



Food and Agriculture Organization  
of the United Nations

# Global food markets in perspective

Piero Conforti

FAO

*Economic and Social Development Department*

CLAL DAIRY FORUM 2016

*Bardolino (VR), 12 Ottobre*

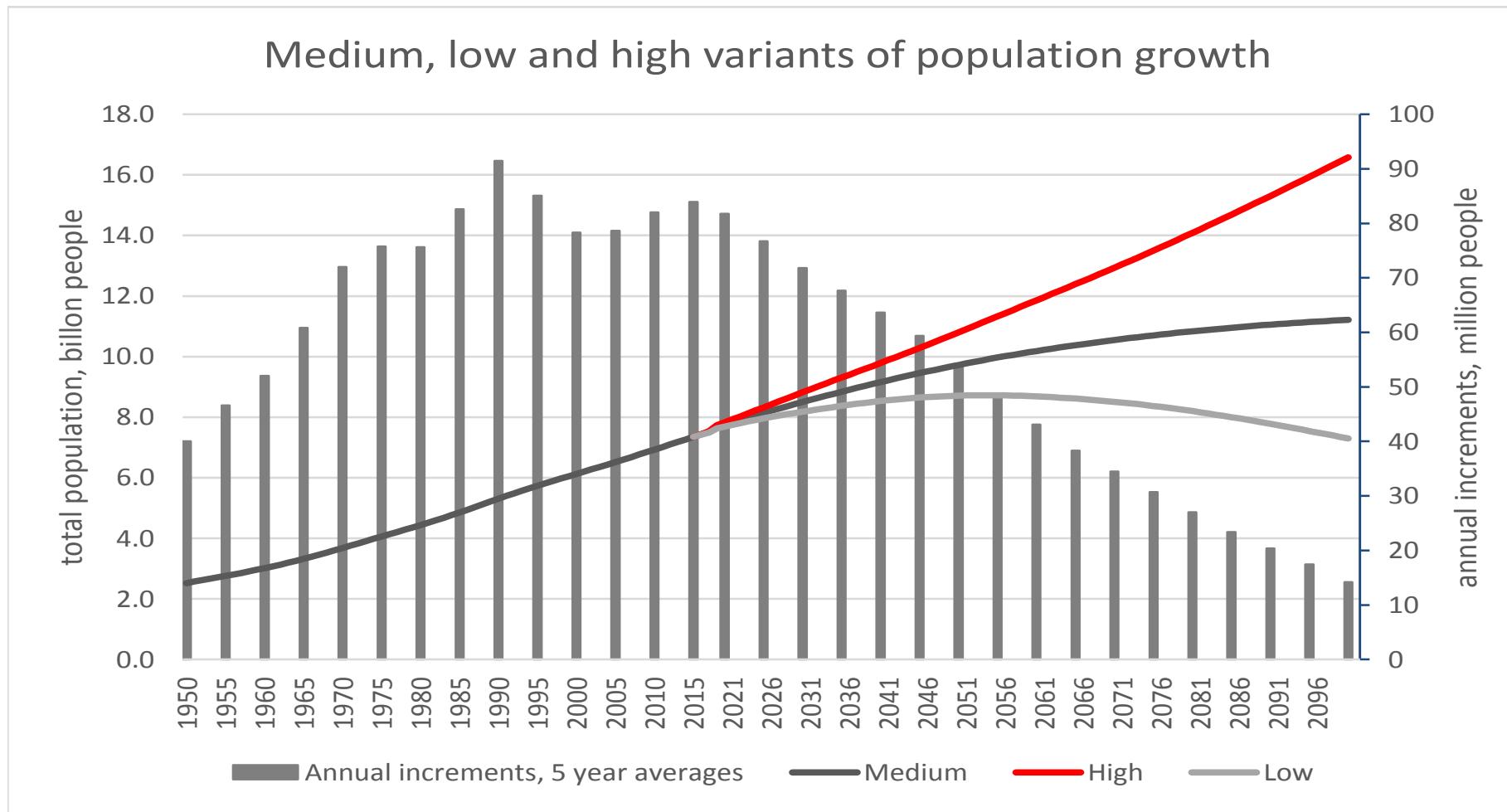
# Growing and shifting food demand

*Population growth, urbanization and income growth will shape food demand in the coming decades*

- ▶ Global food demand will increase by at least 50% by 2050
  - ▶ Income growth and urbanization shift demand towards fruits, vegetables and meats
  - ▶ Agricultural productivity growth on trend of 1 to 3% per year
- *Will we be able to feed the world?*

