

Accelerating Sustainable Regional Vaccine Manufacturing

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Making sure it's possible



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



The Decadal Plan

The Decadal Plan is the implementation plan for the 2019 White Paper on Science, Technology and Innovation (STI)

Vision of the White Paper: Science, technology and innovation enabling sustainable and inclusive development in a changing world

The Decadal Plan theme is:
“deepening knowledge economy for enhanced socio-economic impact”

The Decadal Plan

Climate Change

Future-proofing
education & skills

Reindustrialising the
modern economy

Future of Society

Grand Challenges

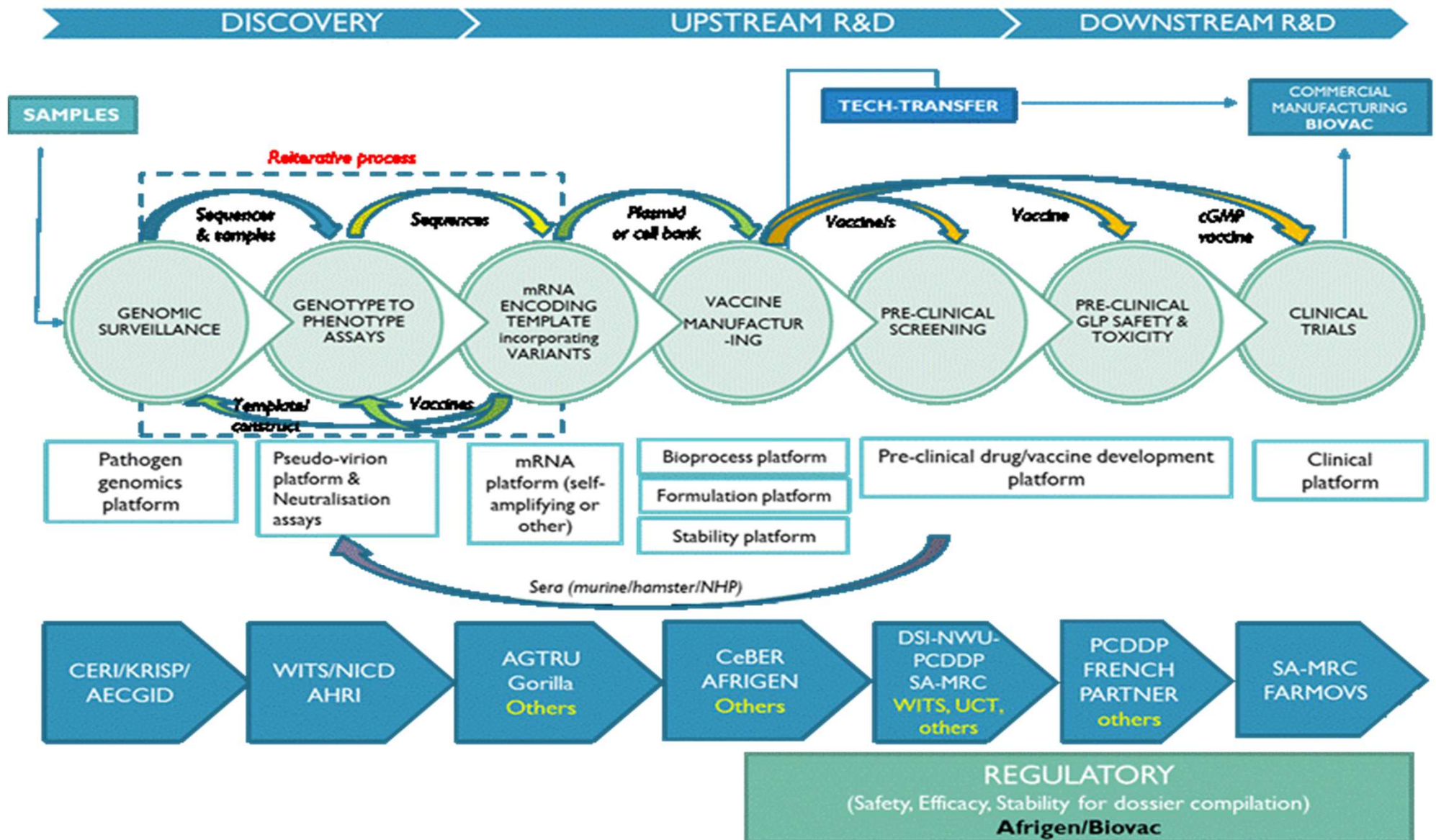
STI Priorities

Energy
Innovation

Health
Innovation

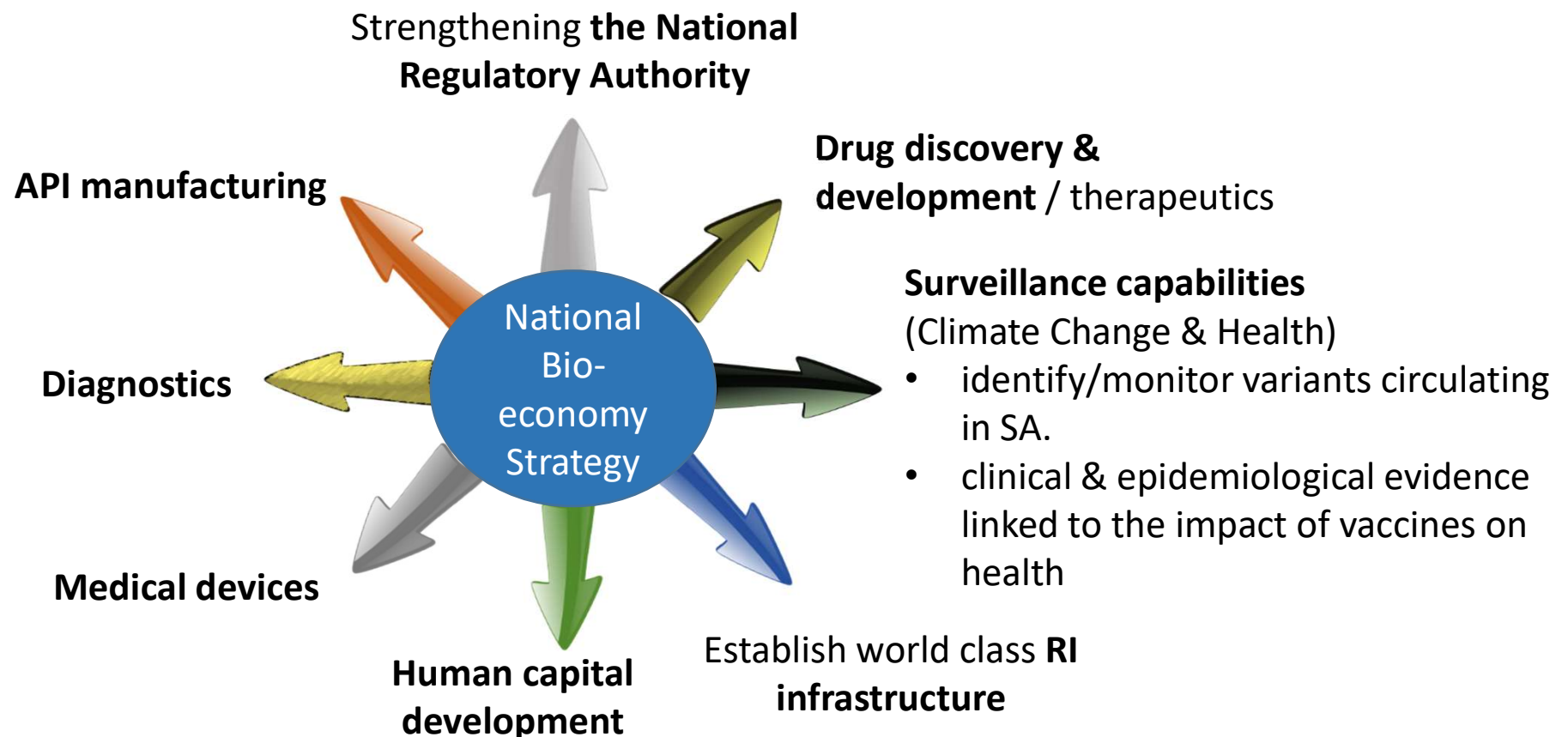
Building infrastructure & expertise

Building innovation capacity & develop pipeline of homegrown products.

