



# PAEPARD



## *What is going wrong with agricultural research in Africa?*



Zerihun Tadale



Francois Stepman



Tropentag Ghent – 19 September 2018



# Juncker's 2018 State of the Union speech



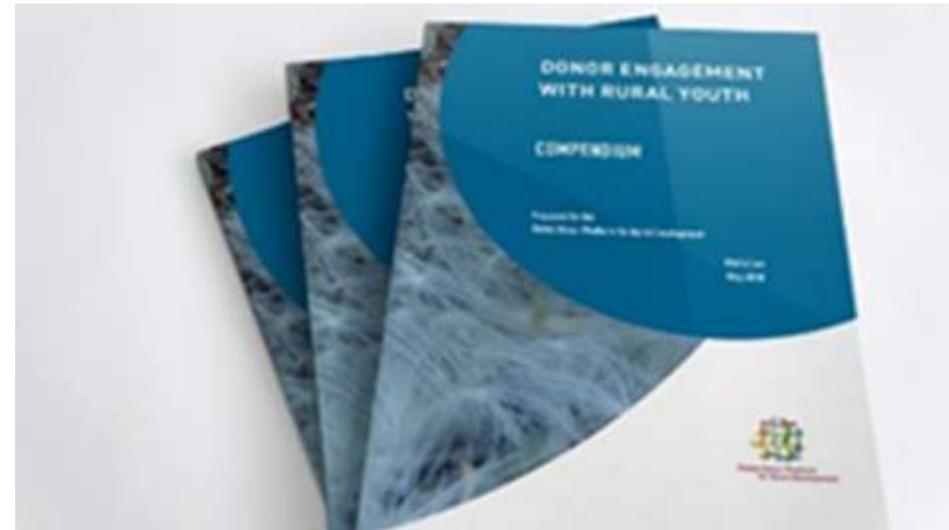
12 September 2018

1. Today, we are proposing a new Alliance for Sustainable Investment and Jobs between Europe and Africa. This Alliance – as we envision it – would help **create up to 10 million jobs in Africa in the next 5 years alone.**
2. Trade between Africa and Europe is not insignificant. **36% of Africa's trade** is with the European Union. This compares to 16% for China and 6% for the United States. But this is not enough.
3. We want to create a framework that brings more private investment to Africa. We are not starting from scratch: our External Investment Plan, launched two years ago, will mobilise over **€44 billion in both the public and private investment.** Alone the projects already in the pipeline will unlock €24 billion.
4. We want to focus our investment where it matters the most. By 2020, the EU will have supported **35,000 African students and researchers** with our Erasmus programme. **By 2027, this figure should reach 105,000.**

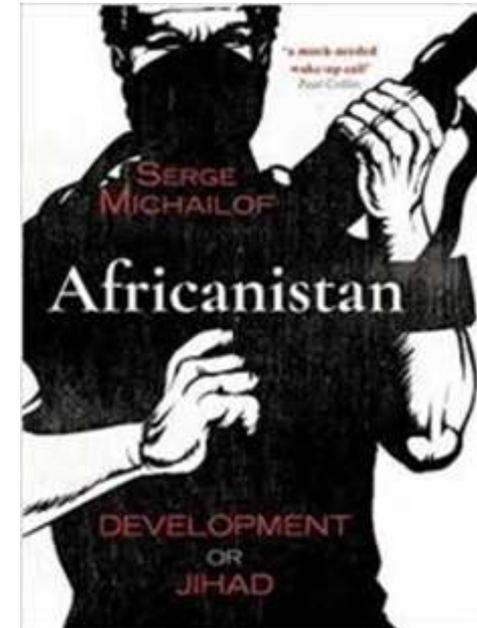
## The present narrative

1. Youth & jobs
2. Trade
3. Dietary transition
4. Private sector and agribusiness
5. Research expectations

Donor engagement with rural youth  
Prepared for the Global Donor Platform for  
Rural Development Maria Lee, May 2018,  
72 pages



