



Role of Universities in transformation of food systems in Africa

Infopoint Virtual Conference: "North-South Partnership in Research and Education for the Transformation of Food Systems"

Date: 29 March 2021

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1. Food systems underpinned by diverse farming systems

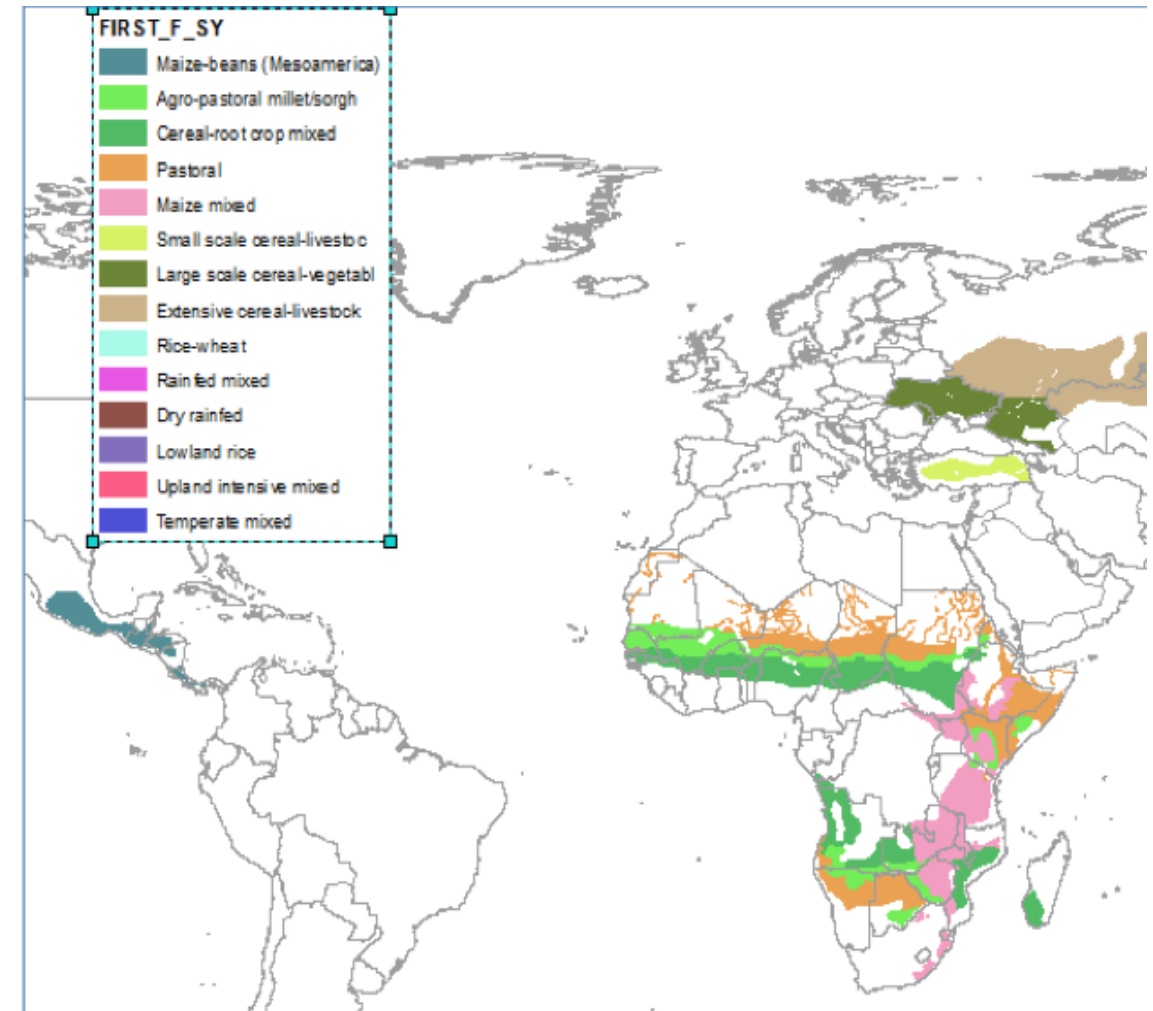
Predominated by

East and southern Africa-

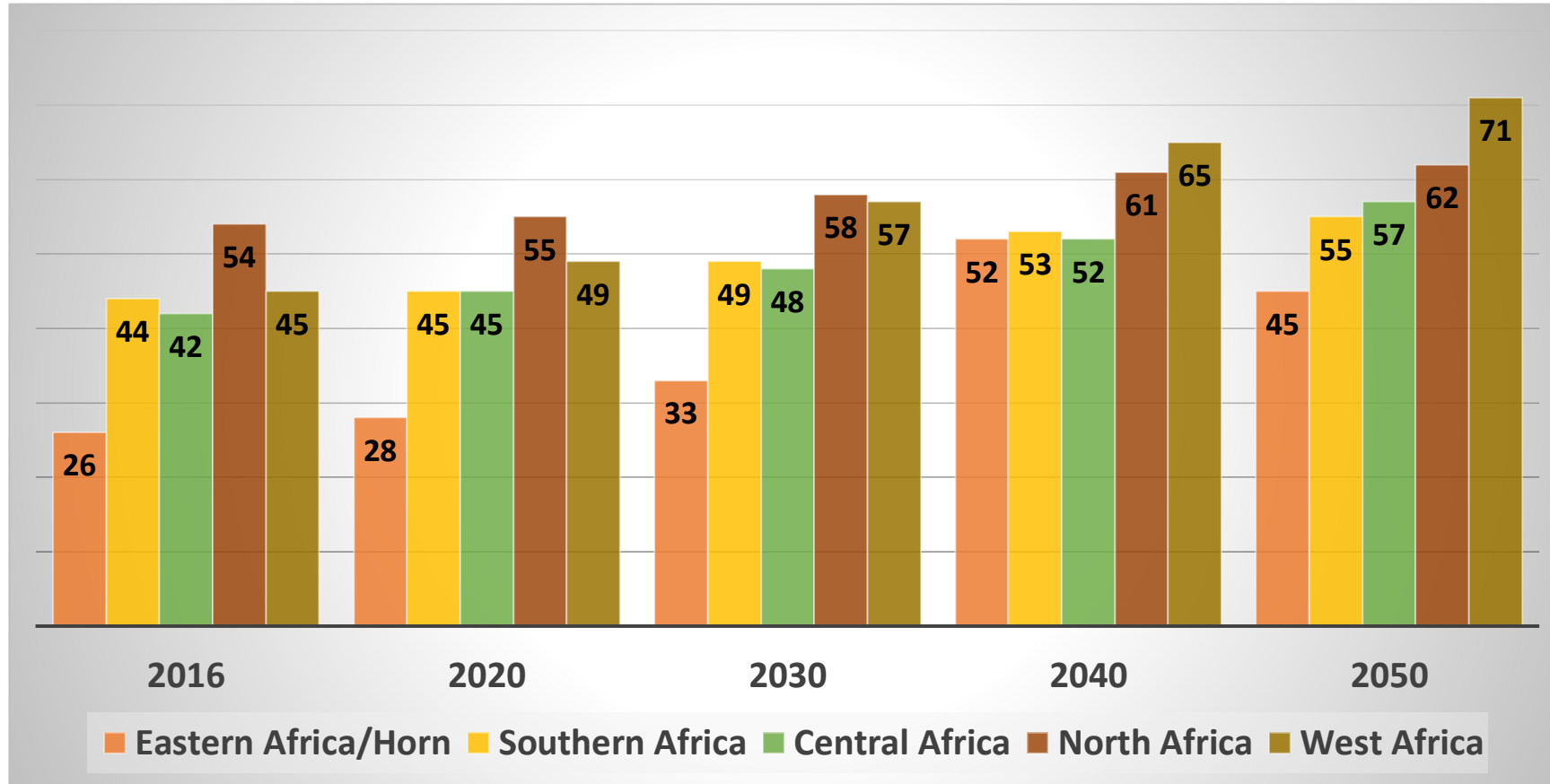
- Maize mixed farming system- humid tropics
- Extensive cereal systems in dryer ecologies
- Agro-pastoral systems semi-arid ecologies