# the determinants

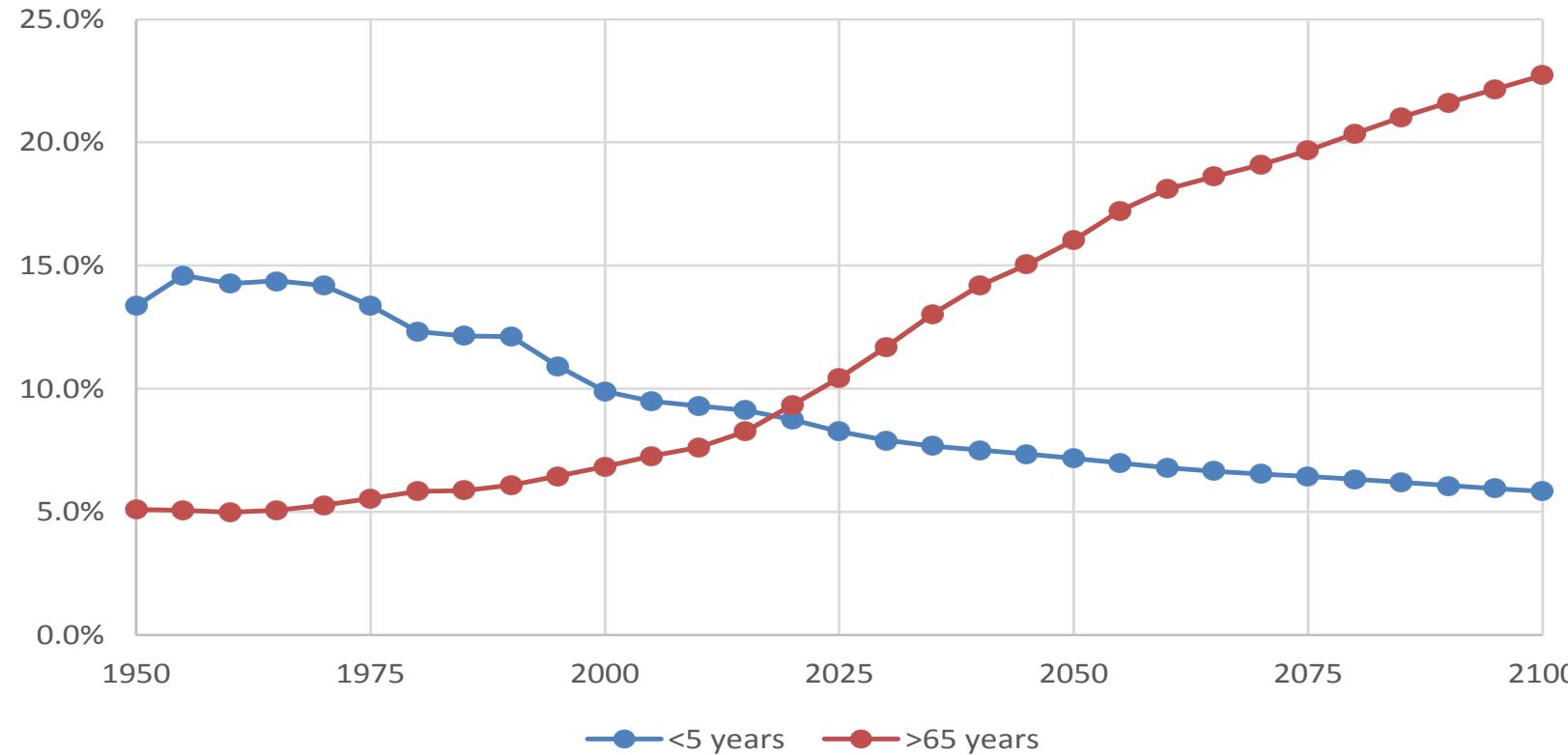
# Population growth to 2100



Source: UN DESA 2015

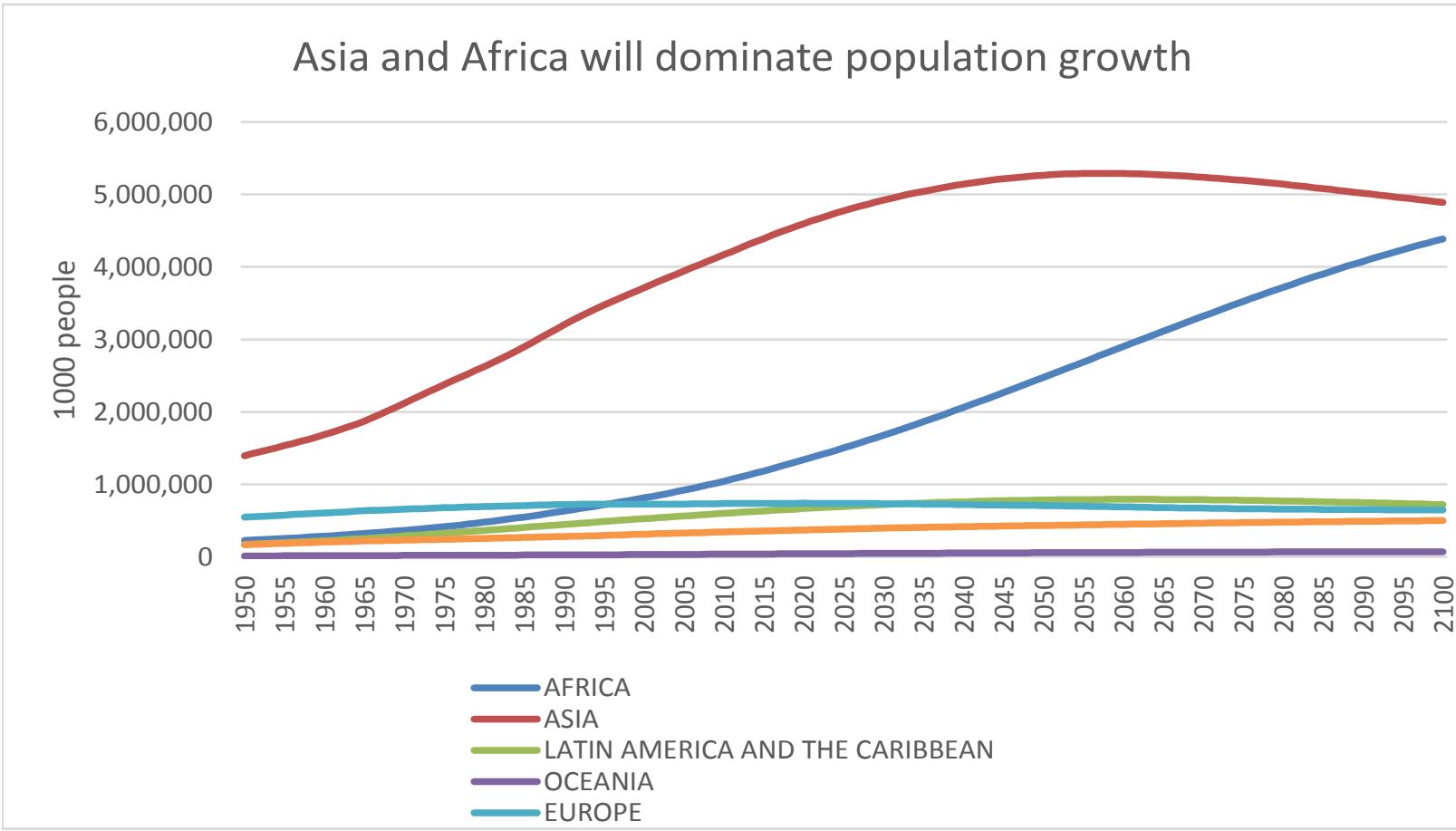
# An ageing population

A rapidly ageing world: young children and older people as a share of global population