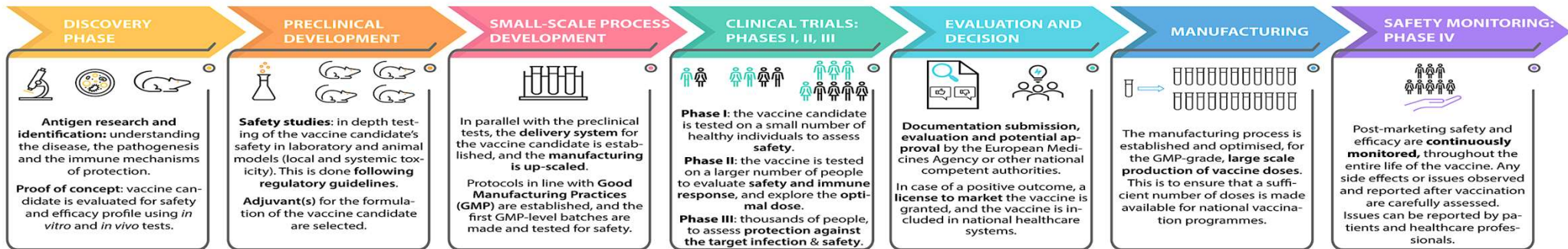


Capabilities needed for a vibrant vaccine manufacturing capability

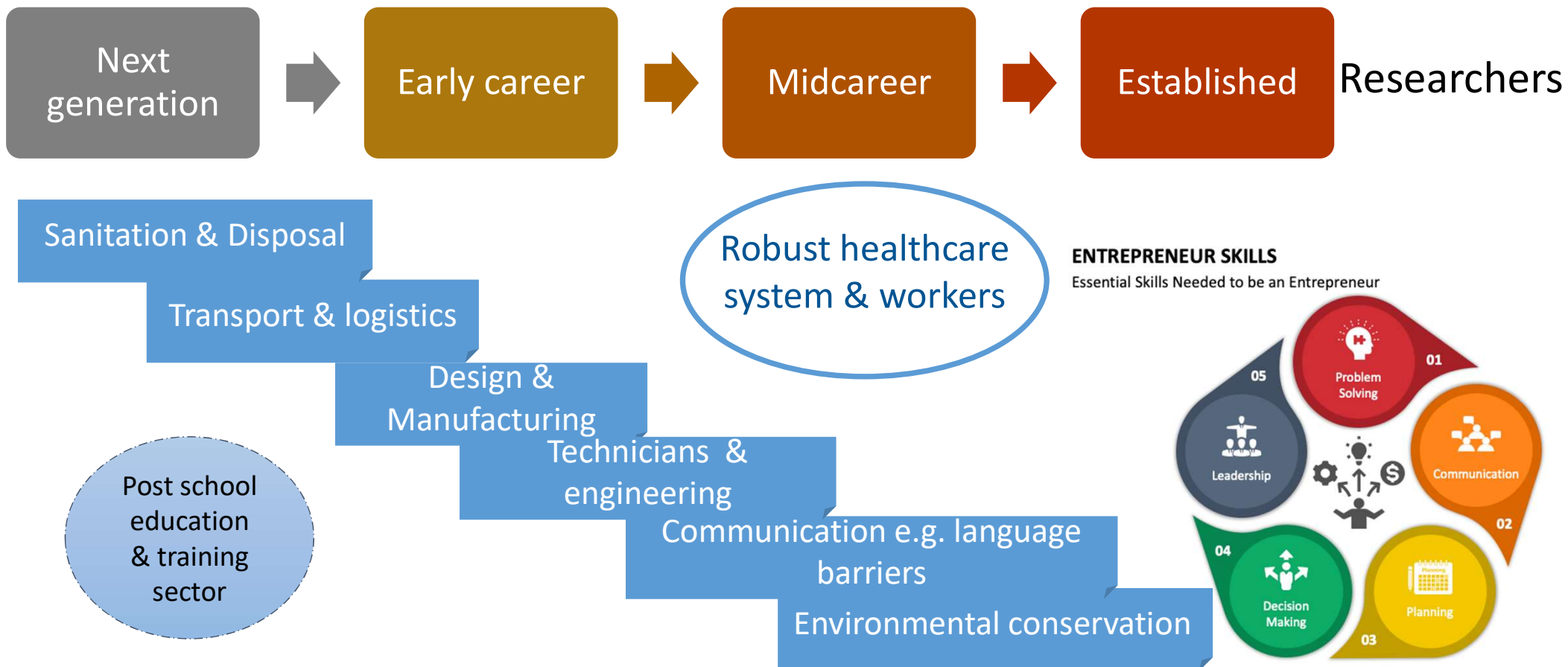
Support and strengthen the country's local **research, development and innovation capabilities to manufacture** active pharmaceutical **ingredients**, vaccines, biopharmaceuticals, diagnostics and medical devices to address the disease burden while ensuring security of supply.



