



UNIVERSITEIT VAN PRETORIA
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ARUA Centre of Excellence Food Security

led by the University of Pretoria, South Africa in
collaboration with the University of Ghana, Legon
and the University of Nairobi

Prof Hettie Schönfeldt
Director

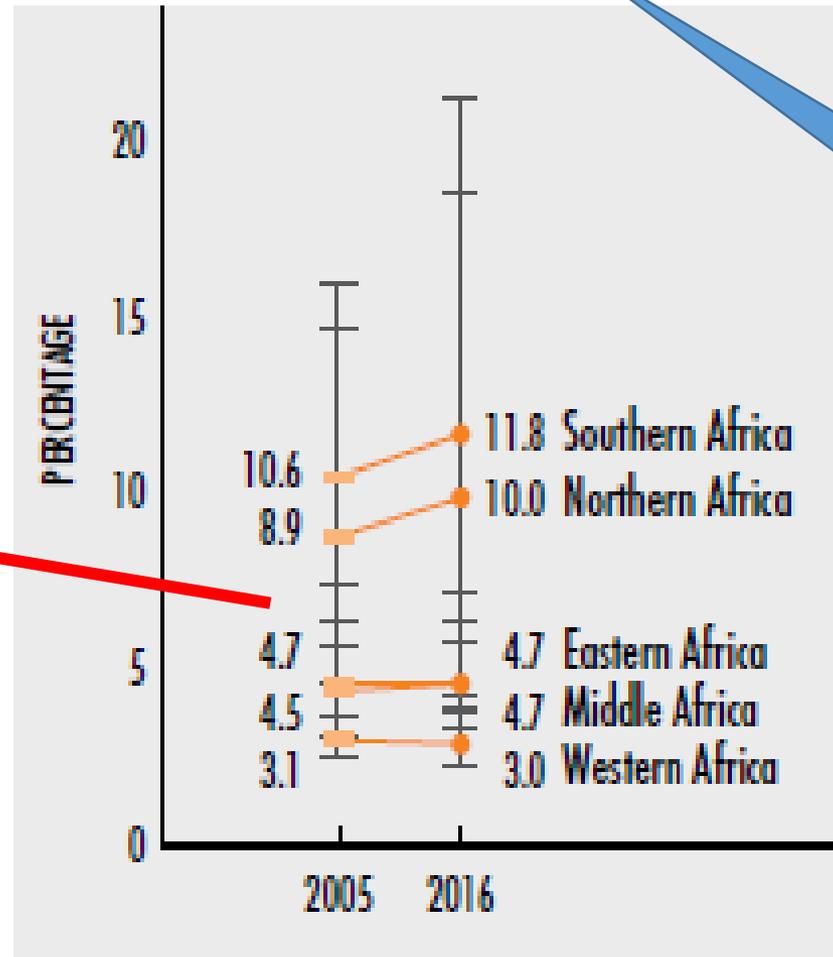


The prevalence of undernourishment in Africa 2000-2016

In Africa hunger kills more children than HIV/AIDS, malaria and TB combined

	2000	2005	2010	2011	2012	2013	2014	2015	2016 ¹
	Percentage								
WORLD	14.7	14.2	11.5	11.2	11.0	10.8	10.7	10.6	11.0
AFRICA	24.3	20.8	18.3	17.9	17.8	17.8	18.1	18.5	20.0
Northern Africa	6.8	6.3	5.1	4.8	8.5	8.4	8.3	8.3	8.3
Sub-Saharan Africa	28.1	23.7	20.6	20.2	20.0	20.0	20.4	20.8	22.7
Eastern Africa	39.3	34.3	30.9	30.2	30.6	30.6	30.9	31.1	33.9
Middle Africa	37.4	29.4	23.8	23.1	22.5	22.3	24.0	24.4	25.8
Southern Africa	7.1	6.4	6.7	6.3	6.2	6.2	6.5	6.6	8.0
Western Africa	15.1	12.0	10.0	9.9	9.9	9.8	9.8	10.4	11.5