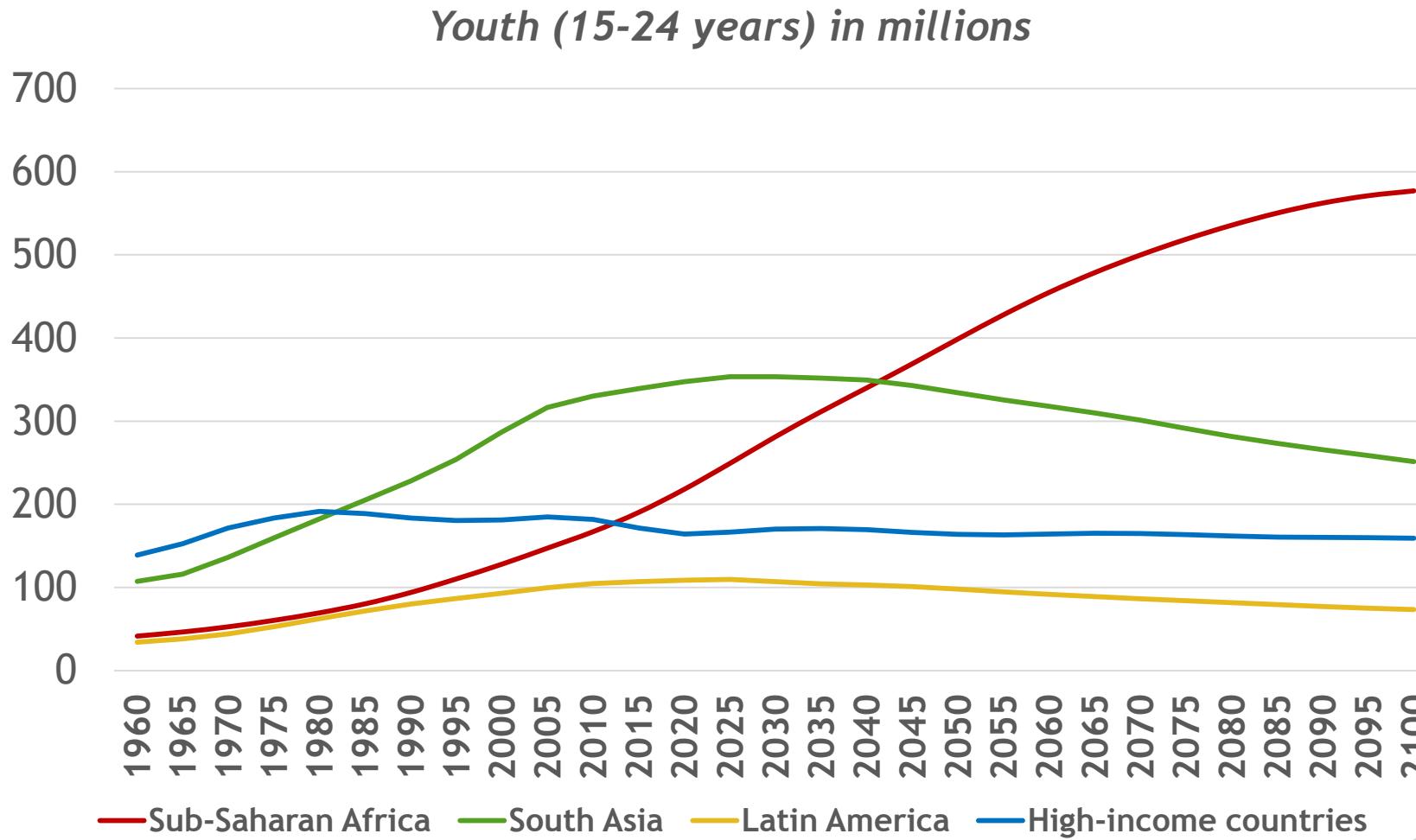
Source: UN DESA 2015

# Population growth to 2100, by region



Source: UN DESA 2015

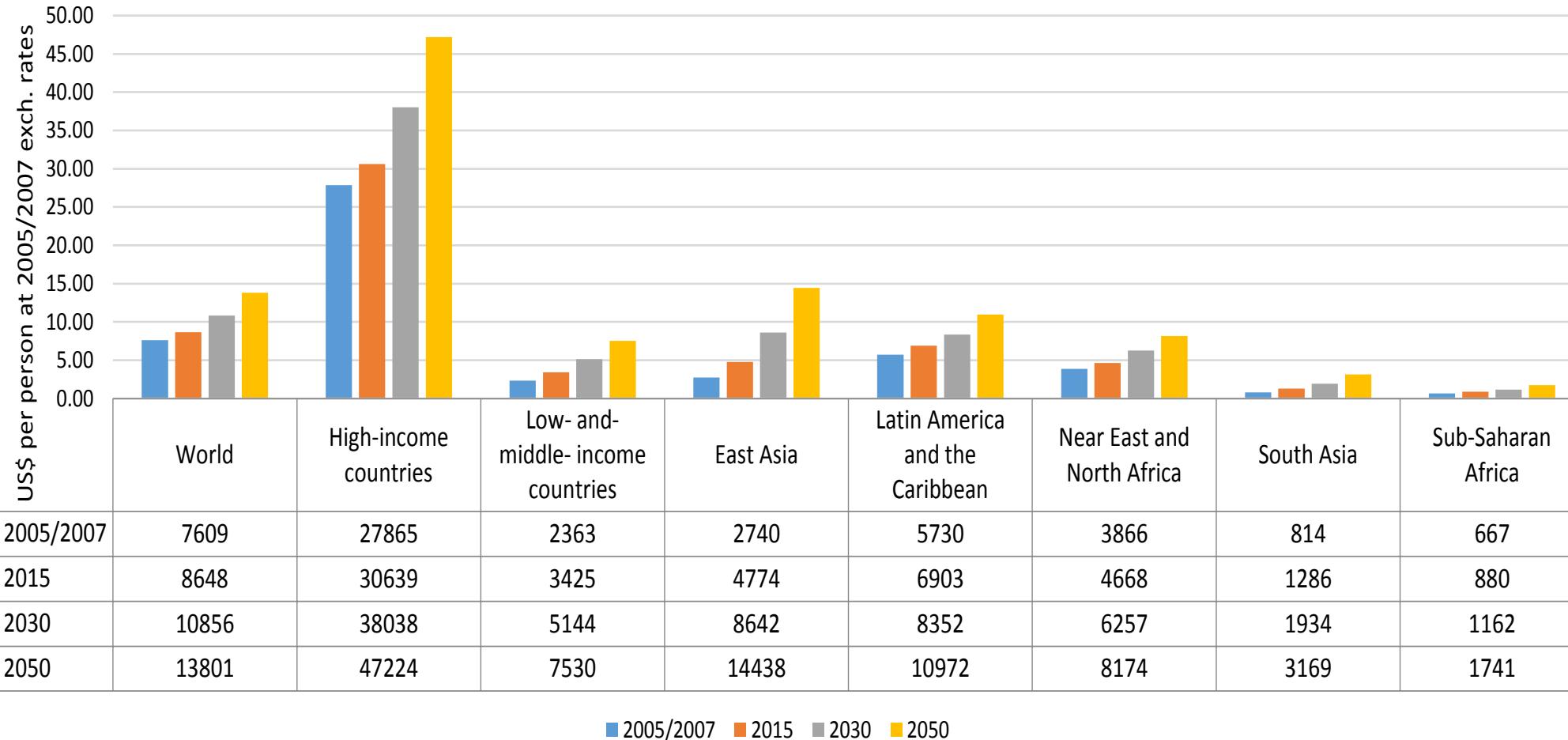
# Youth growing, especially in Africa



Source: UN DESA 2015

# GDP per capita

GDP per capita



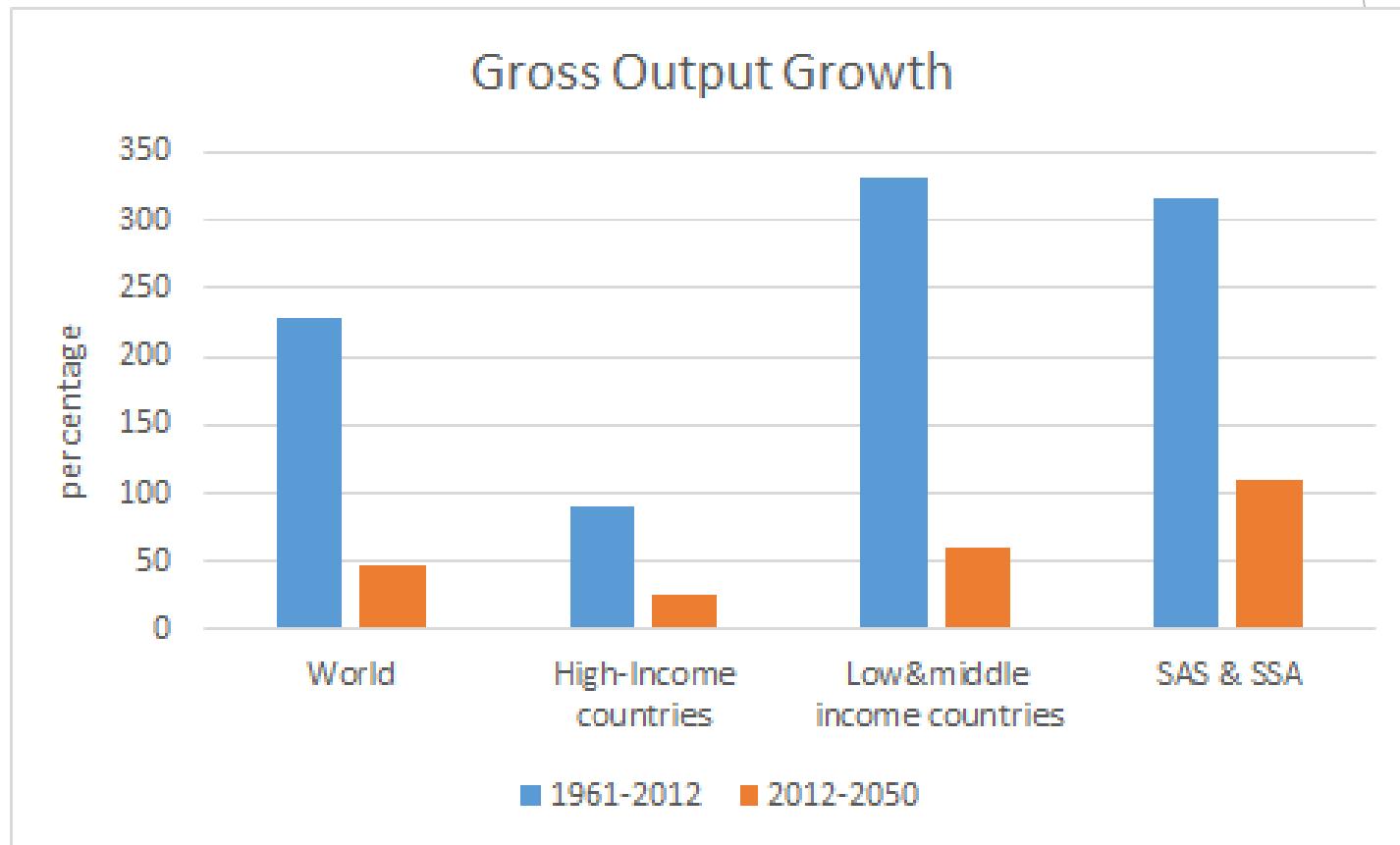
Source: FAO and World Bank, 2012

# **what to expect?**

# Gross agricultural output: past trends (1961-2012) and projections (2012-2050)

Gross agricultural output dramatically increased in the last fifty years.

