

# New FAO updates on GHG emissions from AFOLU

FAO-IPCC-IFAD expert meeting: Emerging activities to combat climate change  
Use of FAO data and IPCC GHG inventory guidelines for agriculture and land use  
Rome, Nov 13-14 2014



Food and Agriculture Organization of the United Nations

# FAO Global GHG Knowledge Generation:

- Based on FAOSTAT Emissions Database
- FAO GHG data -> IPCC AR5
- Use of FAOSTAT Emissions -> WRI, GTAP, EU-28,...
- FAO first to provide 2012 AFOLU emissions data



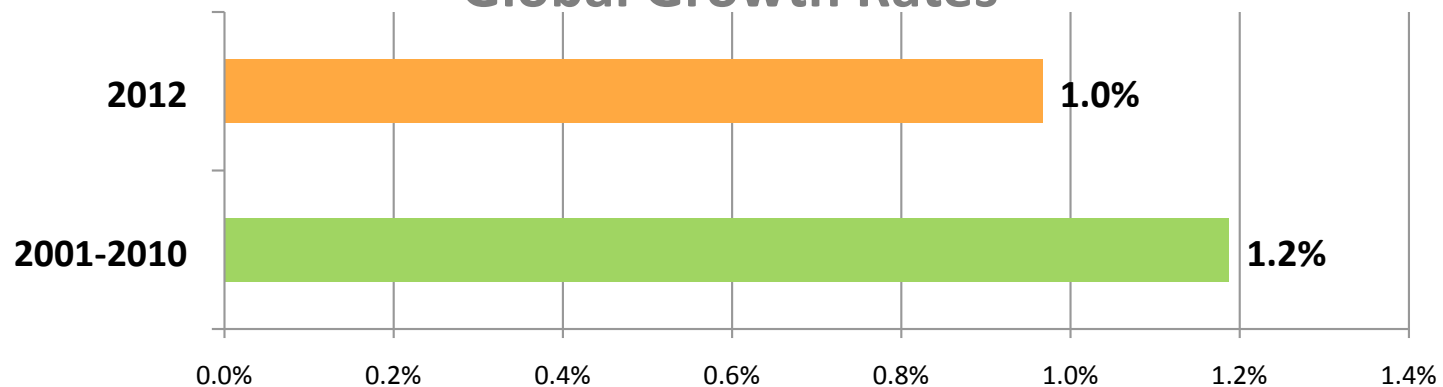
# Global Agriculture Emissions, 2012

Global emissions from agriculture (crops & livestock) continued to increase by almost 100% in the last 50 years