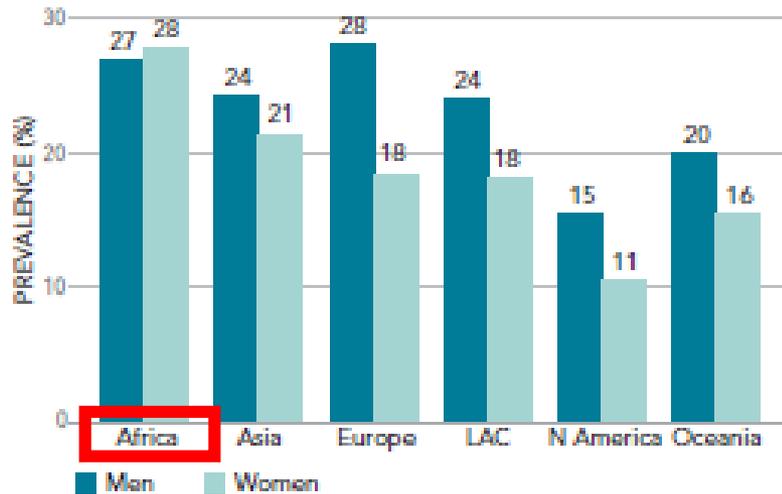
Overweight and obesity in children



Global 6%

Overweight and obesity is on the rise in virtually all regions of the world

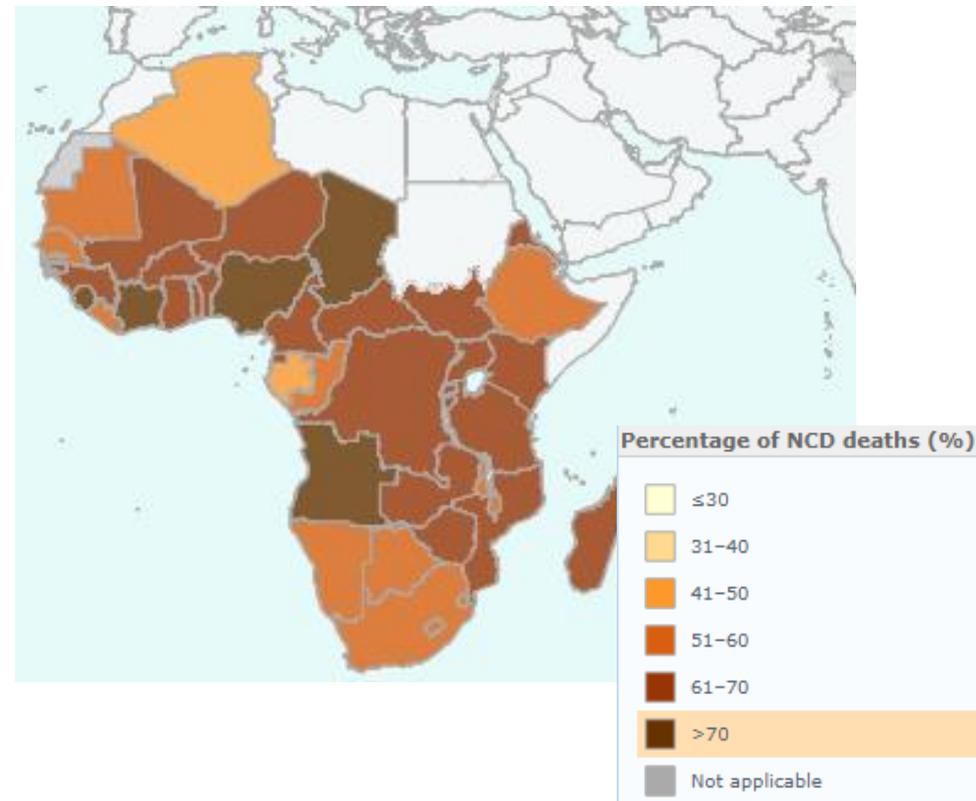
Hypertension / Raised Blood Pressure



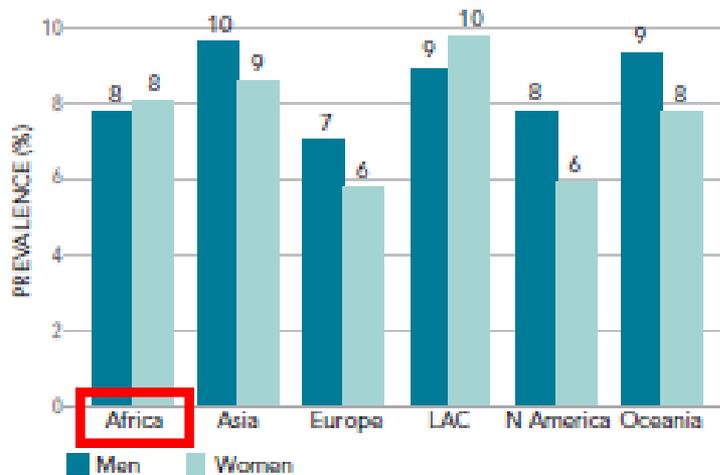
In sub-Saharan Africa, NCDs are projected to be the leading cause of death by 2030