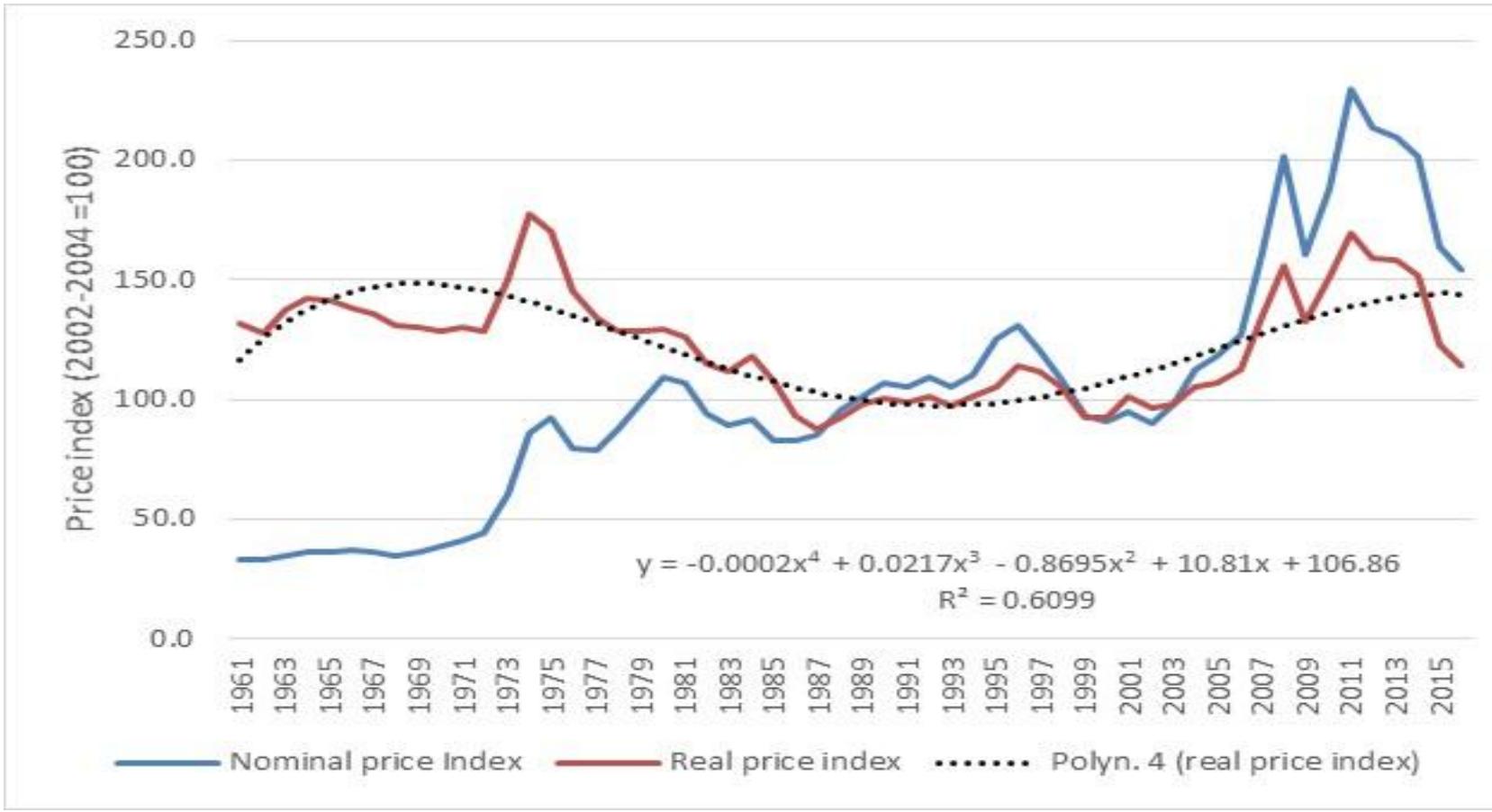
Projected growth to 2050 is lower, however, 50% increase may be needed to satisfy growing global needs



Source: FAO Global Perspectives Studies, based on FAOSTAT Food Balance Sheets (extraction 22 Sept 2016) for past trends and projections to 2050 based on AT2050 with revised population (Medium variant, 2015 UN DESA). Unpublished.

