio Pharms (Pty) Ltd, commenced operations in 2018 as a spin-off from the University of Cape Town
- Total Grant and Investment equity raised to date: \$11,3m
- Cape Biologix (Cape Town) is the South African arm focused on R&D of novel proteins, innovation, process and yield optimization, as well as Custom Protein Services.
- Our Staff of 24 has extensive experience in plant-based expression and strong R&D expertise for new product development, experienced Quality Assurance team under ISO 13485 certification, upstream and downstream teams supported by good systems, processes and driven by our strategic goals.
- Our hydroponic grow rooms have a 25,000-plant growth capacity under environmental controls
- The facility includes fully equipped bacterial preparation, plant infiltration and plant incubation laboratories with separate downstream extraction and purification labs.
- Capacity – 20,000mg* of protein per month (*Yield dependant)



Belinda Shaw: Founder | Interim CEO
 Founded Cape Bio Pharms in 2018.
 CEO from 2018 – July 2022. Re-appointed April 2024



Lynn Scheel: CFO | MD of Cape Biologix Ltd
 Certified Professional Accountant and Certified Director
 Appointed Financial Director April 2022



Mauritius

- Cape Biologix Holdings Limited was registered in 2023 as the location for the company's large volume manufacturing facility, motivated by its economic and political stability, ease of doing business, attractive government incentives and commitment towards building a thriving biotech ecosystem.
- Mauritius is regarded as a well positioned springboard to reach key regional and international markets. Discussions with both the government and property developers for suitable locations, deal structures and financing options are at an advanced stage.
- The Mauritius facility aims to achieve our strategic vision of end-to-end manufacturing capability, which aligns with all local and many international agencies and government initiatives focused on the health sector.

2024 – 2025:

Build, validate and commission the diagnostic test kit (RDT) assembly plant. Commence assembly of HIV 4th Generation rapid diagnostic kits for Professional and Commercial markets.

2026 – 2027

Expand diagnostic pipeline developed in Cape town for assembly and distribution in Mauritius. Expand facility to develop plant grow-rooms, upstream and downstream processing labs, lateral flow formulation, diagnostic device manufacture and distribution. Secure ISO 13485 certification and WHO validation for labs. Achieve end-to-end capability by 2028

2028 - 2033

Secure Phase 1/2 approval for therapeutic/vaccine candidates. Secure commercial partners. Expand facility for cGMP-grade manufacture. Secure WHO and cGMP accreditation. Commence production of therapeutic and vaccine candidates.