POPULATION REFERENCE BUREAU, 2015

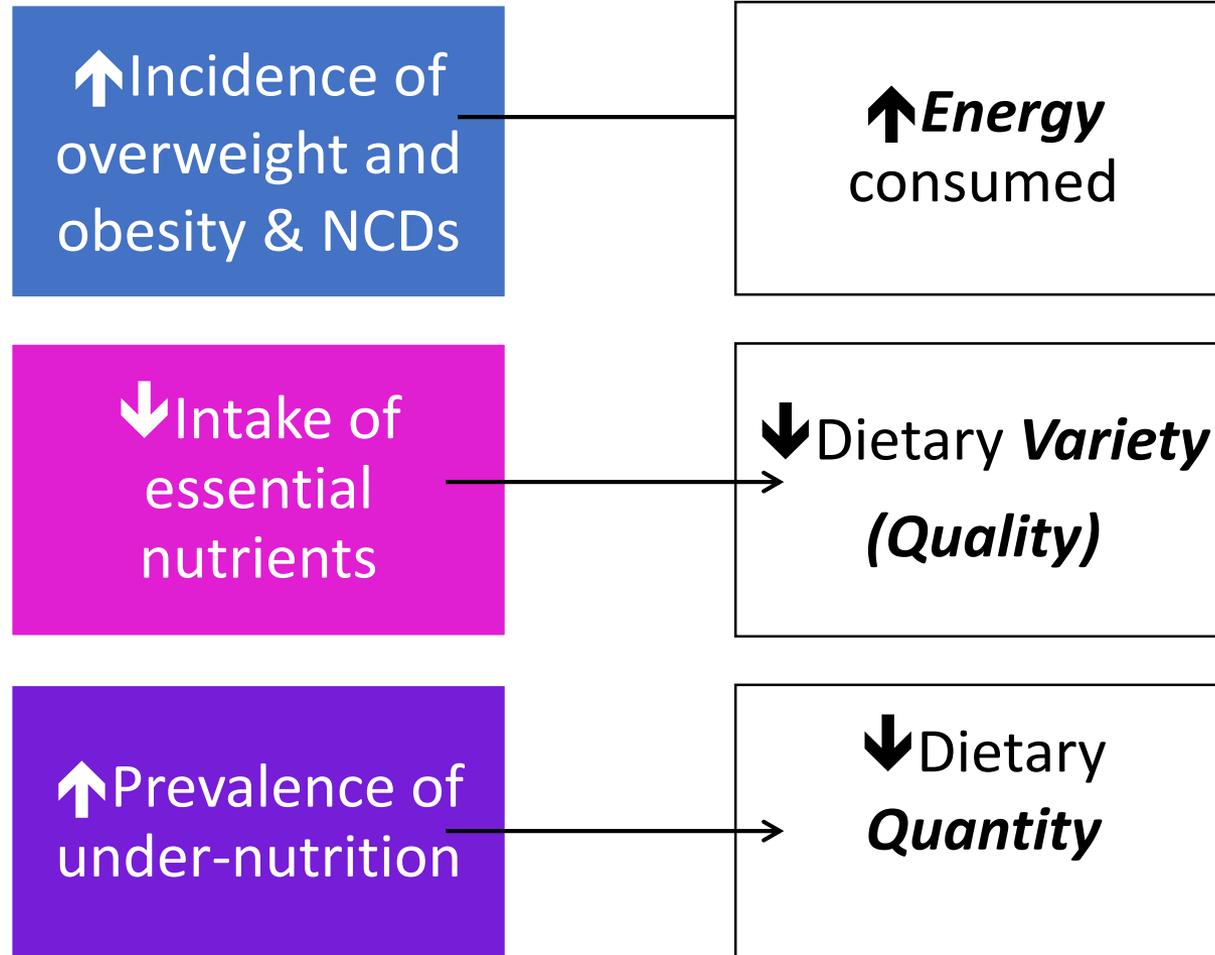
Percentage of NCD deaths



Diabetes / Raised Blood Glucose



Nutrition link to agriculture and human health / food security



Agriculture can provide food and secure incomes

Agriculture is:

- The single largest employer in the world
- Provide livelihoods for 40% of today's global population
- Largest source of income and jobs for poor rural households

Opportunity for African Impact

- Transforming Africa's agriculture requires a science system that produces both 'technical' and 'institutional' innovations
- Now is an opportune time for Africa to make its mark as a player in global science
- Investing in the agricultural sector can address not only hunger and malnutrition but also other challenges

Food and Nutrition plays a central position within:

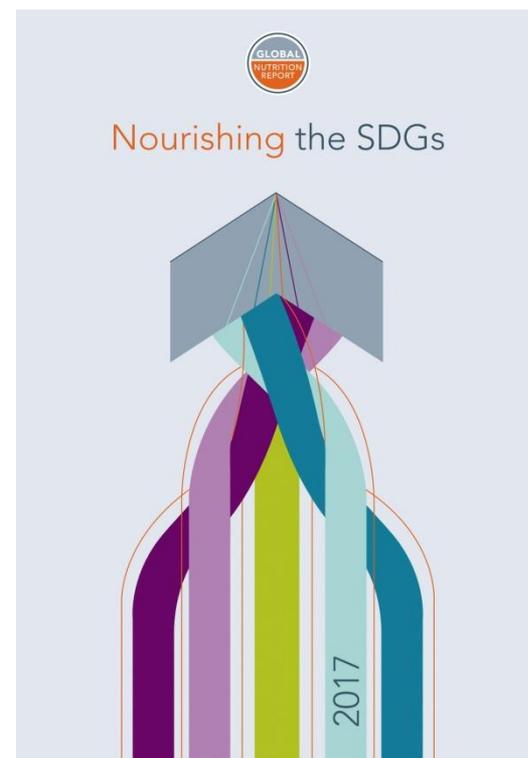
- ✓ the Sustainable Development Goals
- ✓ various other initiatives such as feed Africa, CAADAP, STISA

Global nutrition discussions

Future global focus (Rio+20): *Sustainable Development Goals (SDGs)*
17 Global Goals with 169 Targets

Analysis shows there are **five core areas** that run through the SDGs which **nutrition** can contribute to, and in turn, benefit from:

- sustainable food production
- strong systems of infrastructure
- health systems
- equity and inclusion
- peace and stability



