



**Stellenbosch
Business School**
STELLENBOSCH UNIVERSITY

Institute for
Futures Research
May 2023

Heads up!

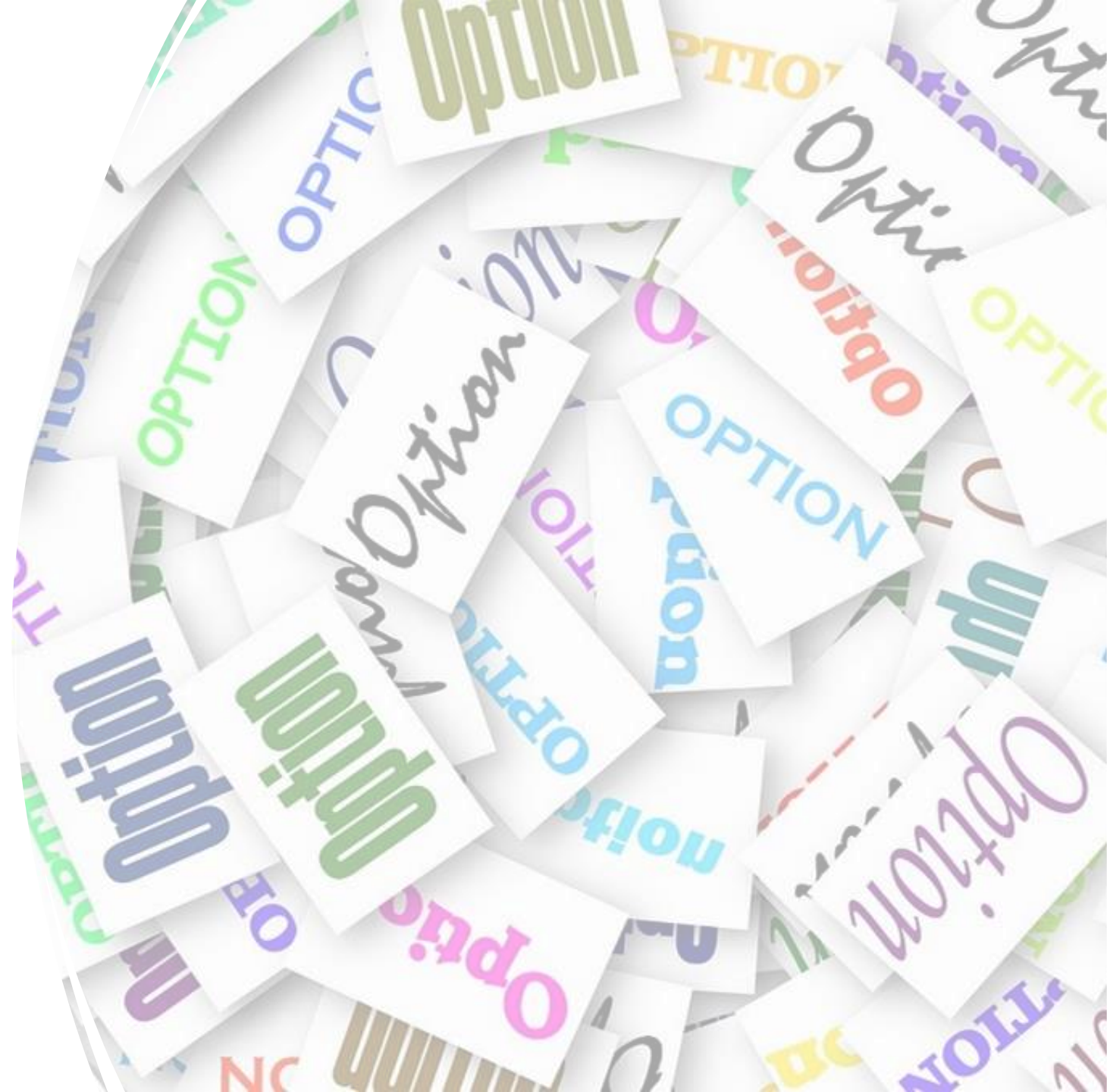
Shifts and trends that deserve attention




Definition of Futures Studies

Futures Studies develop alternative futures, with the aim of informing current decisions, hoping to influence the future through highlighting the consequences of different options.

(Clardy, 2021)





Stellenbosch Business School

Acquire the strategic foresight to help create a better future

Postgraduate Diploma Futures Studies



Stellenbosch Business School

Learn how to make strategic long-term decisions to create a desired future

MPhil Futures Studies



Stellenbosch Business School

Become a specialist in strategic foresight through doctoral research

PhD Futures Studies

Stellenbosch Business School

Help to strengthen your organisation's resilience in a rapidly changing environment

Postgraduate Diploma Futures Studies stream: Managing New Technology



INSTITUTE FOR FUTURES RESEARCH

- Subscription service
- Presentations
- Partners services
- Research



**Stellenbosch
Business School**
STELLENBOSCH UNIVERSITY

Global shifts





The big shifts

- The states of states.
- **Political powers** – nature and control of the nations of the world
- An **economic power shift** to the East
- **Weaponised interdependence**

exploiting control over critical nodes in the global economy to exert geopolitical leverage over competitors

MONEY IS MUTATING

The concept of money and what it should be used for, is changing as a result of a confluence of trends. People are considering other forms of currency for transacting (think crypto and barter). At the same time, the expectations of people about what should be free and what they are willing to pay for is changing rapidly.



FREE

GOING GREENER IS GETTING LESS NEGOTIABLE



Should we move from focusing on a **sustainable** economy to focusing on a **restorative** economy?