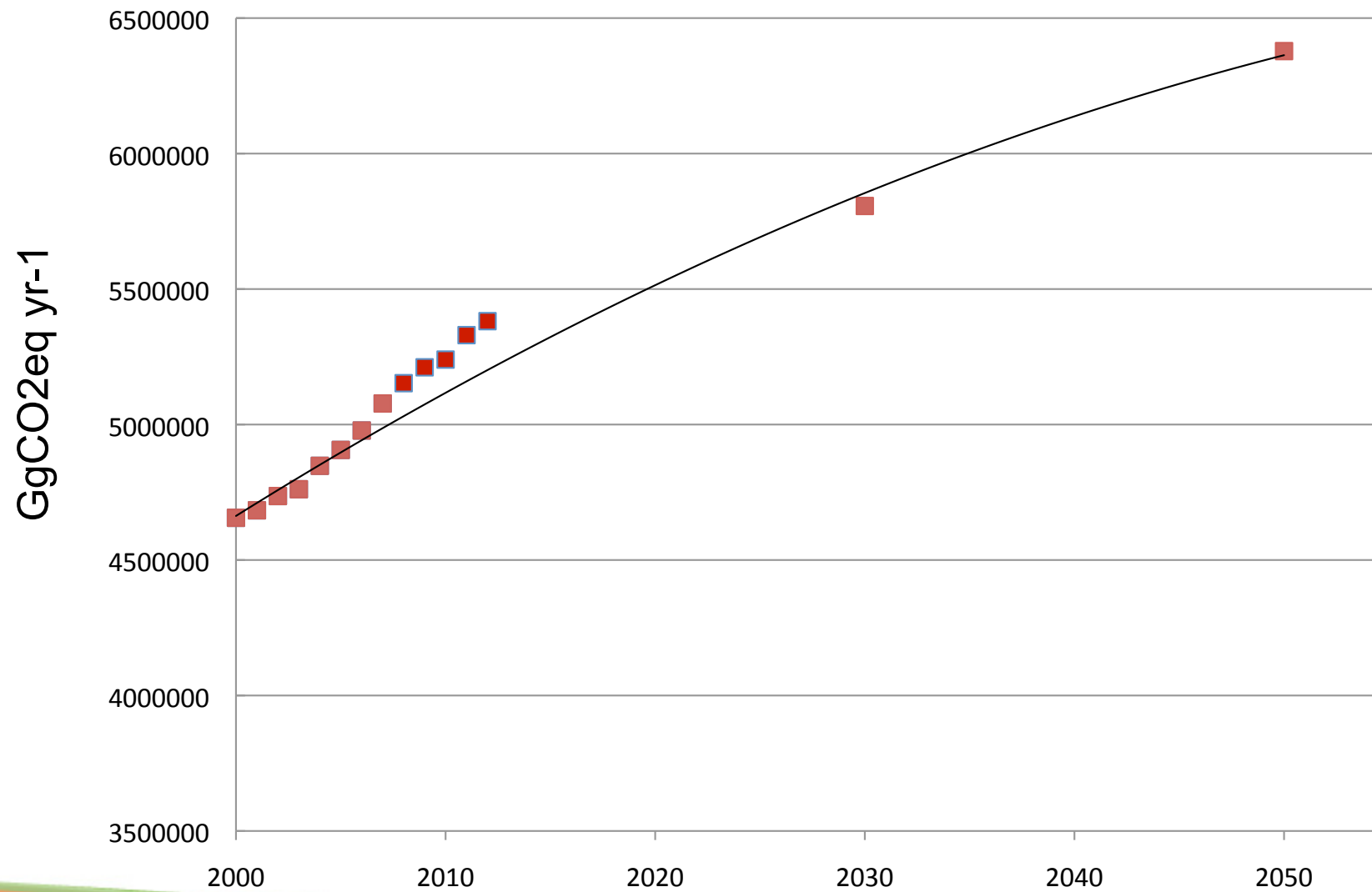
1961  
2.7 billion tonnes  
CO<sub>2</sub> eq