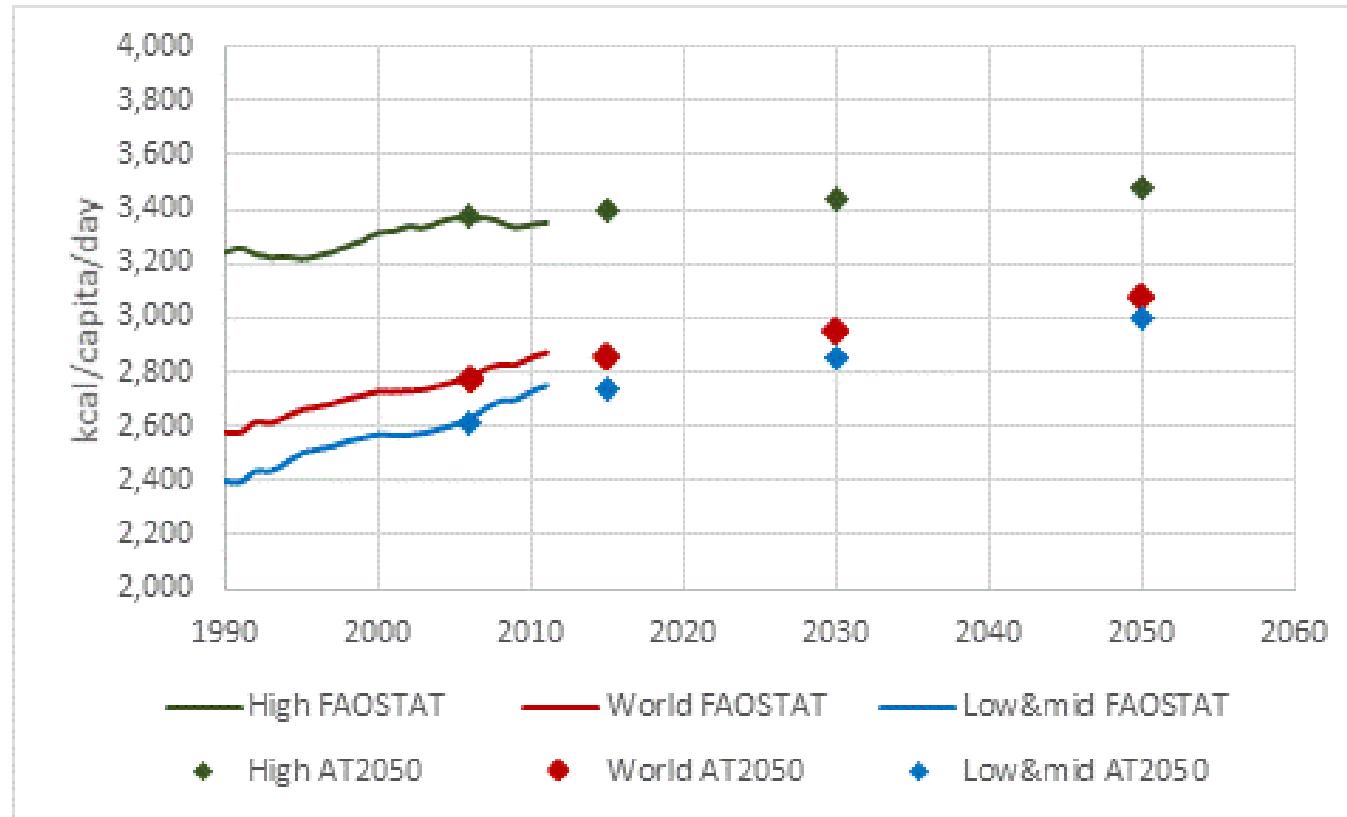


# Food prices



Source: FAO, Food Price Index

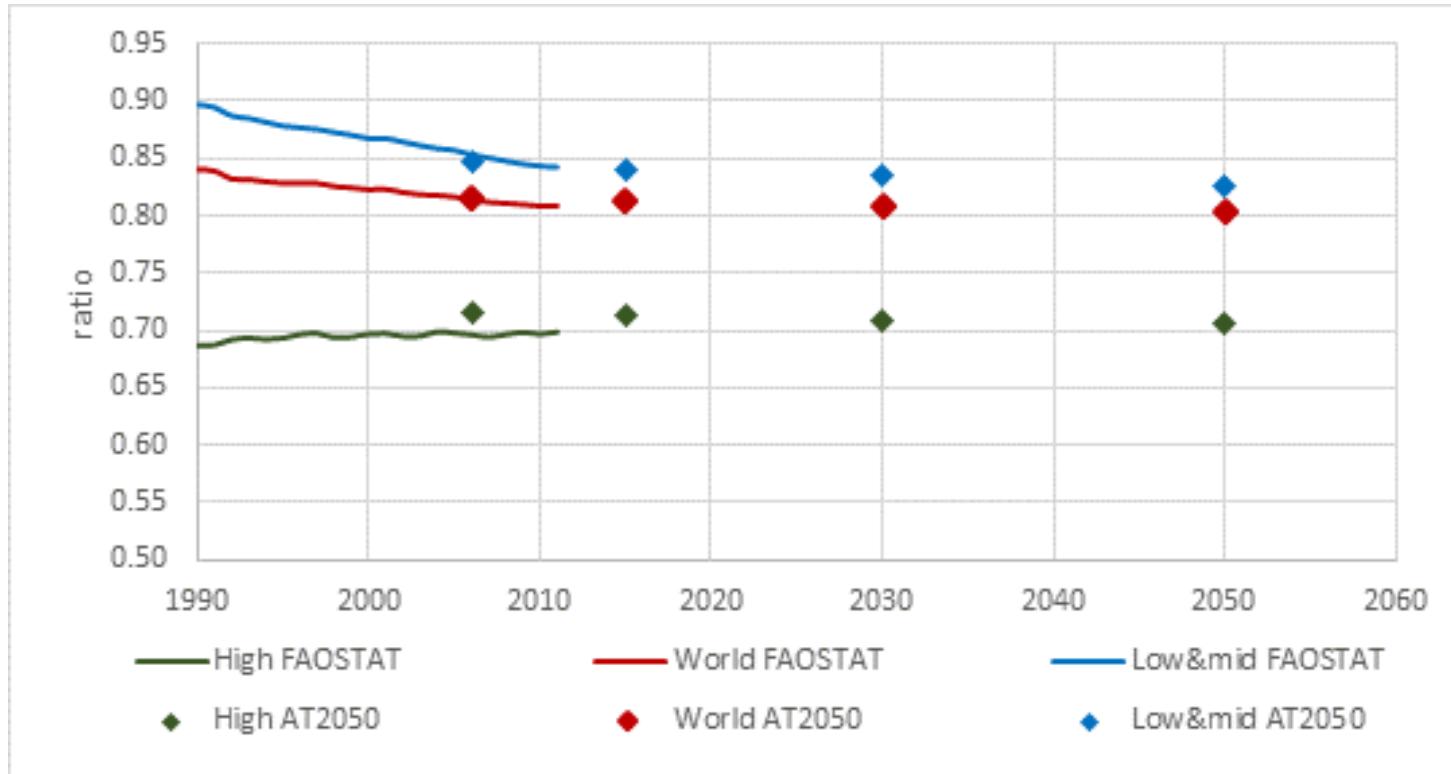
# Food supply: kilocalories/person day



Source: FAO Global Perspectives Studies, based on FAOSTAT Food Balance Sheets (extraction 22 Sept 2016)  
And AT2050 (dotted data). Unpublished.



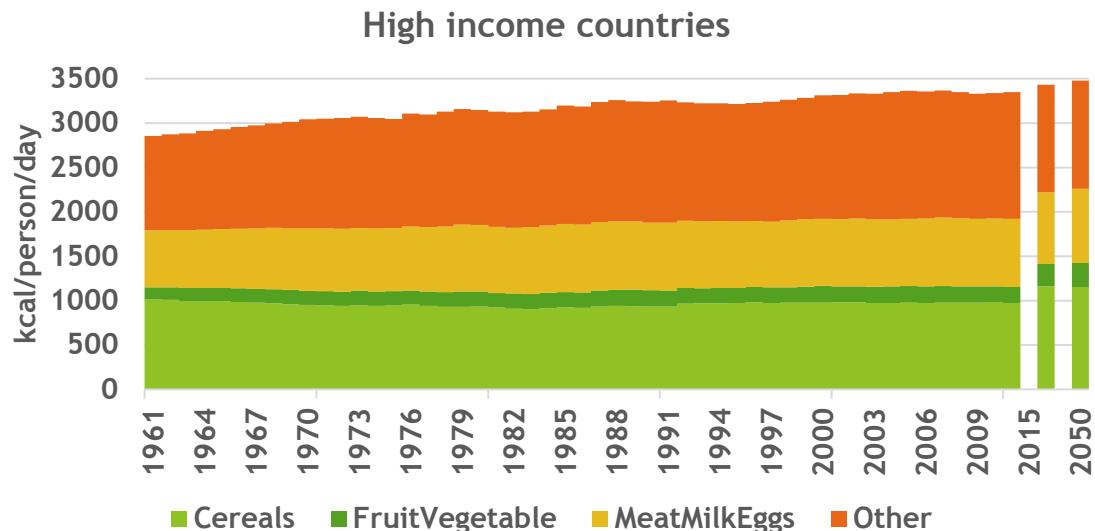
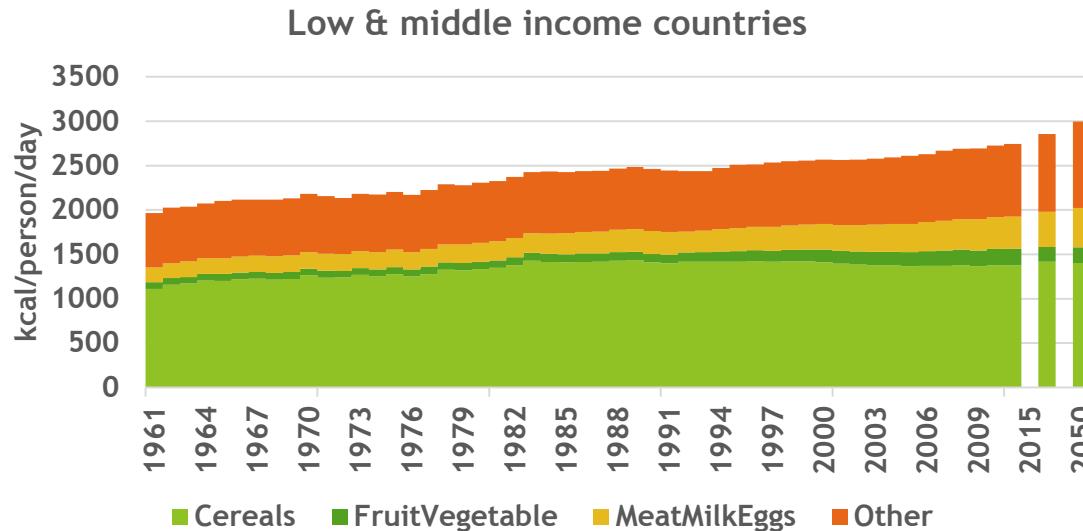
# Dietary changes: calories from crop products as share of total calories



Source: FAO Global Perspectives Studies, based on FAOSTAT Food Balance Sheets (extraction 22 Sept 2016)  
And AT2050 (dotted data). Unpublished.