*Improving the environment,
with social well-being as a boundary condition*



**Stellenbosch
Business School**
STELLENBOSCH UNIVERSITY

South African shifts



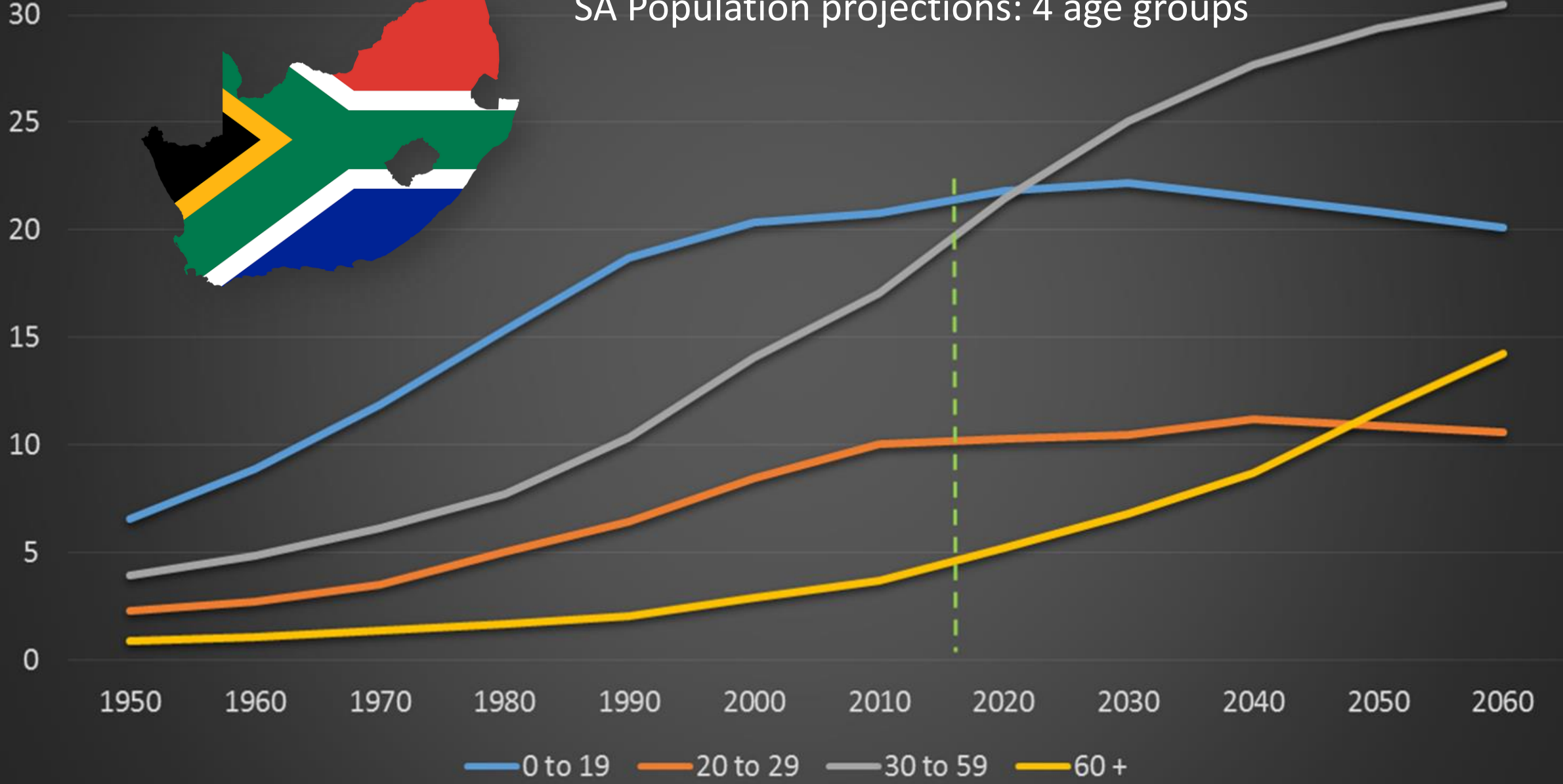


**Stellenbosch
Business School**
STELLENBOSCH UNIVERSITY