West and Central Africa

- Cereal-root crop mixed farming system- humid tropics
- Extensive cereal systems in dryer ecologies
- Agro-pastoral systems semi-arid ecologies



2. Food for whom: The double challenge of feeding urbanising and rural populations



>870 Million
people will live in
rural areas by 2030

An increase from
720 million by
2016.

**Eastern Africa to
have the largest
rural population
in Africa by
2050**

Source: United Nations World Urbanization Prospects, IFs version 7.22.

3. Projected food demand by 2030: 2-3 three fold increase for most commodities compared to demand in other regions

| | World | Developed countries | Developing countries | Sub Saharan Africa | South Asia |
|--|-----------|---------------------|----------------------|--------------------|------------|
| Food products | 16 | 3 | 18 | 56 | 19 |
| Cereals, Food | 18 | 12 | 20 | 0 | 0 |
| Cereals, all uses | 20 | 0 | 24 | 47 | 37 |
| Roots and Tubers | 21 | 1 | 27 | 62 | 32 |
| Sugar and sugar crops (raw sugar equivalent) | 21 | 5 | 20 | 60 | 11 |
| Pulses, dry | 26 | 6 | 36 | 64 | 41 |
| Vegetable oils, oilseeds and products (oil equivalent) | 25 | 8 | 35 | 63 | 76 |
| Meaat and dairy, excl butter(freshmilk equivalent) | 23 | 7 | 34 | 50 | 37 |
| Other foods (Kcal) | 20 | 7 | 24 | 48 | 31 |
| Total foods (kCa) | 20 | 4 | 23 | 55 | 25 |