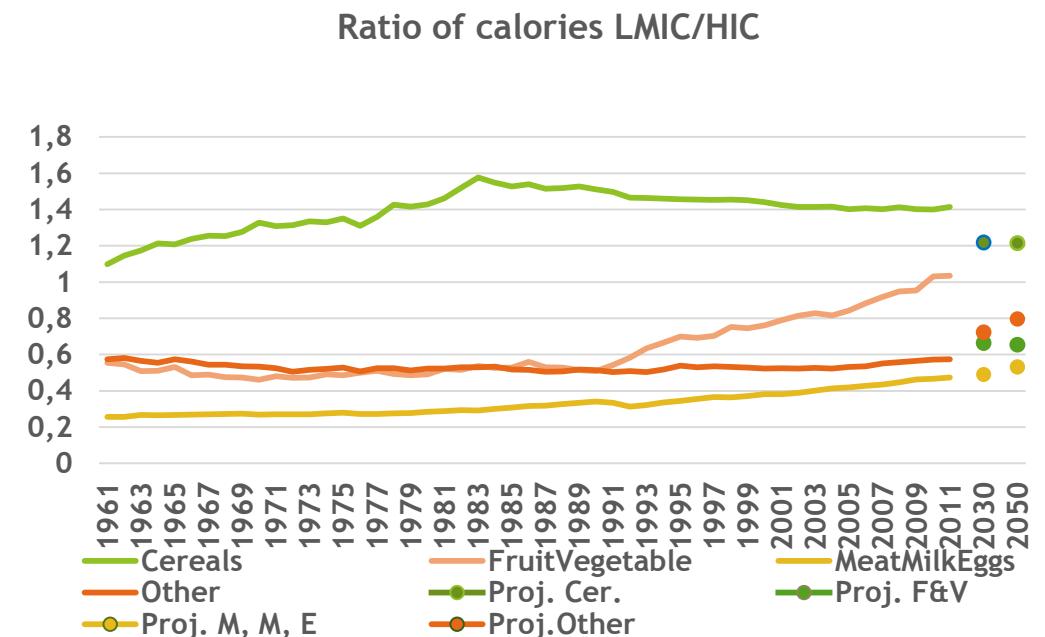
# Dietary transitions: per capita Kcal by type of food



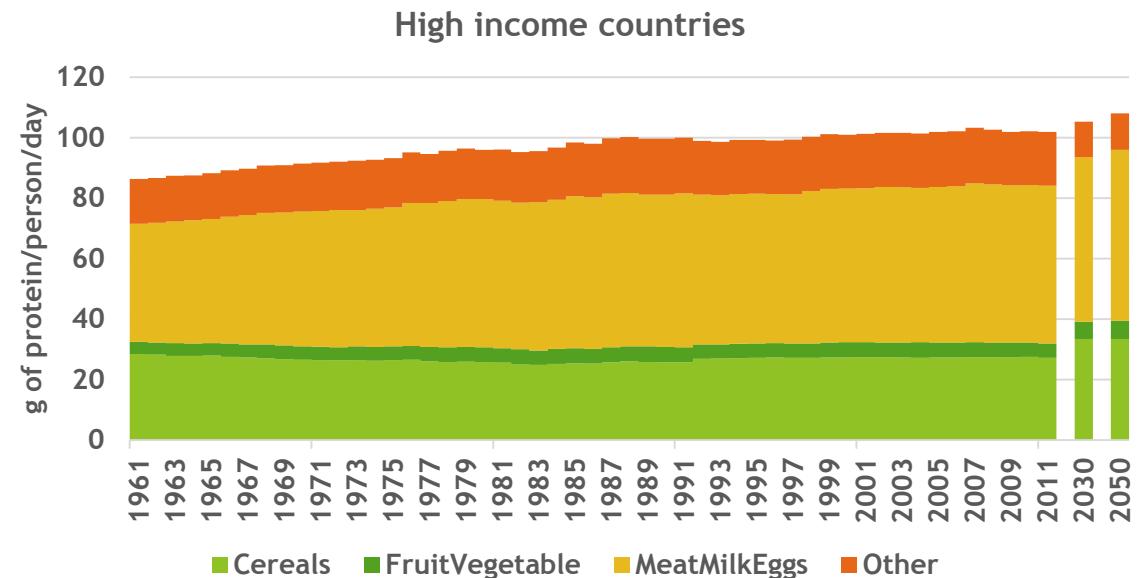
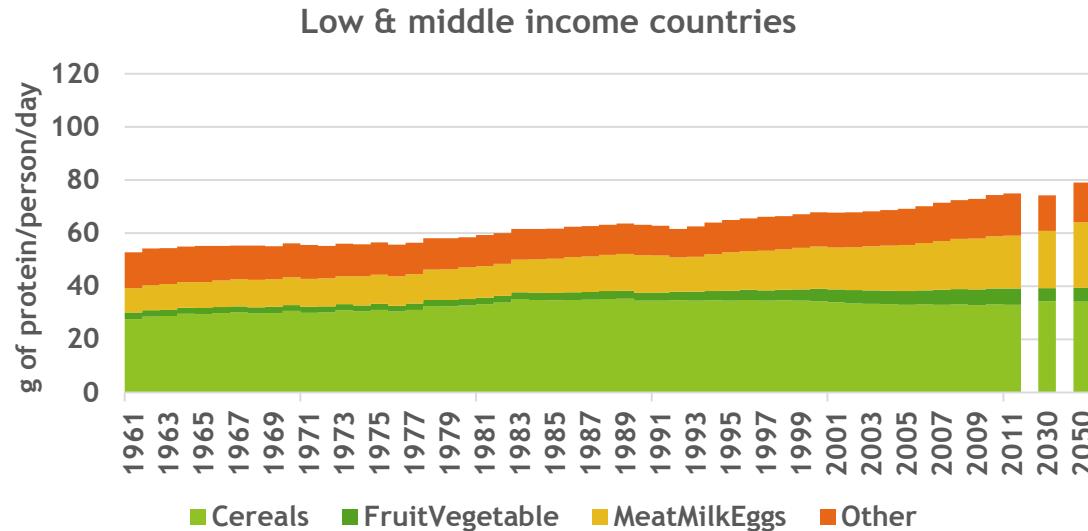
## Diets in low and middle-income countries evolve:

- P.c. consumption kilocalories increased
- The share of animal products and fruits and vegetables increased
- The average composition converged for most food items to the diet of high-income countries
- Projections reinforce historical trends (apart from fruits and vegetables)

Source: FAO Global Perspectives Studies, based on FAOSTAT Food Balance Sheets (extraction 22 Sept 2016) and AT2050 (dotted data). Unpublished.