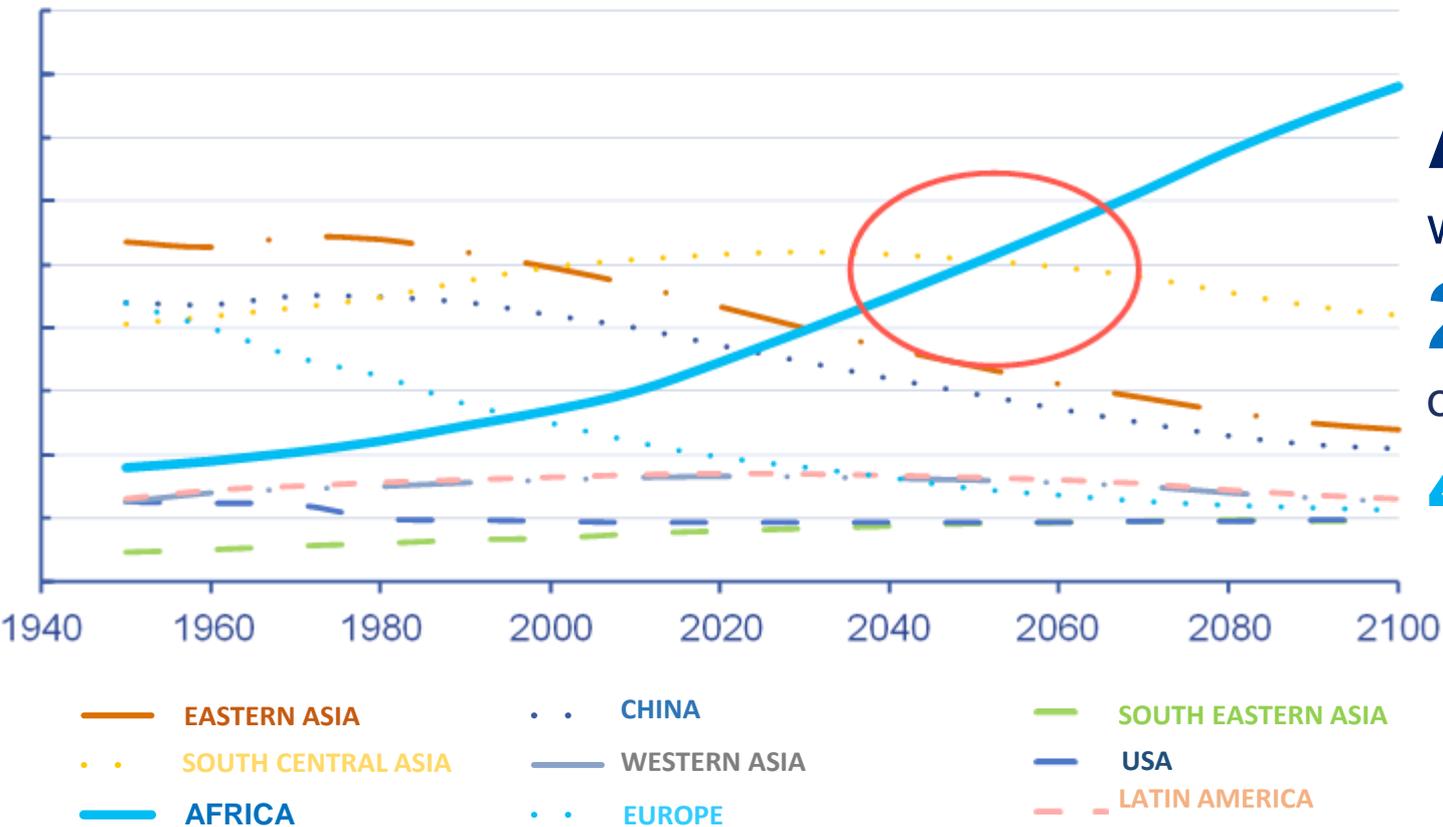
# 1. Youth and jobs



- 📖 *The Sahel, a huge region of about 100 million inhabitants*
- 📖 *a population of 150 million inhabitants in 10 years*
- 📖 *and 700 million in 25 years?*
- 📖 *A region where insecurity is spreading and which may act as a detonator for West Africa*

# 1. Youth and jobs: Africa will be the size of South-Central Asia by 2050 and will continue growing faster...

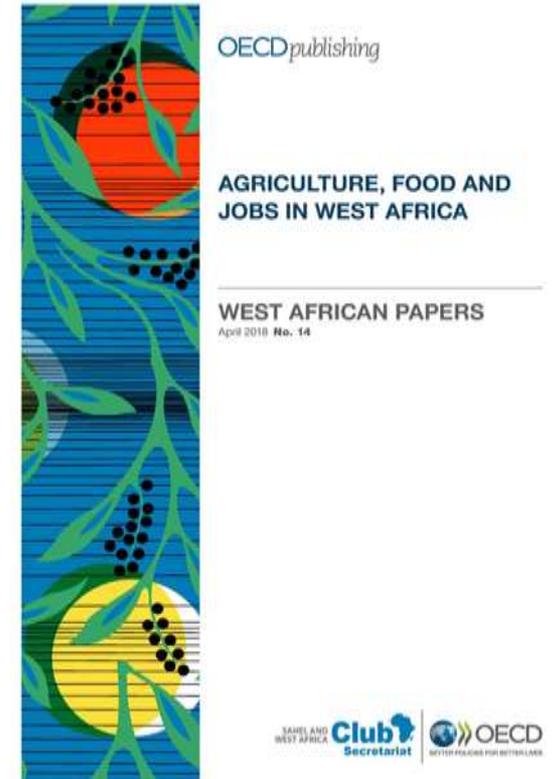
REGIONAL DISTRIBUTION OF THE POPULATION (%)