The economics is
also convincing

\$

back for every \$ invested
in nutrition programmes

30 year
compound
rate of
interest of
10%

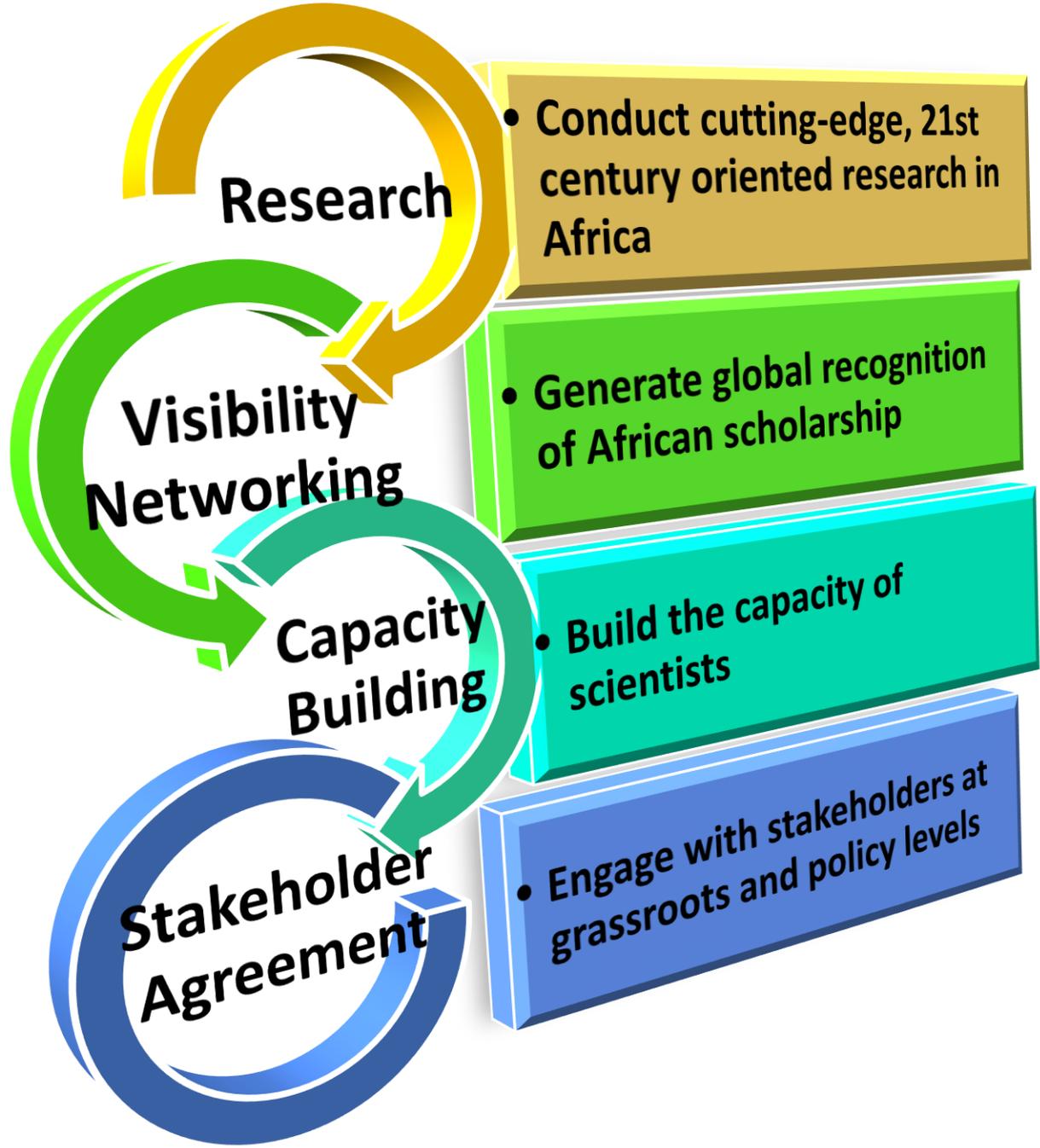
Vision for the ARUA centre of excellence in food security

Harness partnerships in research and innovation to drive agricultural and food system transformation to ensure sustainable food security and nutrition in Africa



GOALS:

ARUA Centre of Excellence in Food Security



Focus Areas

Improve Africa's Herds



1

Unleash the potential of Africa's crops



2

Transforming Africa's
Agriculture and
Food Systems



4

**Inform evidence-led
food policy**



Empowering
vulnerable
groups

**Provide 21st Century Africa
with sufficient, safe, nutritious,
consumer-driven food**



3

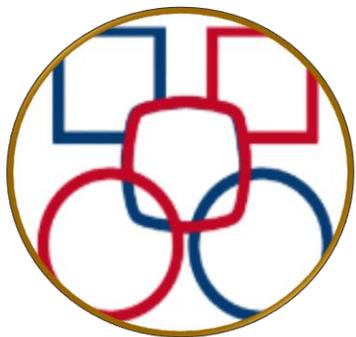


Food security and nutrition in
Africa's towns and cities

Technology,
ICT and
Big Data
Analytics



Transforming Africa's Agriculture and Food Systems



Along with collaborating partners:

South African Agricultural Research Council (SA-ARC)

Bureau of Food and Agricultural Policy (BFAP)

Food, Agriculture and Natural Resource Policy Analysis Network (FANRPAN)

African Women in Agriculture Research and Development (AWARD)

Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)

French Agricultural Research Centre for International Development (CIRAD)



Foresight4Food initiative

Aims to provide a mechanism for improved analysis in global food systems between private sector, government, science and civil society

The University of Pretoria will host a co-support unit in Africa



Running projects

- ARUA Research Innovation Global Challenges Research Fund (UKRI-GCRF) Funding for Capacity Building in Food Security for Africa (**CaBFOODS-Africa**) in collaboration with the University of Nairobi and the University of Ghana, Legon. UP as lead has been awarded £600k over 3 years.
- The ARUA-UKRI GCRF Research Excellence Food Systems Research Network for Africa (**FSNET-Africa**) in collaboration with the University of Leeds and Food, Agricultural and Natural Resources Policy Analysis Network (FANRPAN). UP as lead has been awarded £2 million over 3 years.
- Under the Biotechnology and Biological Sciences Research Council (BBSRC)/GCRF Strategic Training Awards for Research Skills (**STARS**), the University of Leeds, with UP and FANRPAN has been awarded £100k for 3 years to develop a MOOC for the “Research Skills in Nutrition- Sensitive Food Systems to reduce hunger, malnutrition and health inequalities in Sub-Saharan Africa” over 2 years.