2012  
5.4  
billion tonnes  
CO<sub>2</sub> eq

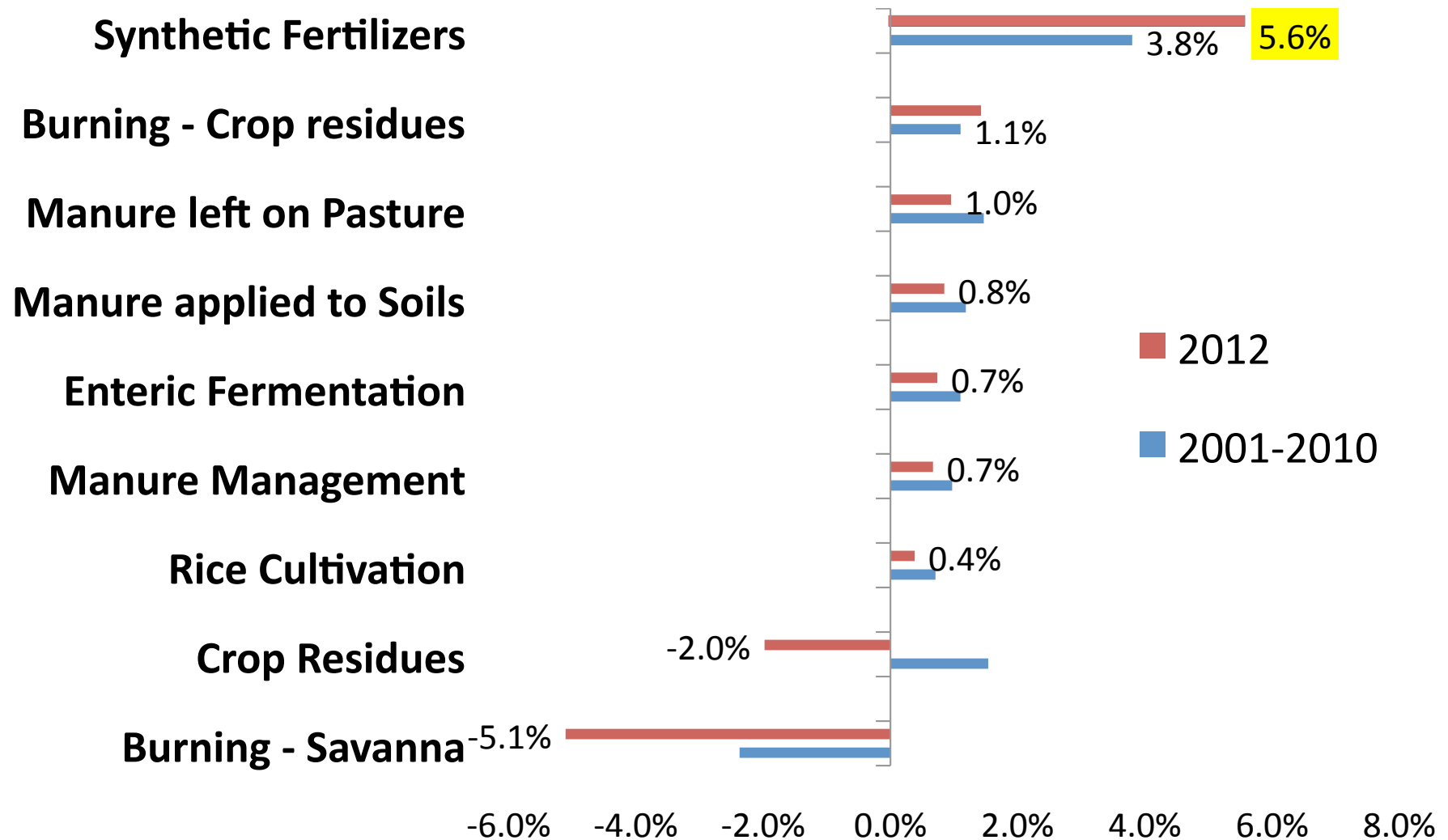
## Global Growth Rates



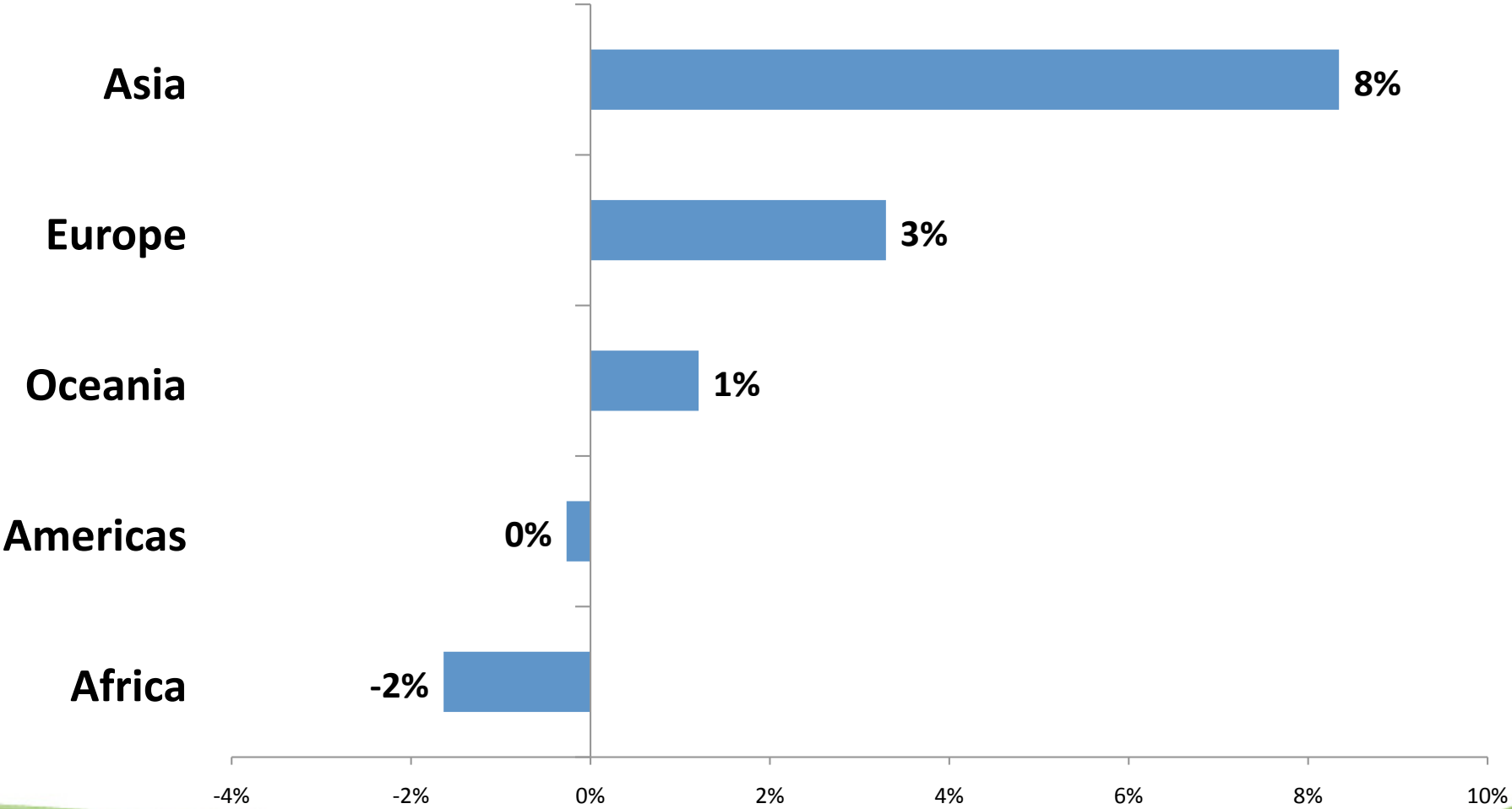
# 2012 Status Against Baseline Projections



# 2012 Growth Rates



# Synth. Fertilizer 2012 Growth Rates by Region



# Agriculture Emissions by Sector

The largest emitters in agriculture are:

In 2012:

40%



Enteric  
fermentation

16%



Manure left  
on pasture

15%



Synthetic  
fertilizers

10%



Paddy rice

7%



Manure  
management

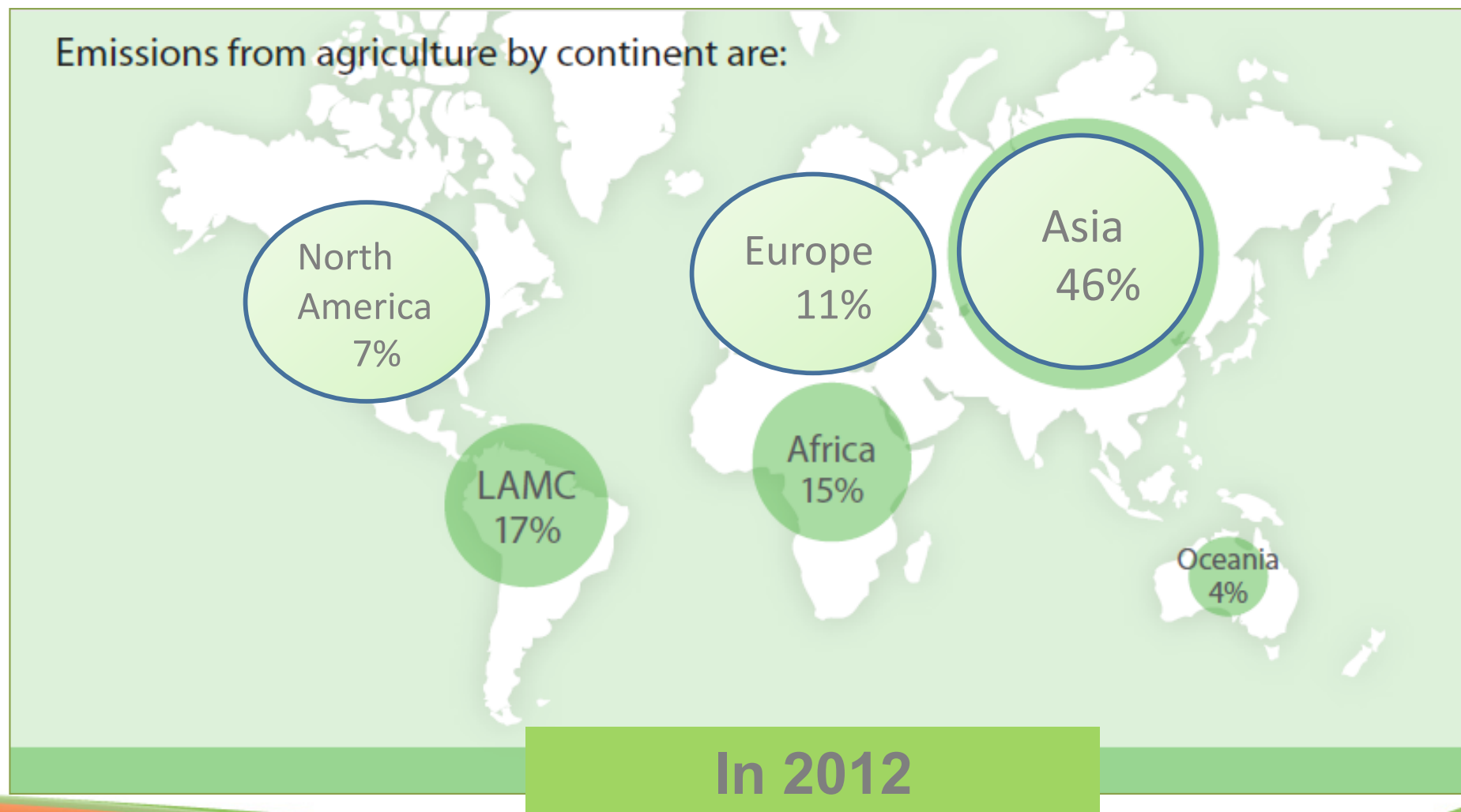
5%



Burning of  
savannahs



# Agriculture Emissions by Continent





# Regional Contributions, 2012

**Asia**

2012

**2,459**  
million tonnes  
CO<sub>2</sub> eq

**Latin America  
& the Caribbean**

2012

**903**  
millones de toneladas CO<sub>2</sub> eq

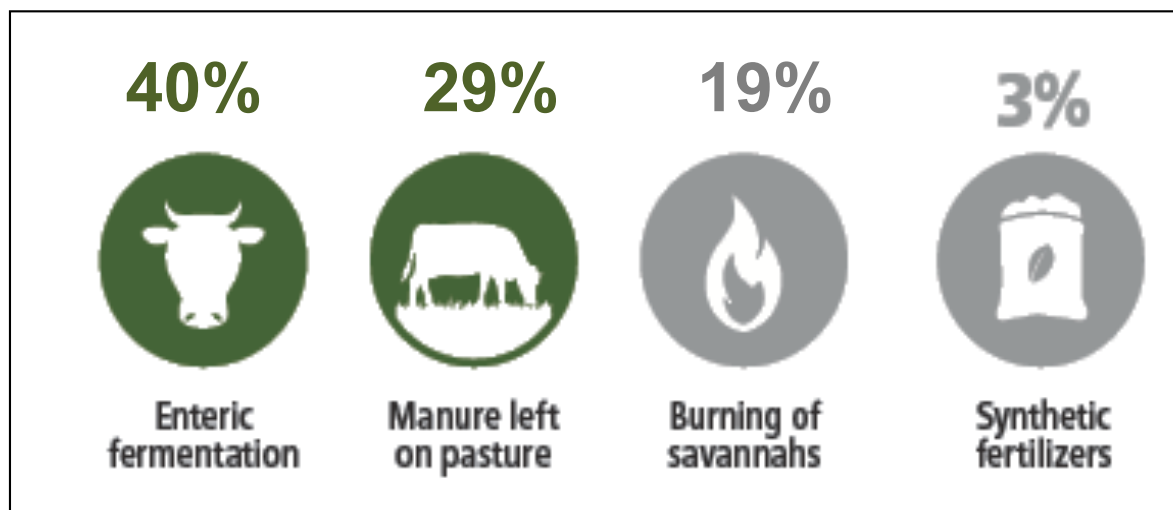
**Africa**

2012

**798**  
million tonnes  
CO<sub>2</sub> eq

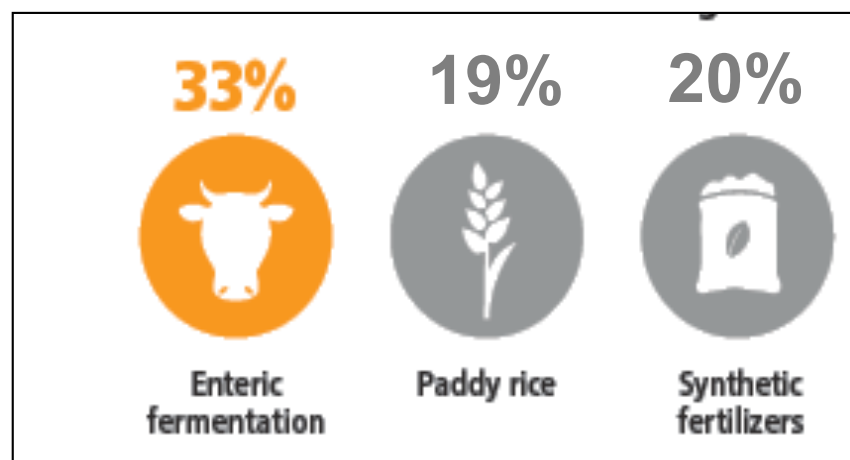