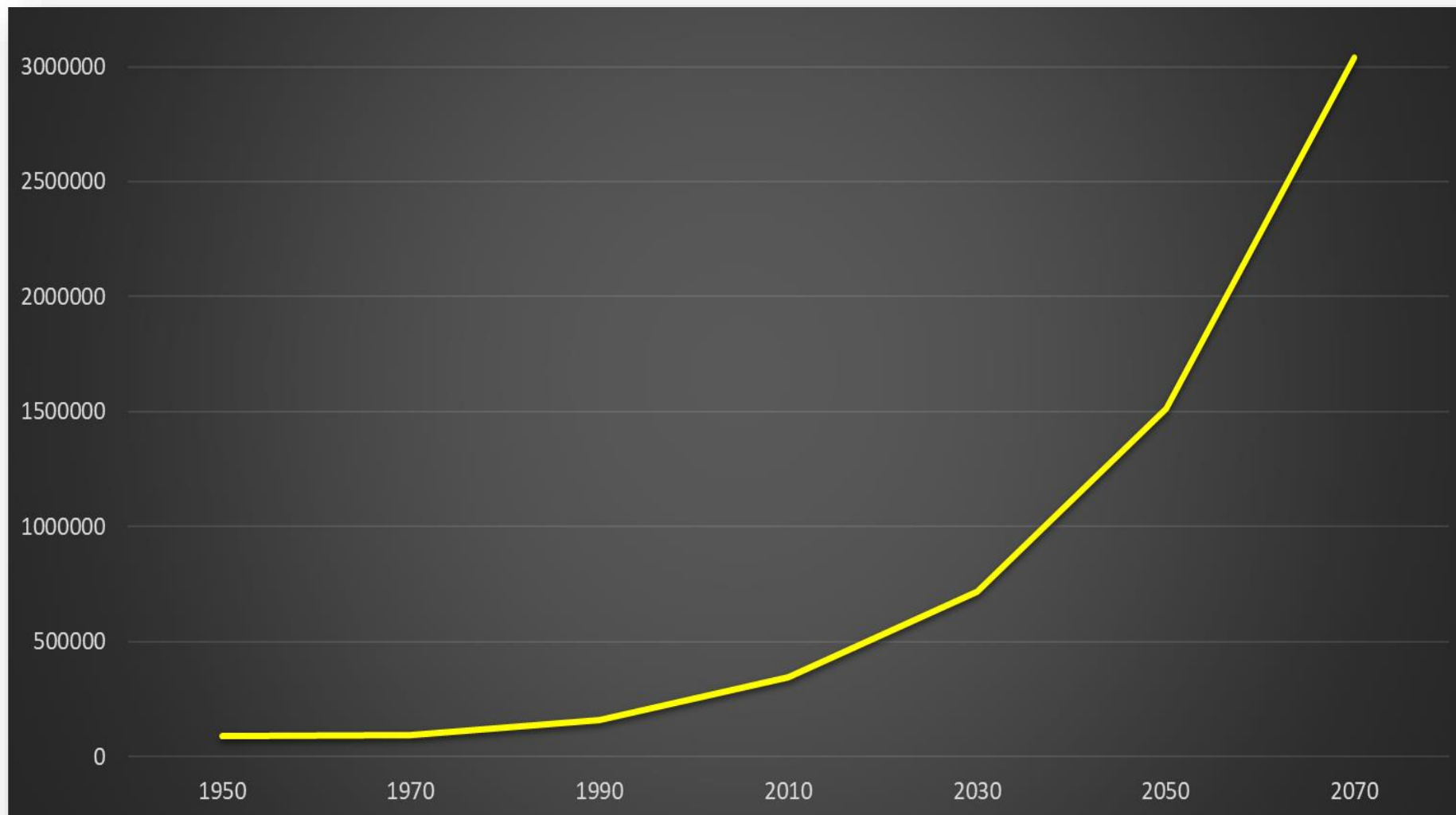
South African shifts: Population growth



SA Population projections: 4 age groups



Number of people aged 80+ in South Africa





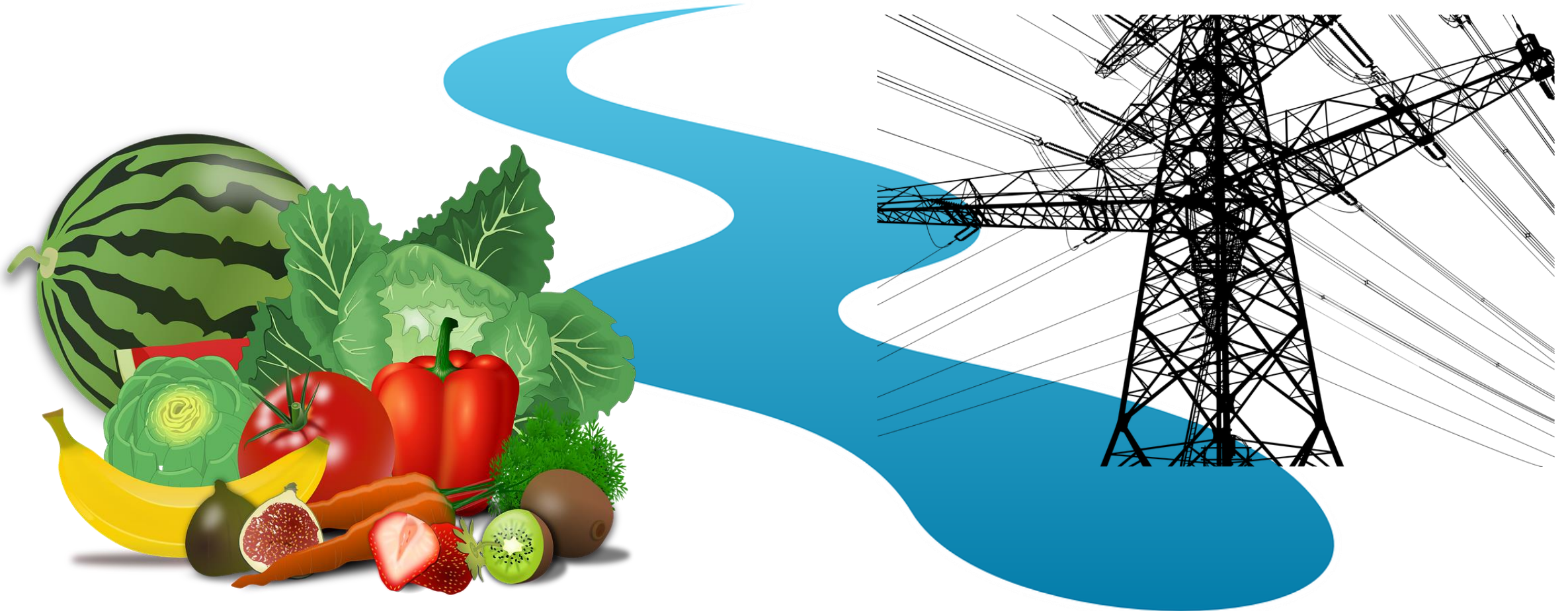
Stellenbosch
Business School
STELLENBOSCH UNIVERSITY

South African shifts: Water???