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Current Active Networks

World Wide University Network



- The Worldwide Universities Network is an alliance of research-intensive universities. WUN provides financial and infrastructural support to member universities to foster international research collaboration and facilitate academic mobility.

African Australian University Network



- High impact, strategic educational and research partnerships providing sustainable solutions to challenges jointly facing Australia and Africa.

Global Challenge Research Fund



- The Global Challenges Research Fund (GCRF) is a 5-year £1.5Bn fund and a key component in the delivery of the UK Aid Strategy



The Future Africa Initiative at the University of Pretoria



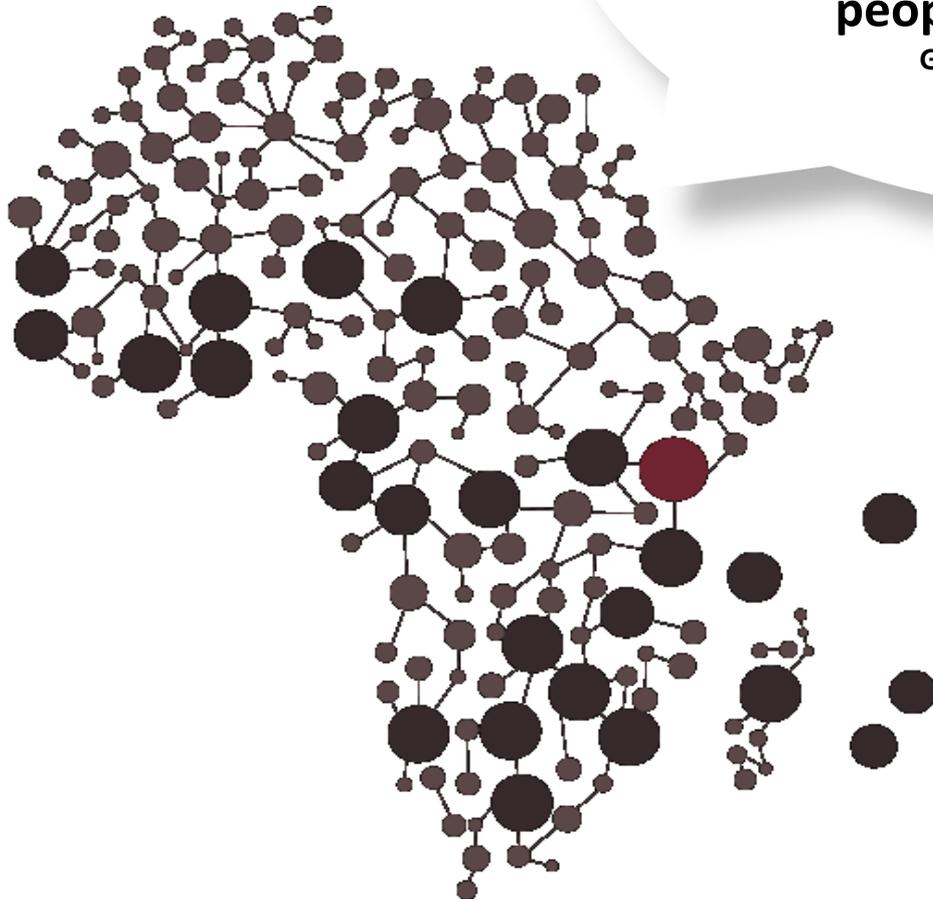
A novel platform that learns from the most successful programs at UP and leading international institutions to develop:

- large
- transdisciplinary
- internationally connected research projects

Future Africa — Connecting Africa and the World

The time of tackling problems in isolation is well and truly over. If we want to transform our world, for everyone, we must all stop acting in silos, remembering that people do not live in silos

Global Nutrition Report, 2017



Thank you



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