



AAUN-Future Legumes Research Training Programme (FLoRET)

Linking climate change
and nutritional needs to agriculture



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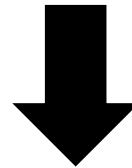
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AIM

Establish an interdisciplinary research and training programme



sustainable, climate-resilient agriculture

responsive to human nutritional needs

legumes as an initial example of a staple food



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ALIGNMENT OF THE PROGRAMME



AAUN AUSTRALIA AFRICA
UNIVERSITIES NETWORK

UN Framework Convention on Climate Change

African Union: Towards a Peaceful, Prosperous & Integrated Africa



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RATIONALE?

Africa and Australia both have challenges:

- Food and nutrition security (climate risks, health)
- Loss of agricultural knowledge and workforce
- Lack of a nutrition-sensitive agriculture
- Lack of integrated, collaborative research and training





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THE FACTS

About 800 million people remain under-nourished globally

An estimated 1.9 billion are overweight or obese globally

A world of nine billion people by 2050

Need nutrition-sensitive agricultural systems

The FLoRET initiative:

- Part of the solutions for feeding a future world
- Decreasing vulnerability and increasing resilience to adverse conditions

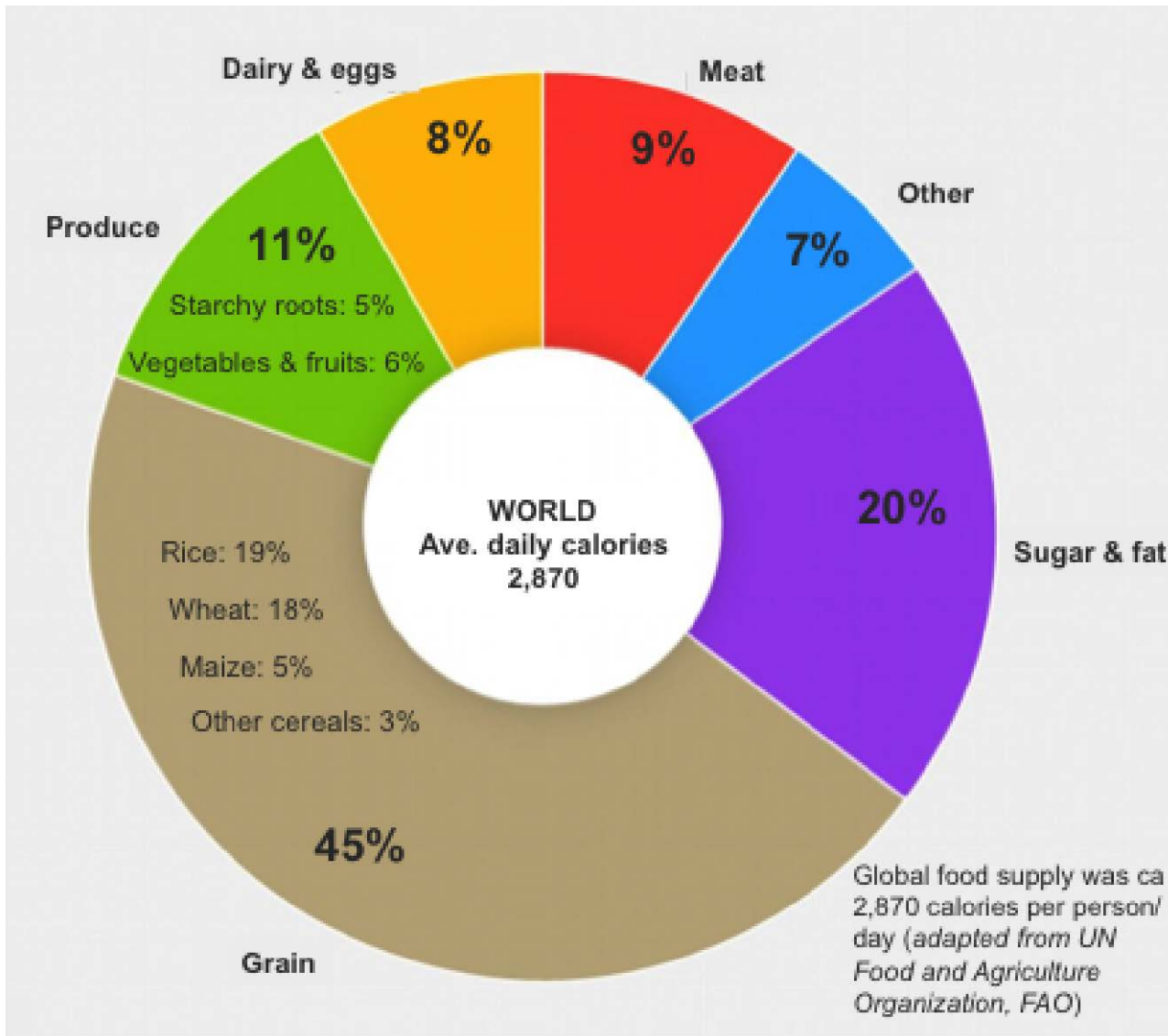
Global challenges



50,000 edible plants

Only a few staple crops contribute to the food energy intake

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THE PLAN?

- Build a collaborative, multi-year partnership
- Connect universities within the AAUN and with international partners
- Build sustainable capacity for research, training and implementation
- Increase and transfer knowledge and uptake of climate-tolerant, nutritious crops into local communities
- Build a model research and training programme initially using legumes as sustainable, high-nutrient crops



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The AAUN FLoRET flexible model

Cohorts of doctoral students working together as a team

Masters, Honours, diploma students integrating with the cohort team

Foundation courses and/or short training workshops – ‘bookends’

Extension and outreach training in communities

Communication

Face-to-face, mobility among universities, telecommunication systems



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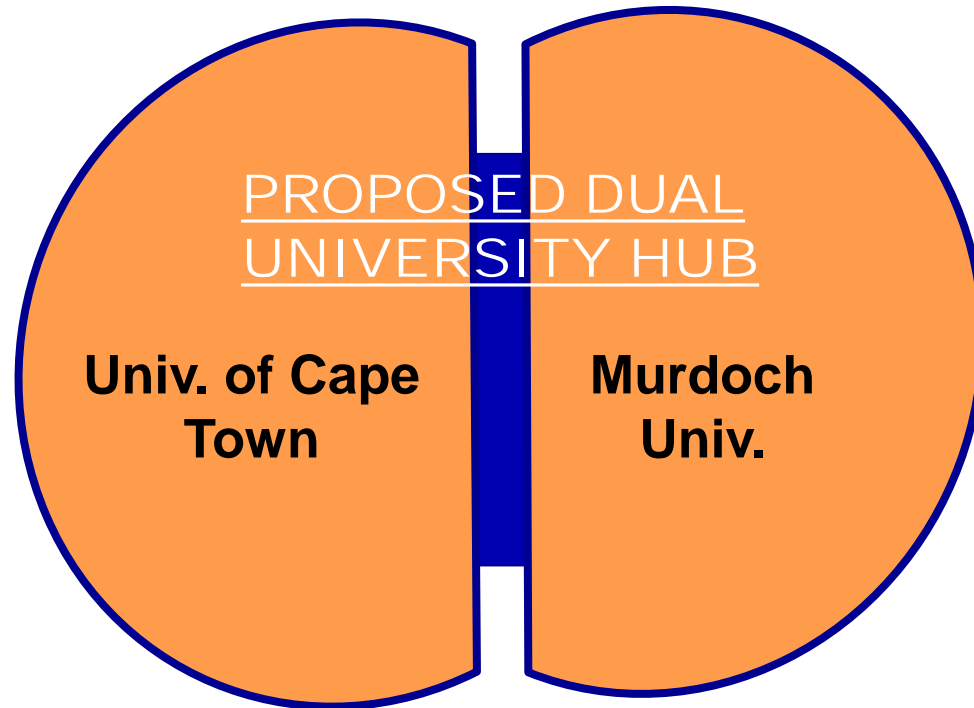


WHAT DOES THE FL_oRET FRAMEWORK LOOK LIKE?