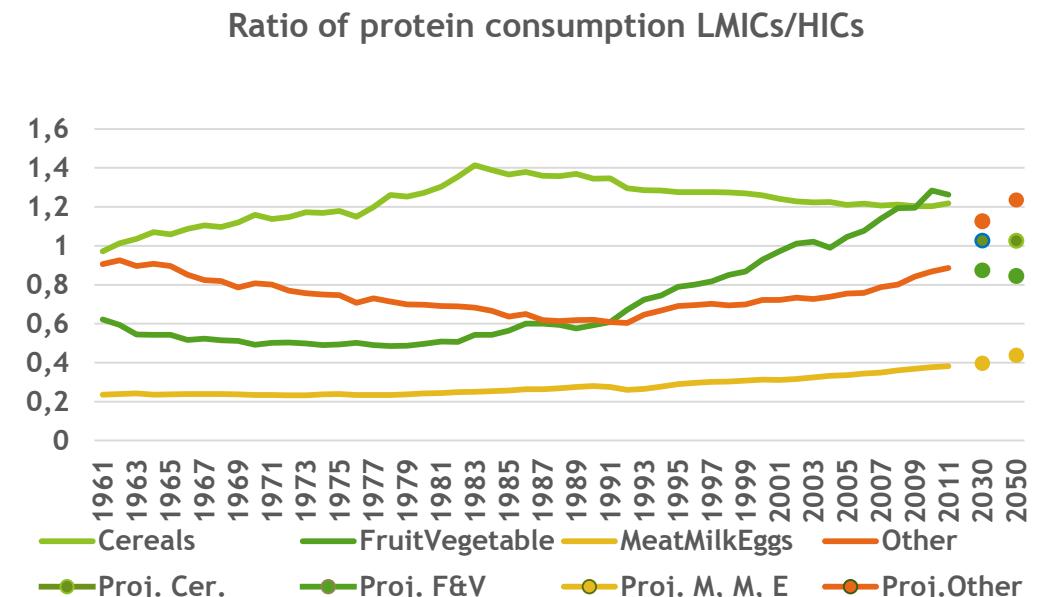
# Dietary transitions: p.c. proteins (gr) by type of food



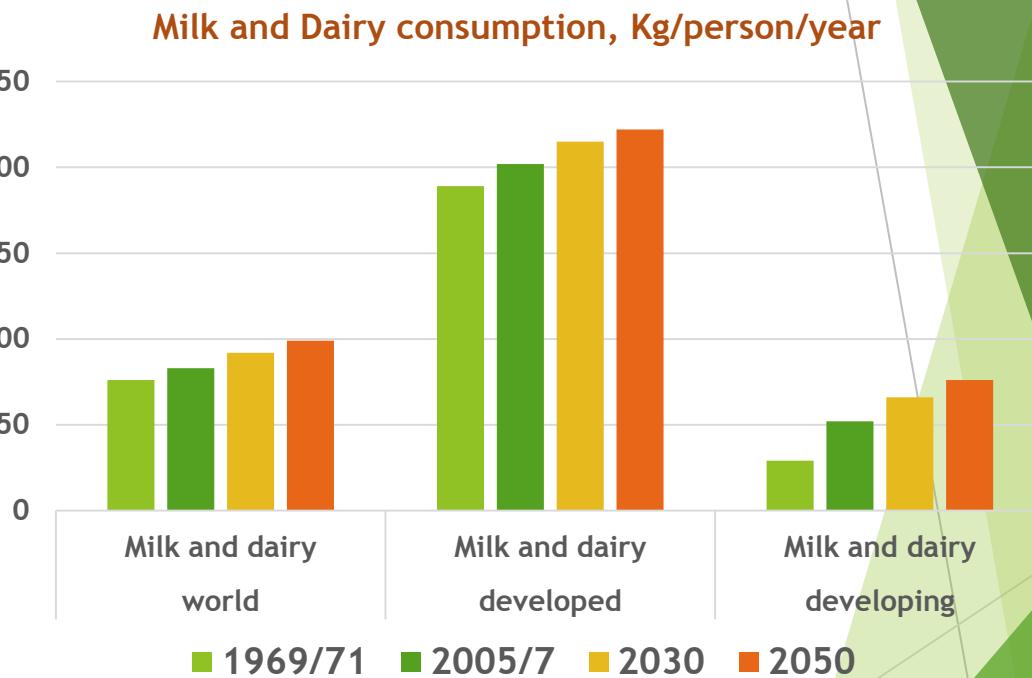
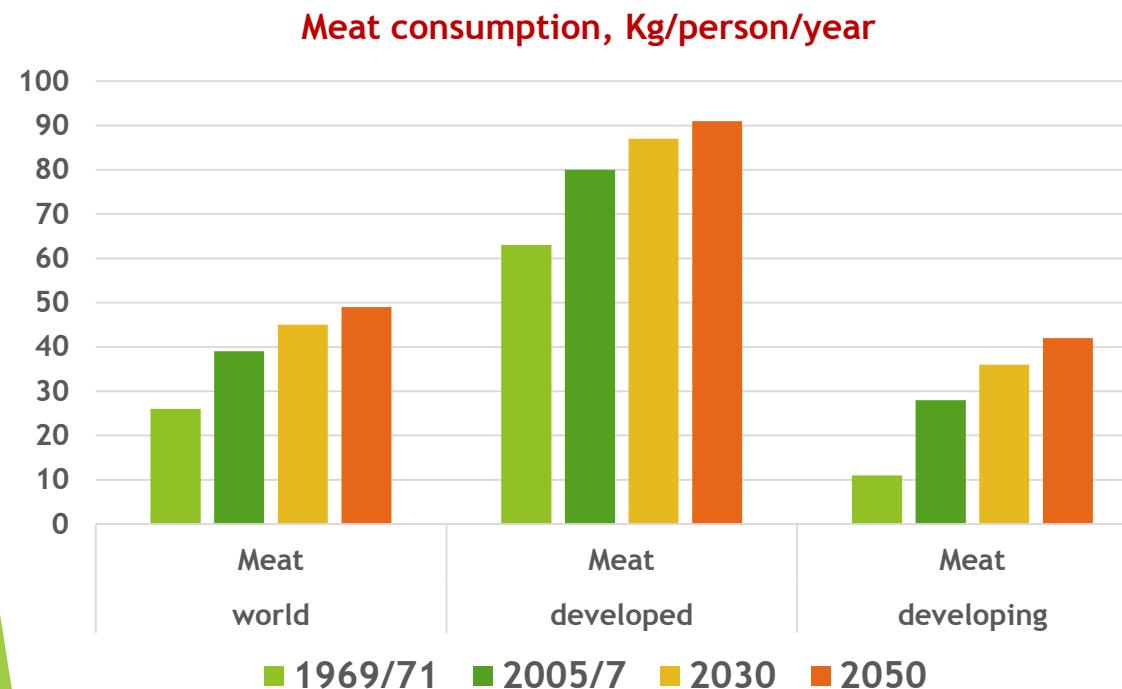
## Diets in low and middle-income countries evolve:

- P.c. consumption proteins increasing
- The share of animal products and fruits and vegetables increased
- The average composition converged for most food items to the diet of high-income countries
- Projections reinforce historical trends (apart from fruits and vegetables)

Source: FAO Global Perspectives Studies, based on FAOSTAT Food Balance Sheets (extraction 22 Sept 2016) and AT2050 (dotted data). Unpublished.