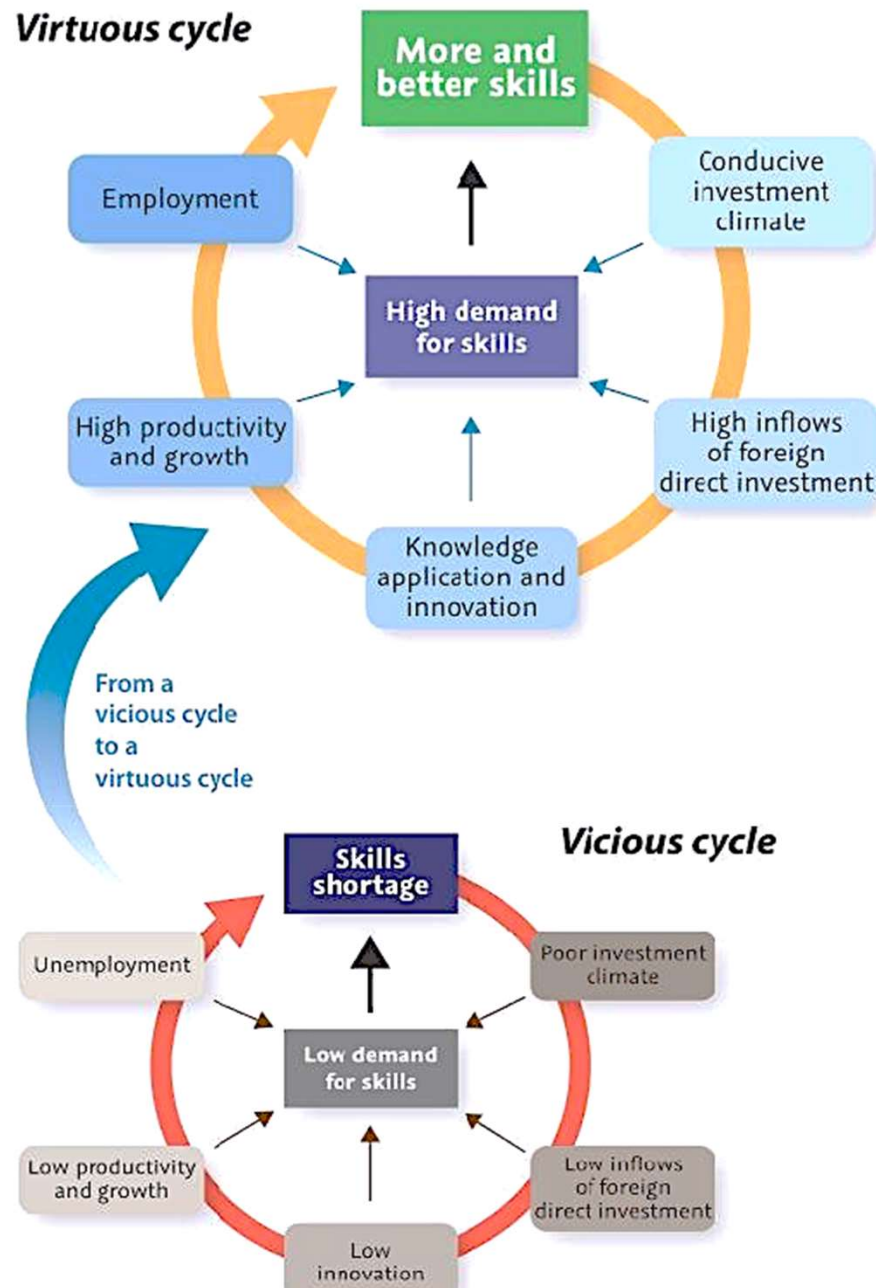
Vaccine development pipeline



Building innovation capacity & human capital pipeline for domestic vaccine manufacturing



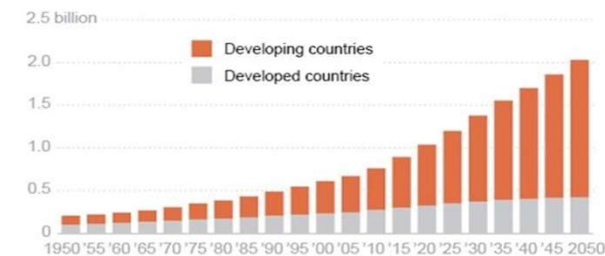
Transformation: Diversity & Inclusion



World not ready for aging population

The number of people in the world aged 60 and older is expected to grow past 2 billion by the year 2050.