**AFRICA**  
will reach almost  
**25%** by **2050**  
of world population  
**40%** by **2100**

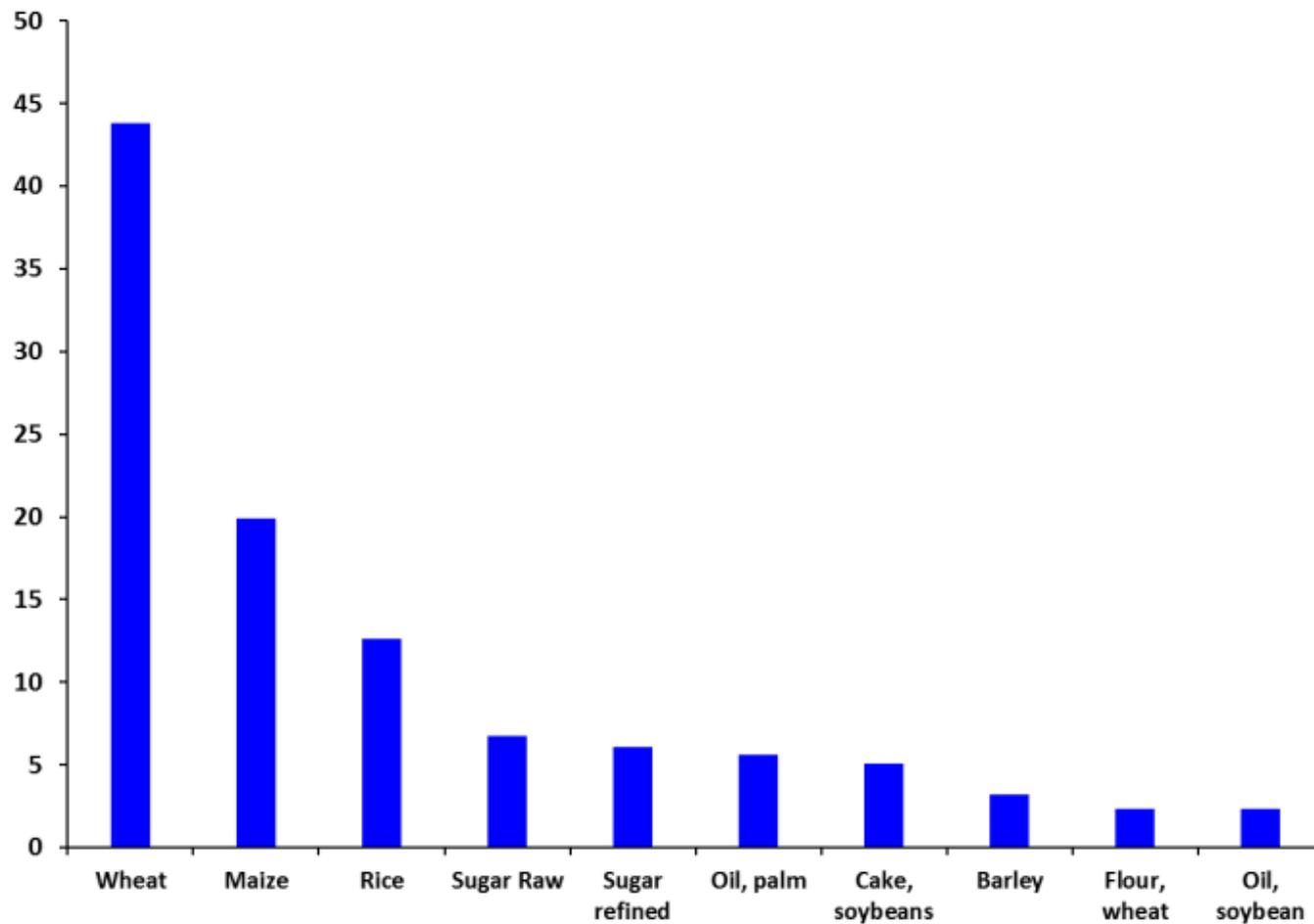
# 1. Youth & jobs

- There are **420 million** youth aged 15-35 in Africa.
- At least **65 million** need to be absorbed by rural enterprises.
- The food economy is the biggest employer in West Africa accounting for **66% of total employment**.
- While the majority of food economy jobs are in agriculture, off-farm employment in food-related manufacturing and service activities is increasing as the food economy adapts to rapid population growth, urbanisation and rising incomes.
- Rural-urban linkages and rural employment diversification, which are related to the agricultural transformations that are reshaping this sector across four broad segments of activities: agriculture, processing, marketing and food-away-from home.