# Dietary transition: growth of animal-sourced foods



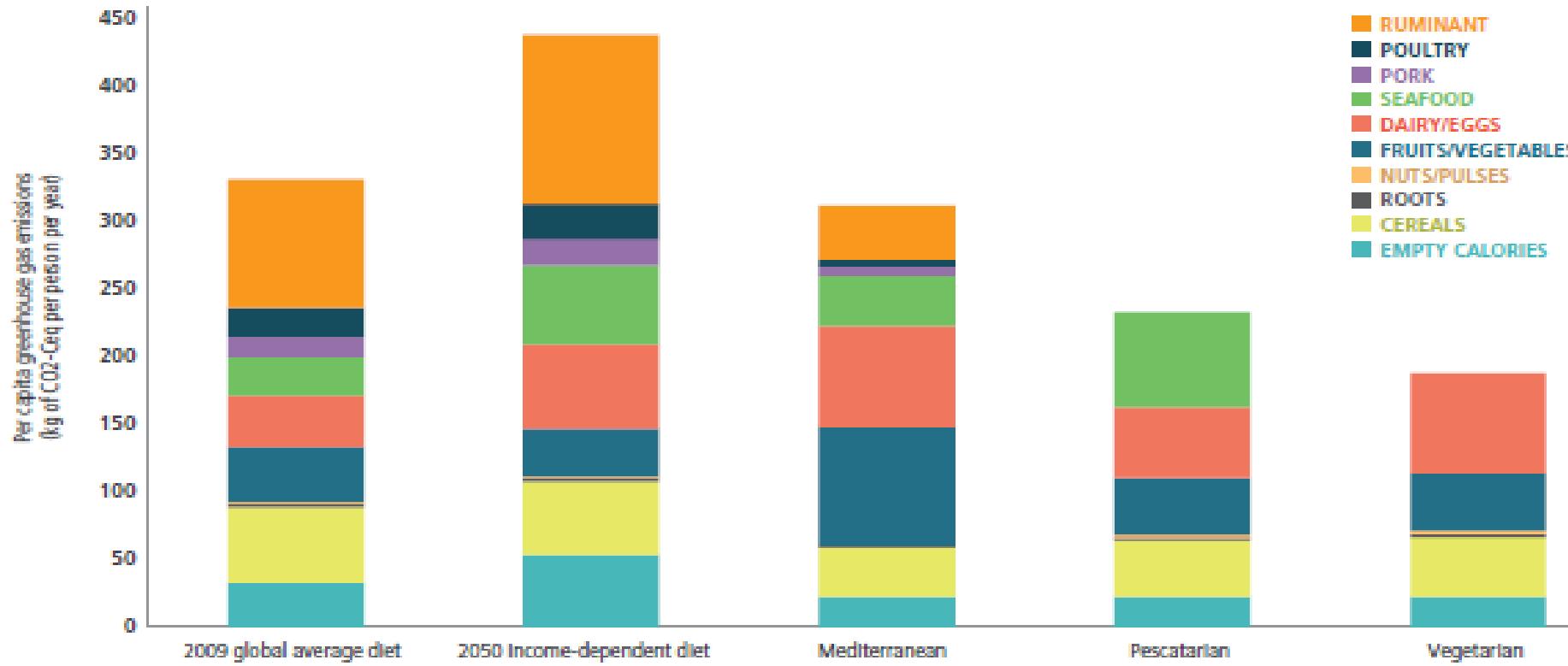
Source: FAO Global Perspectives Studies, AT2050

We can feed the world, but we have to address key challenges ... *starting now!*

1. Sustainably increasing agricultural productivity, to meet increasing demand for food
2. Ensuring a sustainable natural resource base
3. Dealing with climate change and intensification of natural hazards
4. Preventing high impact transboundary agricultural and food system threats
5. Addressing continuing poverty and increasing inequality
6. Tackling the triple burden of malnutrition
7. Addressing migration and employment challenges
8. Building resilience to cope with and mitigate protracted crises and conflicts
9. Ensuring more efficient, inclusive and resilient food systems
10. Addressing the needs of coherent national and international governance

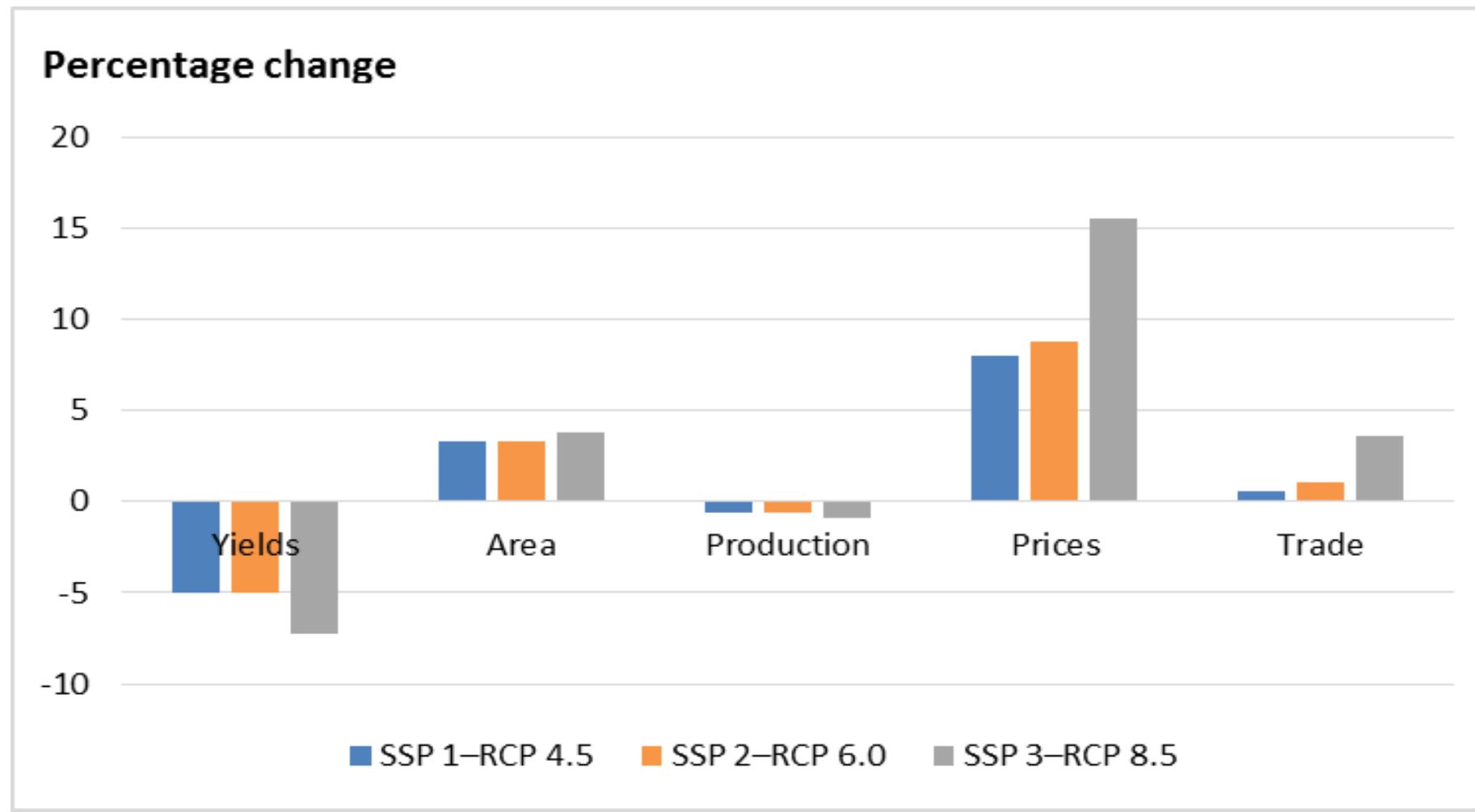
# two examples

# Effects of diet type on greenhouse gas emissions



Source: International Food Policy Research Institute. 2015. Global Nutrition Report 2015

# Global impacts of climate change on crop yields, area, agricultural production, prices and trade by 2050



Source: FAO, The State of Food and Agriculture 2016 (forthcoming)

**Thank you  
for your attention**