Total population of people aged 60 and older

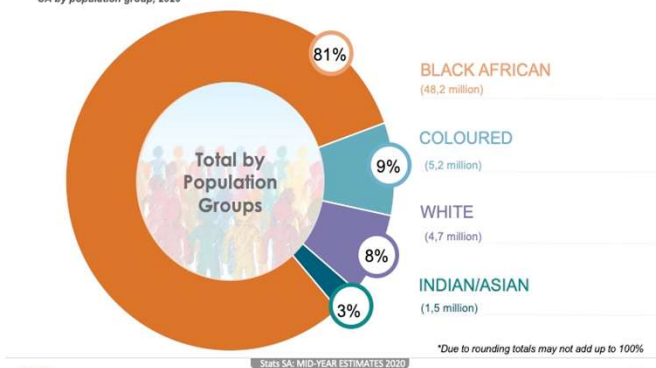


SOURCE: United Nations Population Fund

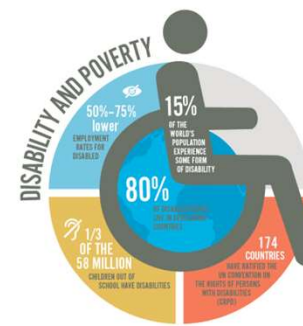
AP

The **black African** population is in the majority and constitutes approximately 81% of the total SA population

SA by population group, 2020



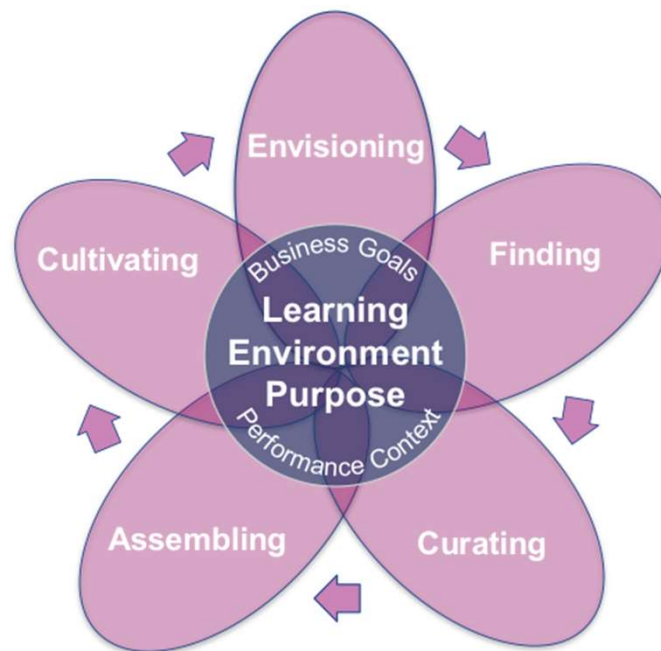
Stats SA: MID-YEAR ESTIMATES 2020



5 GENDER EQUALITY



Key Success Factors



- Microbiologists and chemical analysts
- Quality assurance/release/production/warehouse pharmacists
- Quality assurance/control and production managers
- Maintenance artisans/technicians/engineers/industrial engineers
- Production/Quality control team leaders
- Technical manufacturers
- Procurement category leads
- Controllers/product handlers (cold storage)
- Technical manufacturing
- Fill and finish capabilities'

- Core expert team
- Third party collaborators: skills and knowledge transfer
- On the job training
- Centres of Excellence
- Learning academy
- Service and maintenance contracts with suppliers of equipment
- Training initiatives in partnership with collaborators including suppliers
- Exposure and protocols for regulatory inspections
- Access to information and expertise

- Scientific Validity
- Collaborative partnerships
- Social justice
- Equal moral respect for participants & communities
- Voluntary participation
- Independent review
- Confidentiality
- Anonymity
- Informed consent
- Respect
- Beneficence
- Research merit & integrity
- Non-maleficence

Sustaining a viable domestic vaccine manufacturing capability

1

Strengthen policy coordination & build incentives for developing local, regional & continental capacity & capabilities for vaccines manufacturing

2

Develop, train, skill, re-skill & upskill human capital across the PSET sector

3

Strengthen the enabling environment: for facilitating access to funding, tech transfer & mutually-beneficial partnerships (equitable sharing of IP & downstream dividends)

4

Invest in the establishment & maintenance of large scale & feeder research infrastructure platforms with a focus on geographical spread

5

Ensuring security of equitable supply, access & distribution locally, regionally & continentally



*...locally manufacture
60% of the vaccine doses
required on the continent
by 2040...*





THANK YOU

Siyathokoza

Re a leboga

Dankie

Ro livhuwa

Thank you

Siyabonga

Enkosi

Ha khensa