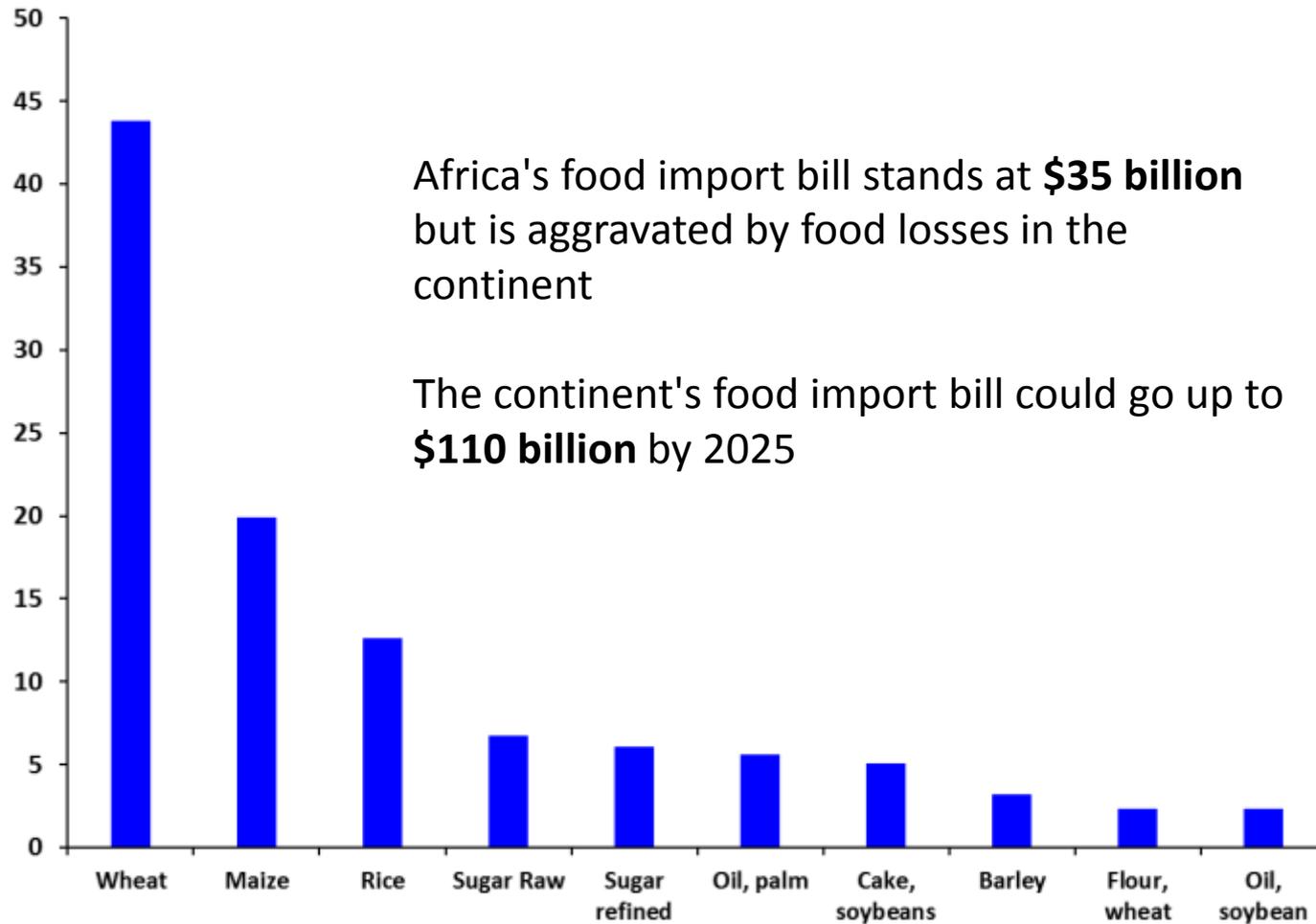


Agriculture, Food and Jobs in West Africa  
OECD, April 2018. 32 pages

## 2. Trade: Food import in 2016 (mio. tons)



## 2. Trade: Food import in 2016 (bio. USD)



### 3. Dietary transition



📄 An increasing **middle class** demanding for new products



📄 **Local brands** creating value to emerging consumers