FINDING THE BALANCE

food-water-energy nexus

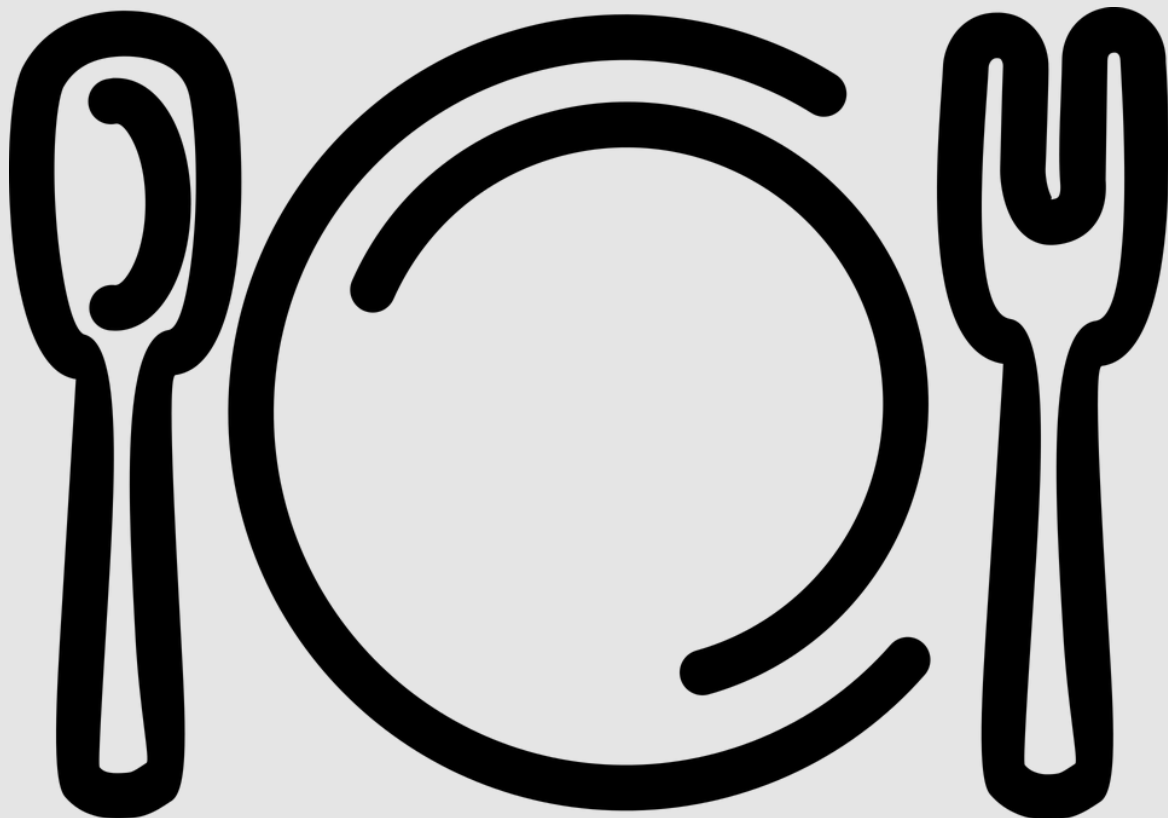




Coal mining and power generation: 5% of total water use in South Africa

Upper Olifants catchment: 37% of water used for power generation

Food access of households



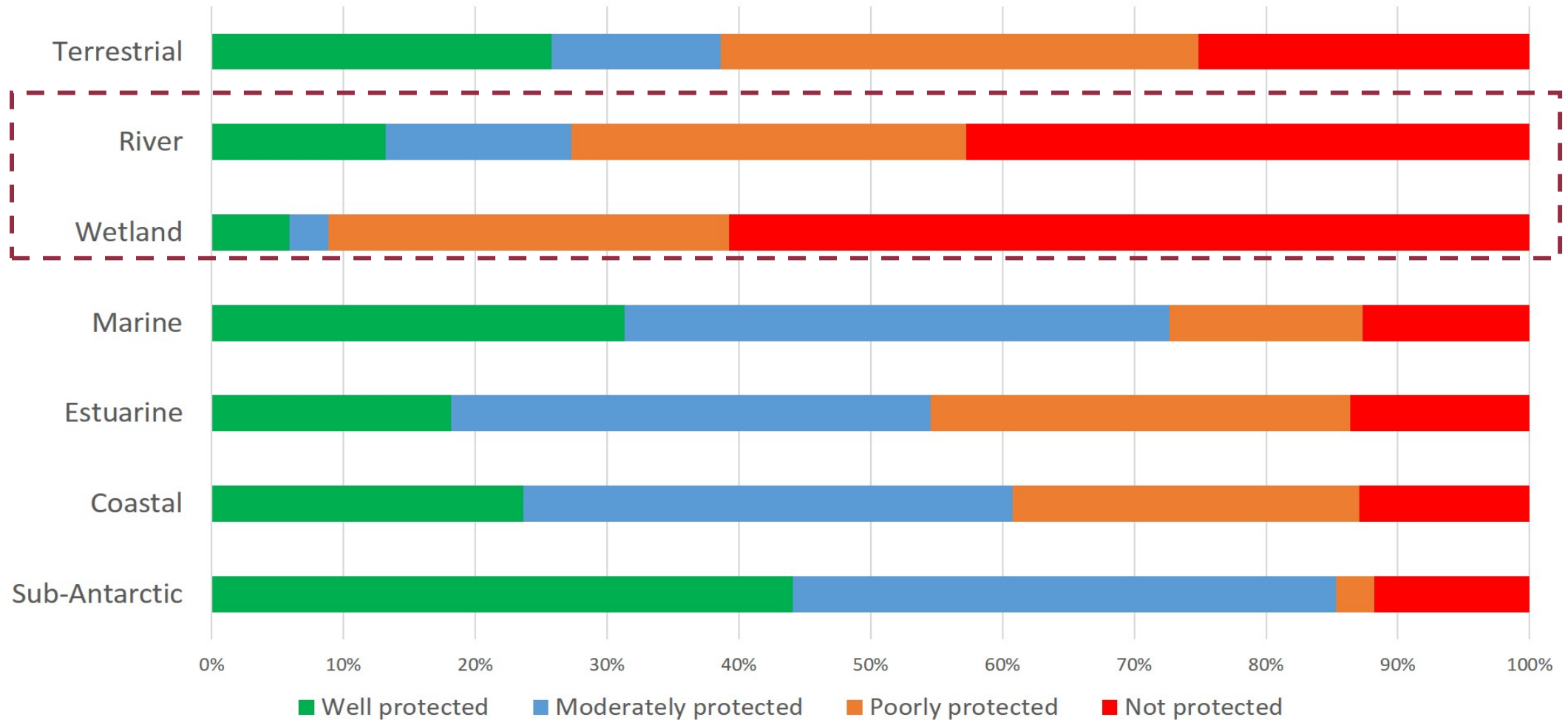
Inadequate

SA: 14.6%

Severely
inadequate

SA: 6.4%

ECOSYSTEM PROTECTION LEVELS IN SOUTH AFRICA



Source: Compiled from the National Biodiversity Assessment, October 2019

Waste water management in SA

Systems in a critical state (Score of 31% or less)

- Municipal: 334/850 *(248 in 2013)*
- Department of public works: 102/115
- Private: 1/30





Stellenbosch
Business School
STELLENBOSCH UNIVERSITY

South African shifts: Compounding collective trauma



CHALLENGES REMAIN

5 GENDER EQUALITY



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



17 PARTNERSHIPS FOR THE GOALS