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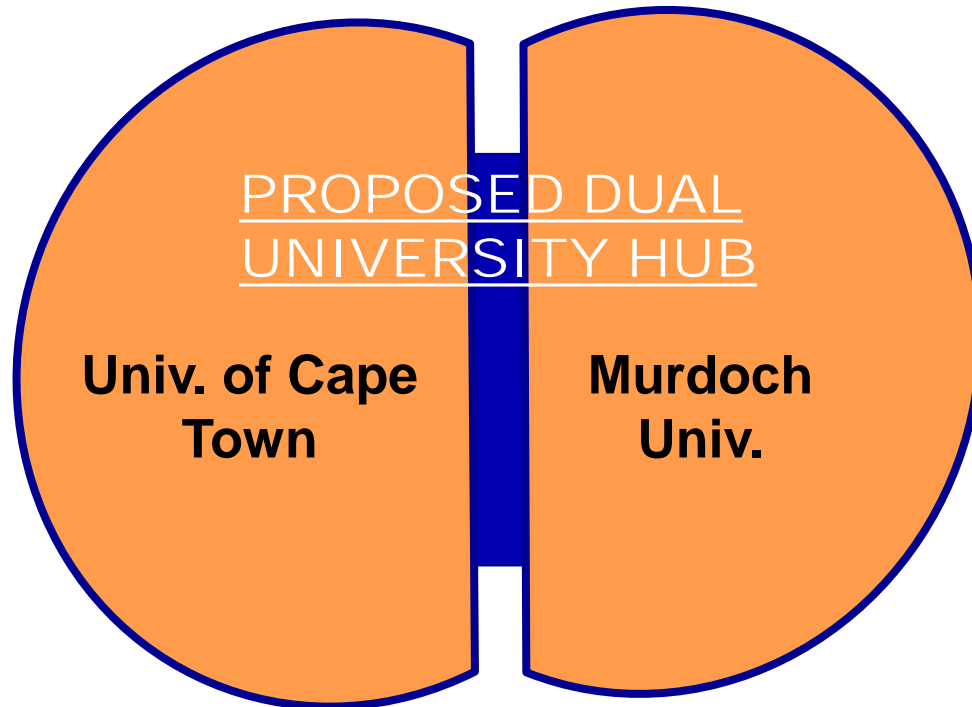
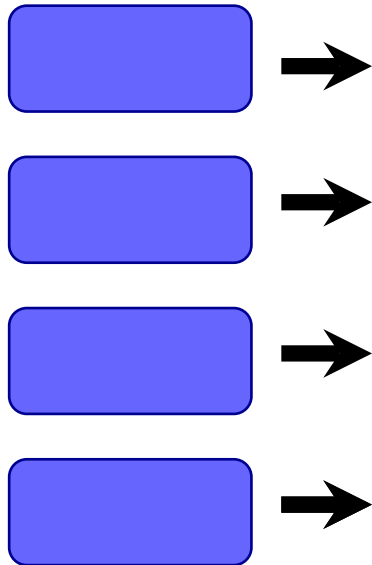


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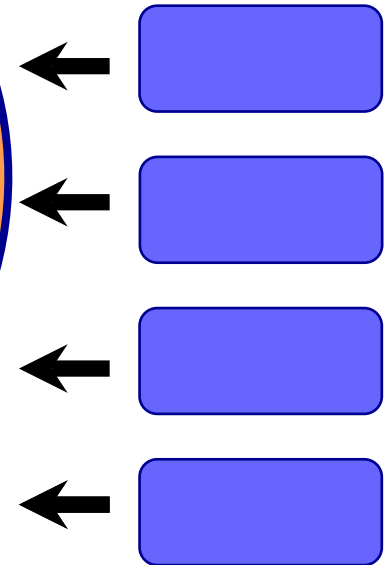
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Participating
African
universities



Participating
Australian
universities



Participating international
universities



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FLoRET - TWO INTERLINKING PILLARS

1. Socio-economic enablers and barriers along the food chain

- Life cycle analysis of supply & demand food chains
- Social and gender equity
- Cultural awareness & understanding

2. Knowledge-based selection of climate-tolerant, high-nutrient legumes

- Selection for climate & pest/disease resilience
- Selection for nutrient-dense crop plants
- Nutrient composition and bioavailability



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TO CONCLUDE...

Uniqueness of the approach

Collaborative cross-disciplinary pathways for linking nutrition, climate & agriculture



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TO CONCLUDE...

Uniqueness of the approach

Collectively, it mirrors the **diverse range of disciplines** required by today's graduates, decision-makers and farmers to manage the **complexity of agri-food security** nationally and globally

The first AAUN-FLoRET workshop:

Held at the University of Cape Town prior to the African AAUN Forum

Next steps:

- Confirming university agreements
- Identifying funding sources
- Refining the FLoRET Concept
- Drawing up Business cases for funding



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