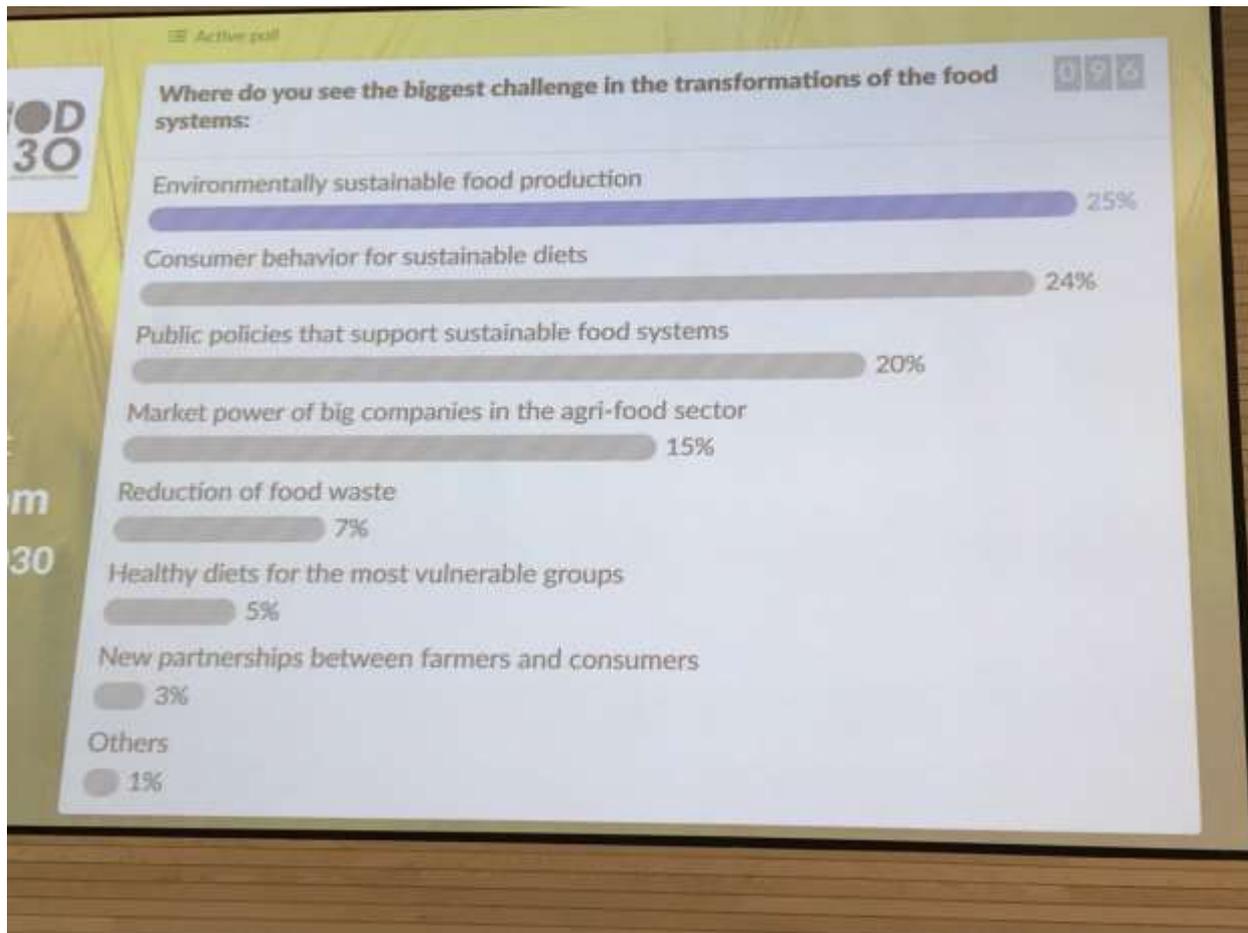


📄 Different cultures and migration adding new **consumption habits**



📄 **Strong urbanization** driving convenience and availability

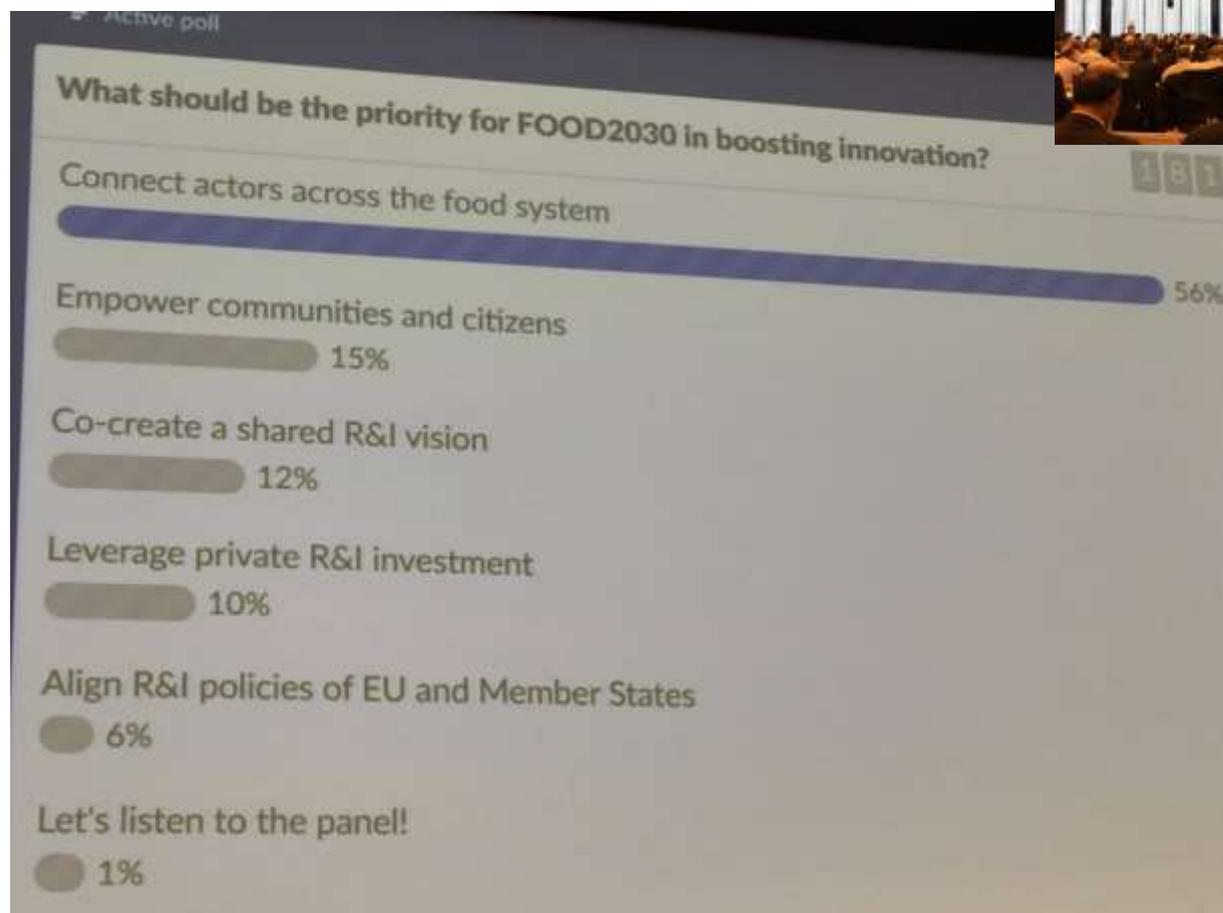
### 3. Dietary transition: *Where do you see the biggest challenge in the transformation of the Food System?*