SIGNIFICANT CHALLENGES REMAIN

4 QUALITY EDUCATION



6 CLEAN WATER AND SANITATION



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



MAJOR CHALLENGES REMAIN

1 NO POVERTY



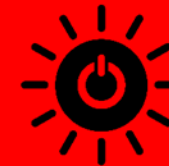
2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



10 REDUCED INEQUALITIES



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE, JUSTICE AND STRONG INSTITUTIONS





Stellenbosch
Business School
STELLENBOSCH UNIVERSITY

But ...

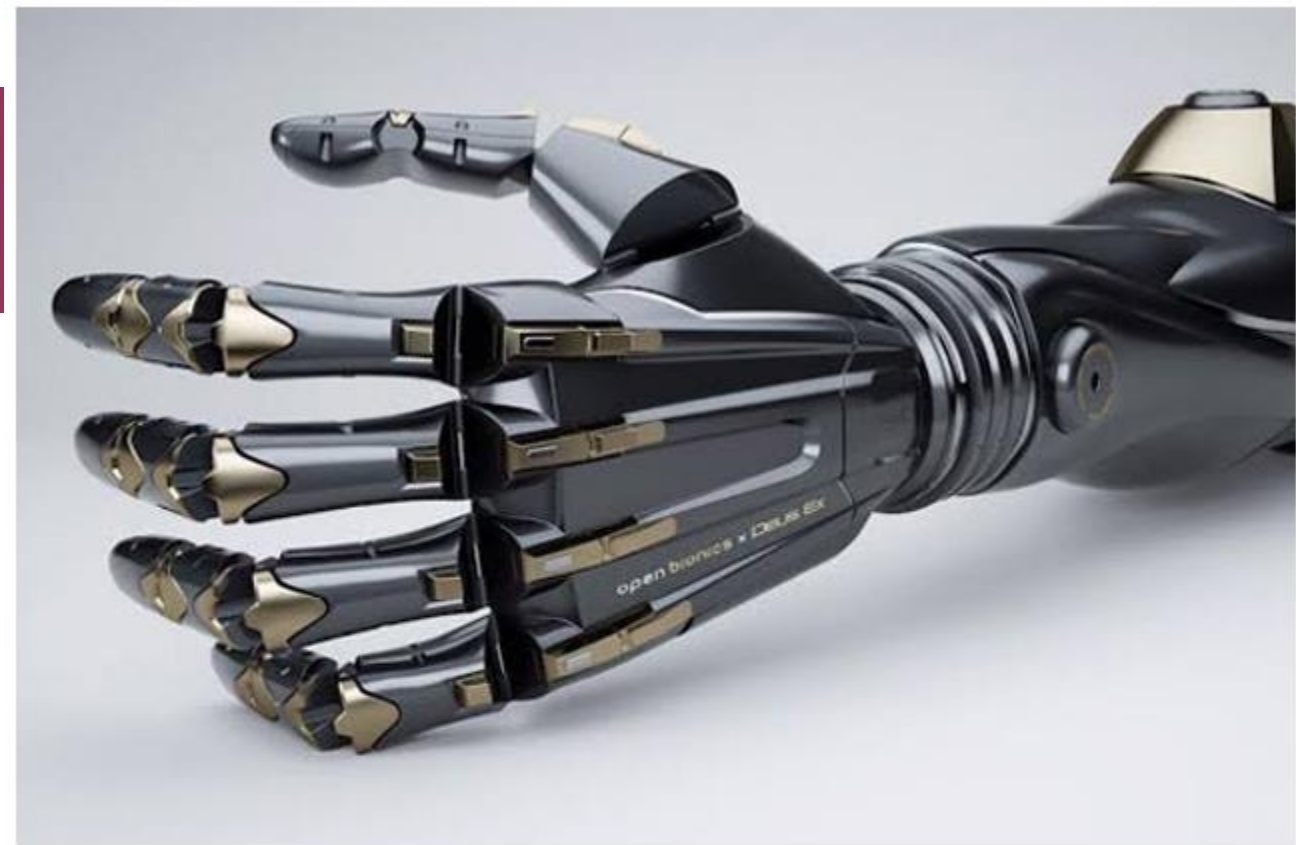
we have smart people



WE HAVE SMART PEOPLE

Three young South Africans scoop prizes at International Science Fair

May 27, 2019



Top marks to Wits University postgraduates. They have engineered a bionic hand which can interpret brainwaves from amputees, in the process making mobility more accessible to more than a million amputees throughout SA.