Source: Robert F. Townsend 2015 World Bank

4. Energy for production. A need for green tech

621

Million

African do not have access to electricity



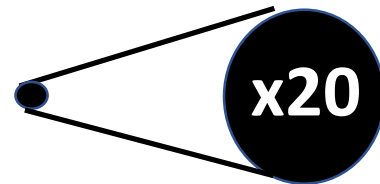
of SSA is consumed by south Africa

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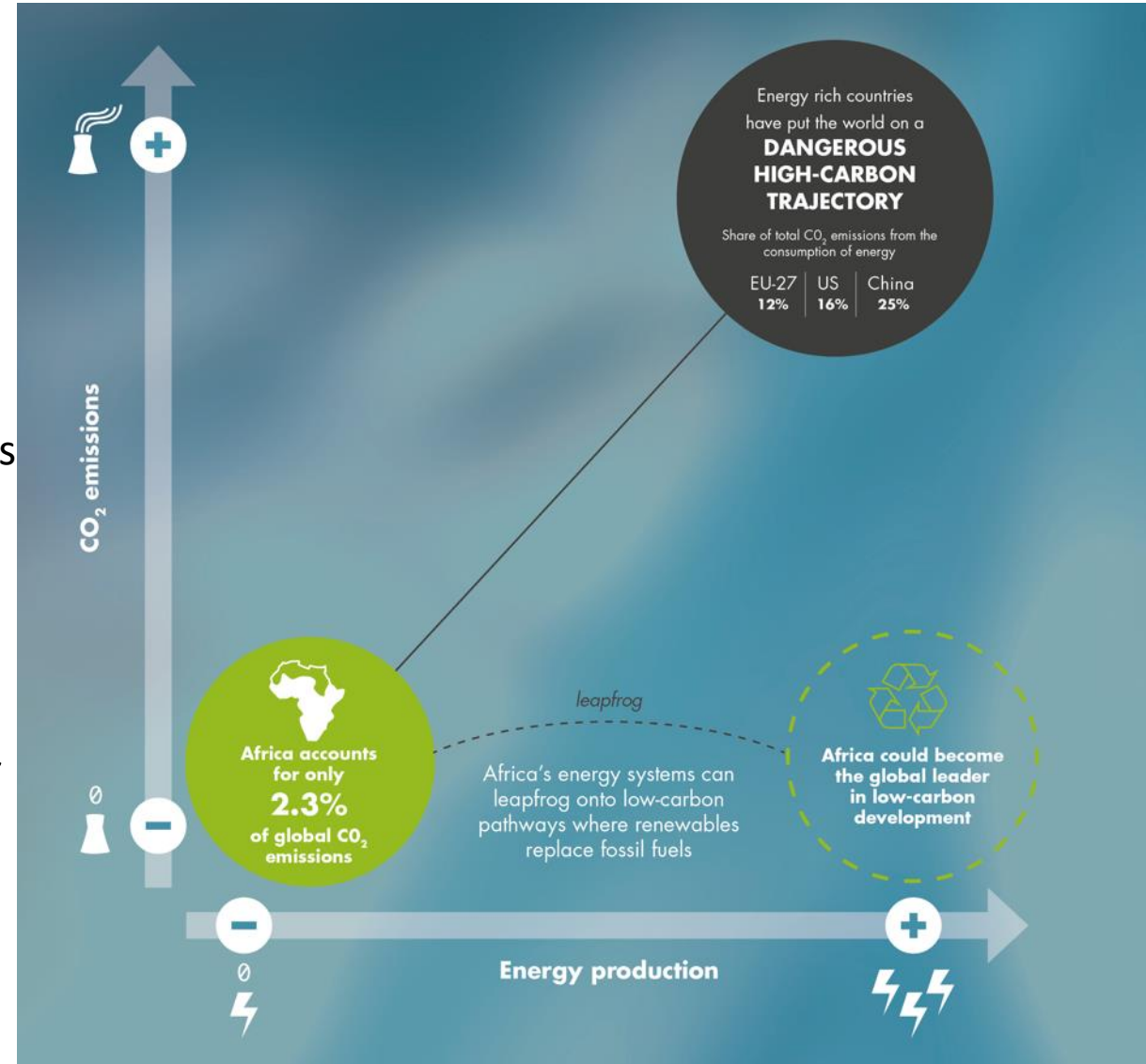


OF THE POPULATION rely on solid biomass (fuel wood + charcoal for cooking)

In Africa the poorest households spent



MORE PER UNIT OF ENERGY THAN THE WEALTHIEST HOUSEHOLDS connected to the power grid



Source: Africa Progress Panel 2015.

5. Implications for Universities and other Research agencies

1. Strategic investment in agrifood systems research to develop sustainable production to consumption systems for

- Increased resilience of production systems
- Improved productivity (water use efficiency, low carbon emission, renewable energy dependent)
- Increased employment opportunity and trade

2. Water and energy

- Water for production dependent on re-greening projects. Harnessing diverse Africa's botanical resources for greening and conservation.
- Water efficient crops and livestock needed
- Intensification of capacity for research to deployment of renewables energy.

3. Inclusivity and diversity

- Innovations that address gender and other inclusivity gaps
- Nutrient dense crops that meet nutrition needs of children, women, youth and other vulnerable populations

6. Going Forward - Africa and Europe need to Partner to:

- Strengthen resilience and productivity of the diverse agri-food systems using an integrated approach
- Develop contextualized green technologies for production and industrialization
- The European Green Deal should support Africa's research agenda and invariably involve universities
- Capacity development is key for building Africa's response capacity and for generation of technologies and innovations
- African Universities working with European Universities provide a strong platform for innovations, foresight and policy support



Thank You!



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