5 – 6  
September  
2018.  
University  
of Hohenheim



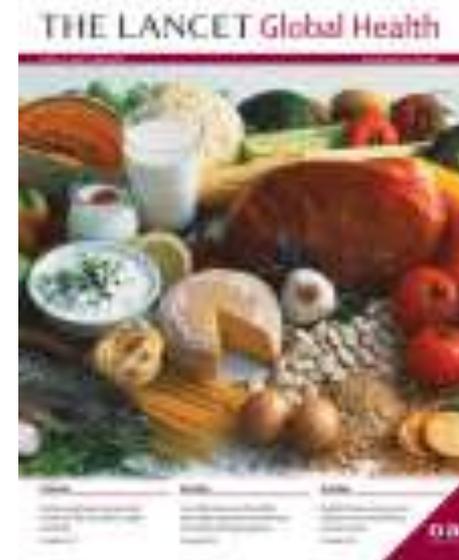
### 3. Dietary transition: *What should be the priority for FOOD2030 in boosting innovation?*



16 October  
2017.  
Brussels.

### 3. Dietary transition

- 🍃 A 2015 [study](#) published by [The Lancet Global Health journal](#) looked at the consumption of food (both healthy and unhealthy items) and nutrients in **187 countries in 1990 and then again in 2010**.
- 🍃 The aim was to determine which countries had the world's healthiest diets.
- 🍃 It found that none of the **healthiest ten diets** is in a wealthy Western nation, nor are any in Asia.
- 🍃 **Most were found in Africa,**