Biomedical engineers at Wits have researched how brainwaves can be used to control a robotic prosthetic hand. The impact is far-reaching, as such a Brain Computer Interface (BCI) will enable amputees and people with motor impairments to regain some hand mobility.

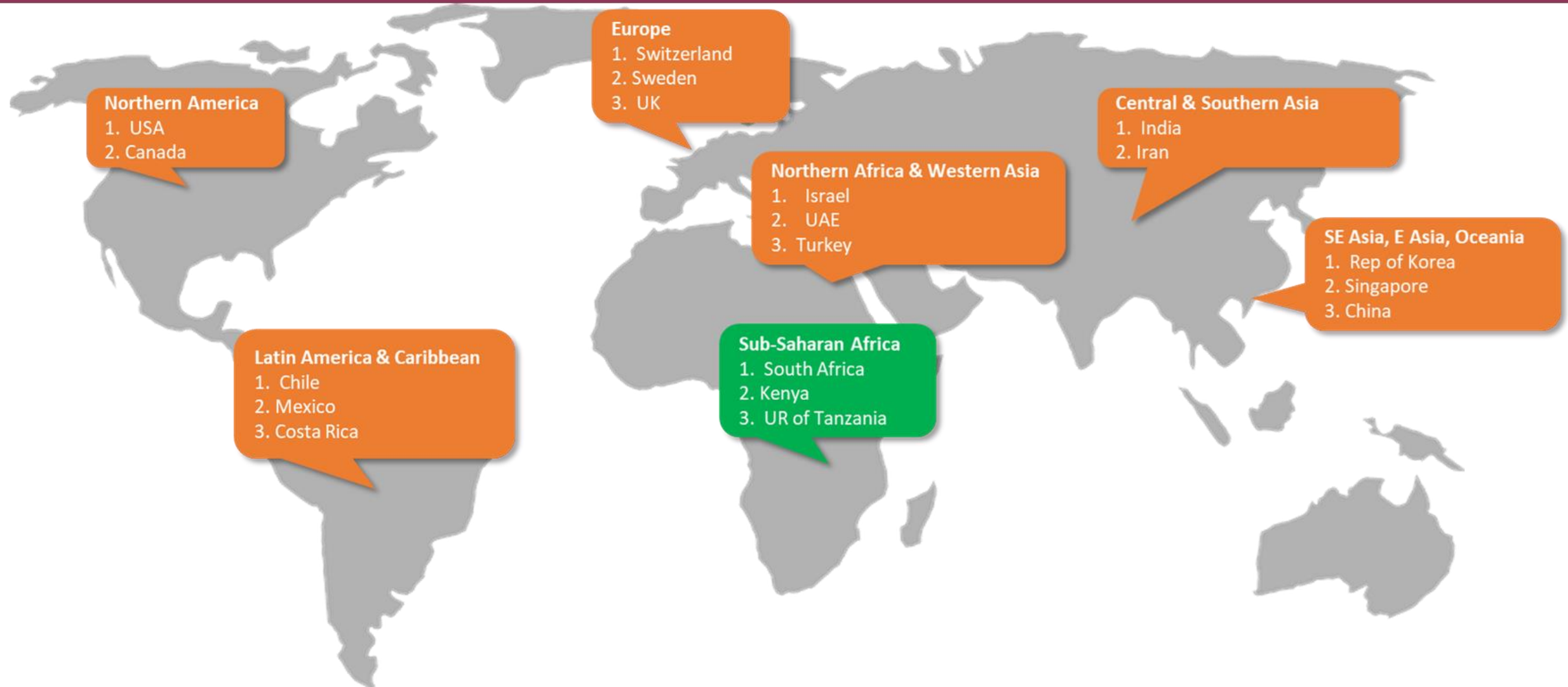
WE HAVE SMART PEOPLE



Munch Bowls has given new meaning to “so hungry you could eat your plate” with their edible takeaway bowls which have grabbed the world’s attention.

Fin24 reports that the Cape Town-based company Munch Bowls have netted funding from the organisers of the 2020 World Expo which is set to be held in Dubai.