The Lancet Global Health  
Volume 3, Issue 3, March 2015,  
Pages e132-e142

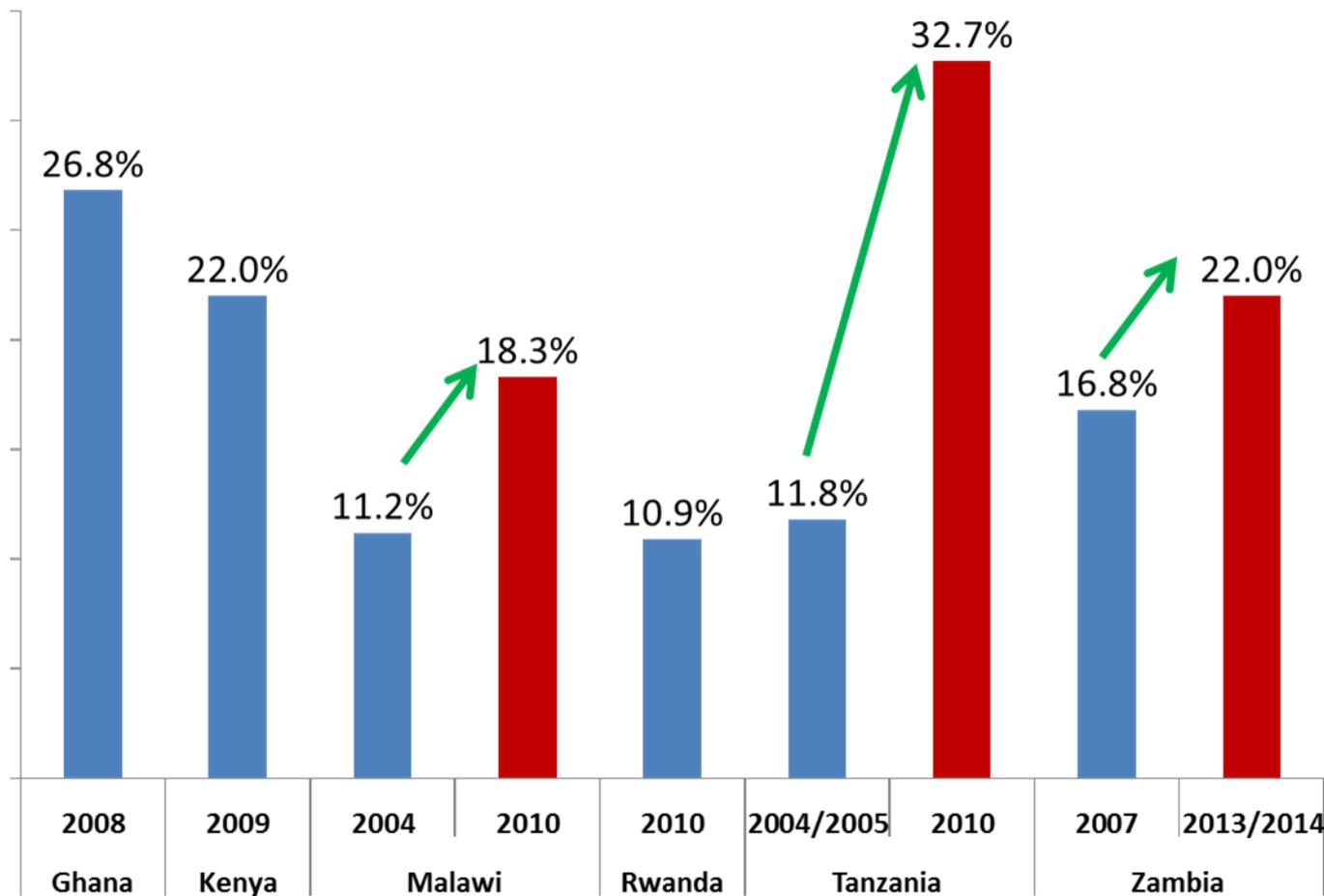


### 3. Dietary transition: *the agricultural transformation*

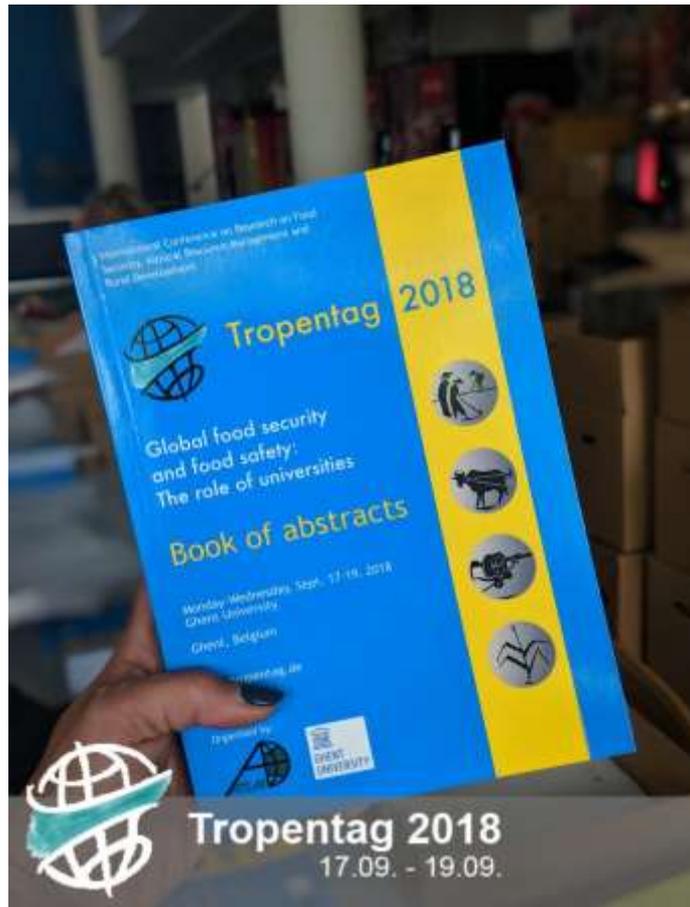
- General figures on agricultural transformation in developing countries considered by donors indicate that while perhaps **30% of the farmers may be able to join, take advantage and grow, up to 70% is bound to lose.**
- As a result alternative development plans or social protection must be developed for the majority.
- Some go even as far as saying that development agencies should **focus on the food and nutrition security of the 70%**, and leave the 30% to others.

*Aligning Agricultural and Rural Development and Trade policies to improve sustainable development impact*  
ECDPM DISCUSSION PAPER No. 221, Feb.2018