GLOBAL LEADERS IN INNOVATION



Source: Global Innovation Index 2021



**Stellenbosch
Business School**
STELLENBOSCH UNIVERSITY

Scenario work



Scenario definition

STORY

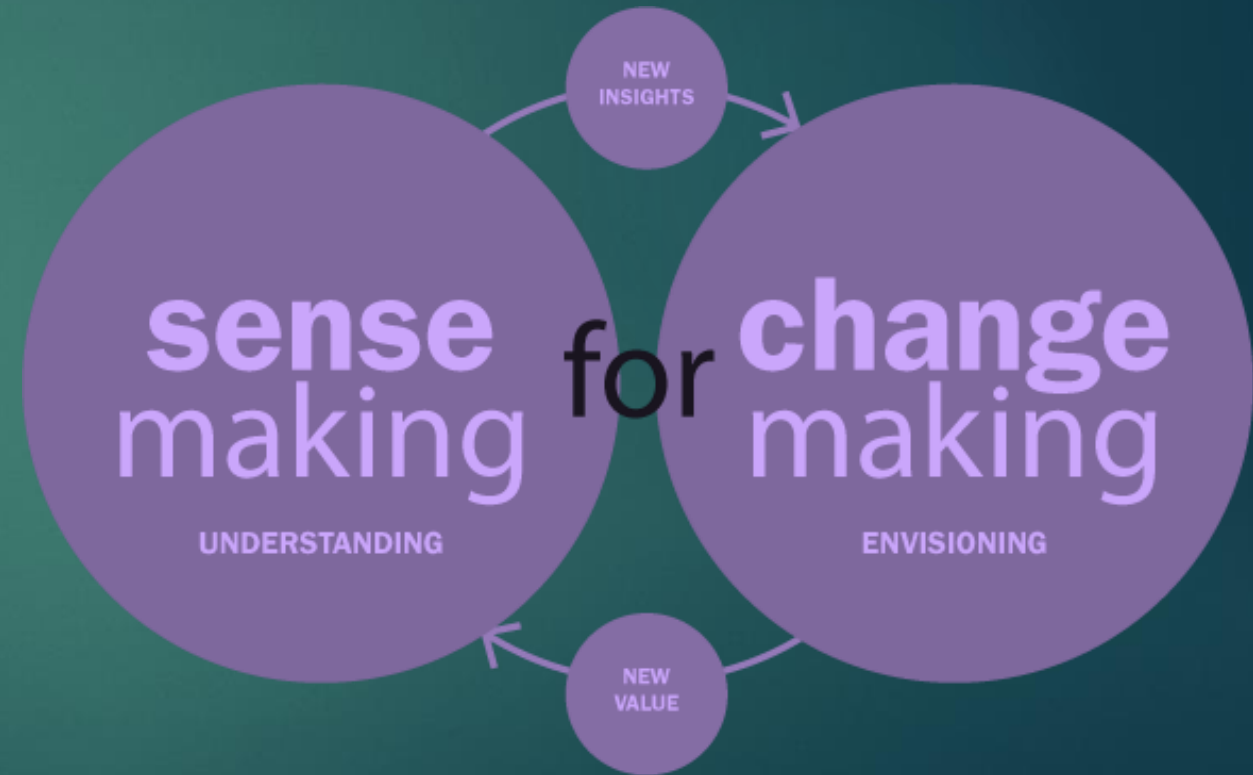
STORY

STORY

A scenario is a story about the future, a sequence of events that unfold over time and that are coherent, internally consistent, and plausible.