## 4. Private sector: *Farm ownership: % of National Landholdings held by Urban Households*

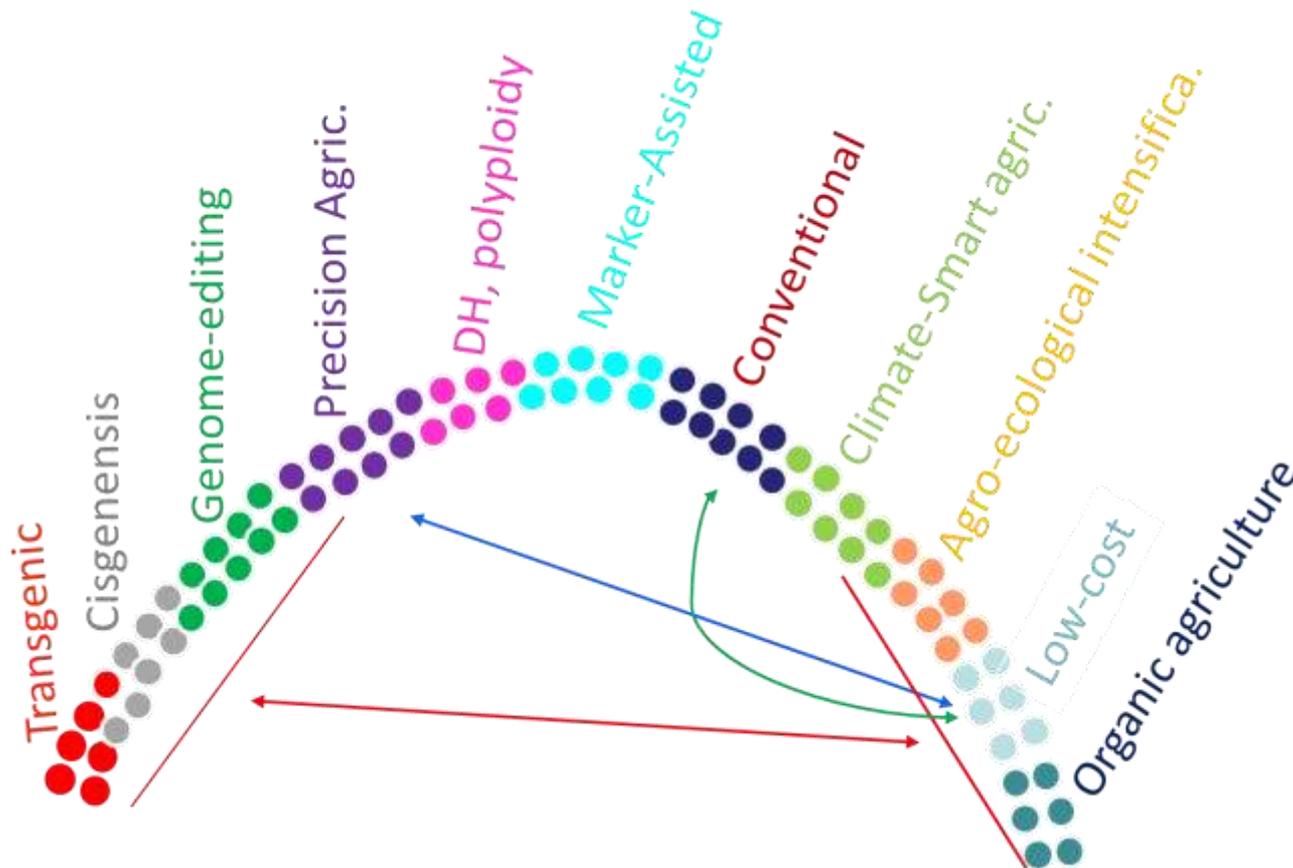


## 4. Research expectations



1. Youth & jobs
2. Trade
3. Dietary transition
4. Private sector and agribusiness

## 4. Research expectations: *Crop researchers: the fighting parliament*



Are arguments based on scientific evidence?

Biased towards the affiliation?

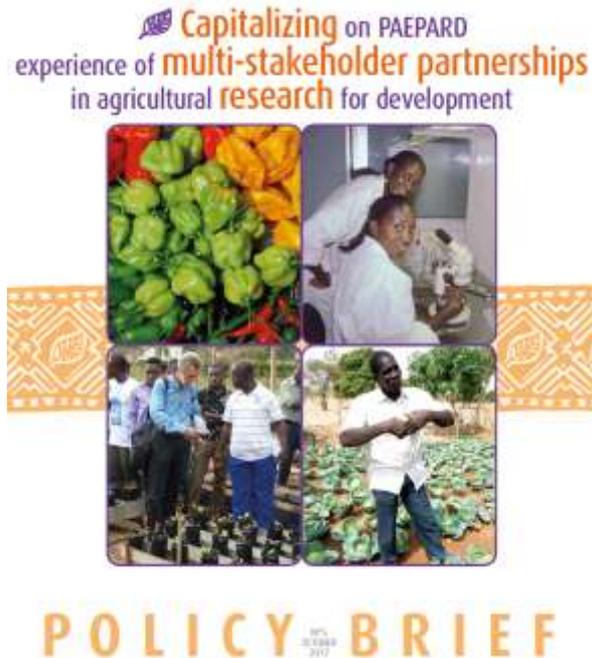


## 4. Research expectations

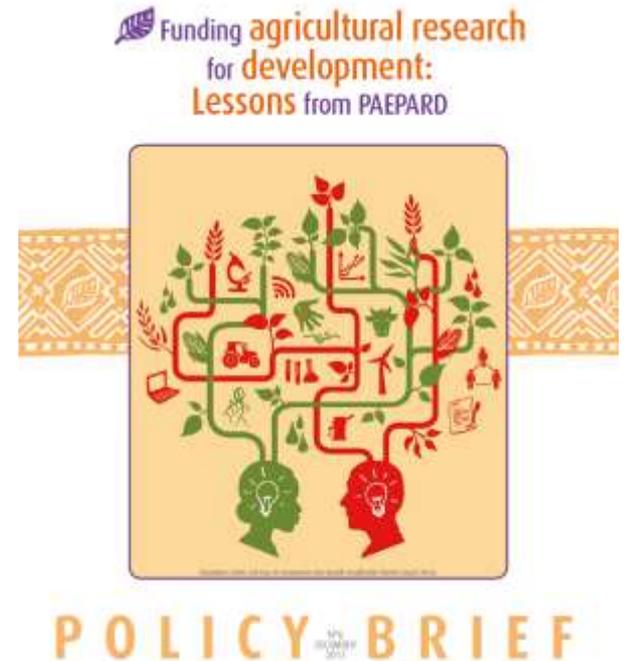
- 📖 Research into **processing, storage, food preparation** and other food interventions post-farm
  - 📖 *Example: EC/FP7 AFTER: African Traditional Food Revisited by Research ; DANIDA/UniBRAIN incubators; Soy milk Benin*
- 📖 Research on **adapted mechanization**
- 📖 **Healthier packaged food**
  - 📖 *Example: Pack4Food*
- 📖 **Renewable Energy** research needs
  - 📖 *Irrigation: Diesel pumping systems fueled with biofuel, micro-hydro, solar PV, wind*
  - 📖 *Agro-processing: Biodiesel pumps, micro-hydro, microgrids, solar dryers*
  - 📖 *Mechanical energy: Biodiesel pumps, micro-hydro*
  - 📖 *Cooking: Cleaner biomass cookstoves, biogas, solar cookers*
  - 📖 *Cooling/refrigeration: Larger-scale solar PV and wind, biodiesel, and micro- and picohydro stations (power generation of under 5 kW); biodiesel engines*



Aflatoxin contamination of food and feed



Multi-stakeholder partnerships



Funding ARD