Test

Enable a journey from sensing to sense-making to change-making



Re-framing and re-imagining in a safe space
Conversations are key



**Stellenbosch
Business School**
STELLENBOSCH UNIVERSITY

Examples of recent IFR work



The issue

ALTERNATIVE FUTURES OF AGRICULTURAL EMPLOYMENT IN SOUTH AFRICA IN 2035



Futures of Agricultural Employment in South Africa 2035

Key uncertainties

Commercialisation of subsistence farming

Global protectionism

State capacity

Composition and structure of the market

Attractiveness of agri-employment

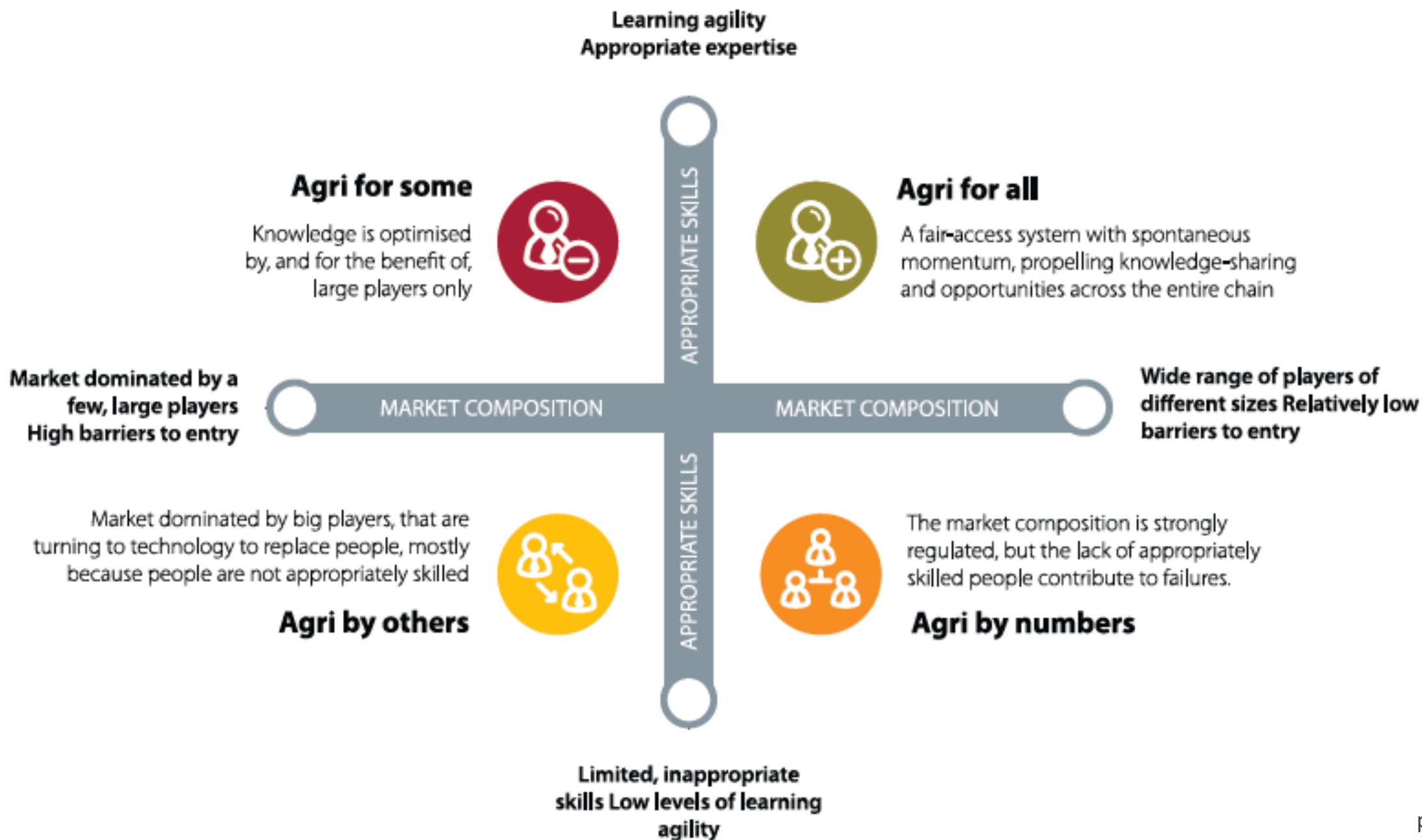
Tenure of employment

Social stability in rural areas

Appropriate skills and learning agility

Proper infrastructure/logistics

Managed land expropriation



Mini scenarios

How aquaculture became
a sector leader in SA
agriculture

Land philosophy – how efficient
usage finally trumped the
political agenda

Filling the missing middle

Urban farmers
taking the lead

How agri became cool



TRANSLINK
CORPORATE FINANCE

In Partnership with



TOMORROW : 2050

Alternative Futures for **Food and Beverage**





Stellenbosch
Business School
STELLENBOSCH UNIVERSITY

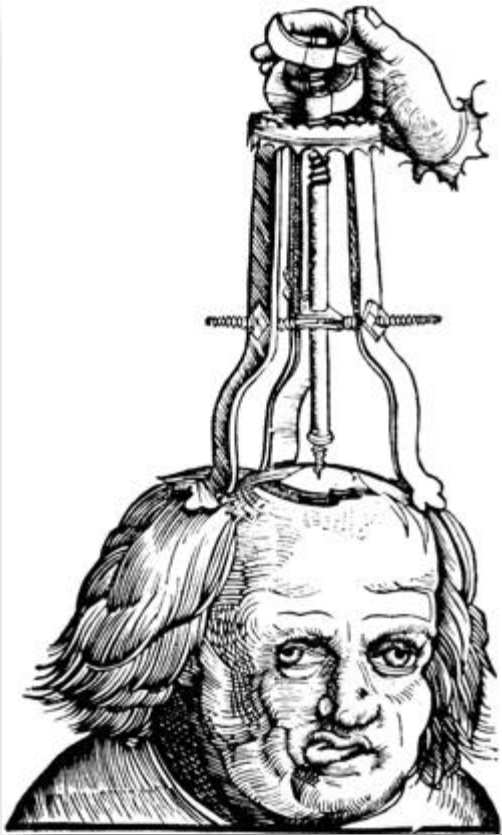
2123

How will we
disgust our descendants?



COCAINE

For hay fever, indigestion, fatigue, eye pain, hemorrhoids



For epilepsy, migraines



1896, Australia

Rheumatism sufferers sought relief inside a whale

<https://www.bbc.com/news/world-asia-pacific-26807485>



1901

Am. J. Ph.] 7 [December, 1901

BAYER Pharmaceutical Products
HEROIN—HYDROCHLORIDE

is pre-eminently adapted for the manufacture of cough elixirs, cough balsams, cough drops, cough lozenges, and cough medicines of any kind. Price in 1 oz. packages, \$4.85 per ounce; less in larger quantities. The efficient dose being very small (1-48 to 1-24 gr.), it is

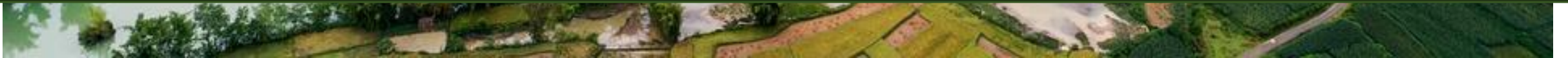
The Cheapest Specific for the Relief of Coughs
(In bronchitis, phthisis, whooping cough, etc., etc.)

WRITE FOR LITERATURE TO
FARBENFABRIKEN OF ELBERFELD COMPANY
SELLING AGENTS
P. O. Box 2100 40 Stone Street, NEW YORK

Cough syrup
for kids



No legal rights for nature (e.g. rivers, ecosystems)



```
language_attributes(); ?>
<meta charset="utf-8" />
<meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1" />
<title>?>
<link rel="profile" href="http://gmpg.org/xfn/11" />
<link rel="pingback" href="http://??" />
<?php fruitful_get_favicon(); ?>
<?php wp_head(); ?>
</head>
<body <?php body_class();?>
  <div id="page-header" class="hfeed site">
    <?php
      $theme_options = fruitful_get_theme_options();
      $logo_pos = $menu_pos = "";
      $logo_pos = esc_attr($theme_options['logo_position']);
      $menu_pos = esc_attr($theme_options['menu_position']);
    </?php
  </div>

```

Technology was seen as a panacea for humanity's problems

```
32 $logo_pos = $theme_options['logo_position'];
33 $menu_pos = $theme_options['menu_position'];
34 $responsive_menu_type = $theme_options['responsive_menu_type'];
35 $responsive_menu_class = $theme_options['responsive_menu_class'];

```



Elderly care was institutionalised

Big cities had so many negative effects on humans
(waste, inefficiencies, pollution, etc)



A close-up photograph of a hand holding a pen, poised to write on a document. The word "ILLEGAL" is already written in large, bold, black capital letters on the paper. The hand is positioned in the upper right corner, and the pen is angled towards the center. The background is a plain, light-colored surface.

Profit from unethical business was considered success

People used resources to grow lawns rather than food





**Stellenbosch
Business School**
STELLENBOSCH UNIVERSITY

Concluding thoughts



WHEN THINKING ABOUT PLAUSIBLE FUTURES ...



**ZOOM OUT; GET A
WIDER PERSPECTIVE**

**ASK WHAT ELSE IS
GOING ON**



FOCUS ON HUMANS

**ASSESS SECOND
AND THIRD ORDER
CONSEQUENCES**





**Stellenbosch
Business School**
STELLENBOSCH UNIVERSITY

Thank you!

Doris Viljoen
doris@ifr.sun.ac.za