# Regional and Sectoral overview

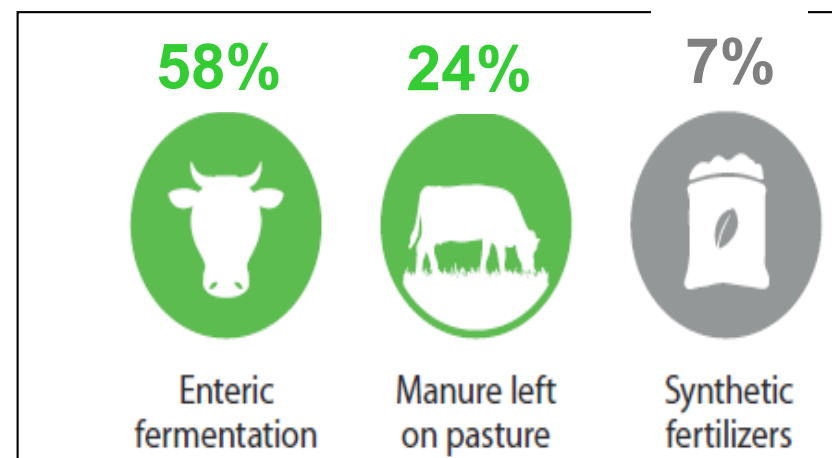


## Africa

## Asia



## Latin America



In 2012



# Global Emissions from AFOLU

## Sources and Sinks

Global emissions by sources from agriculture, forestry and other land uses were nearly

**10 billion tonnes**  
**CO<sub>2</sub> eq**

Global removals by sinks from agriculture, forestry and other land uses were nearly

**2 billion tonnes**  
**CO<sub>2</sub> eq**

Sources and sinks in the agriculture, forestry and other land use sectors include:



crops & livestock  
(+5.0)



net forest conversion  
(+3.7)



forest  
(-1.9)



biomass fires  
(+0.3)

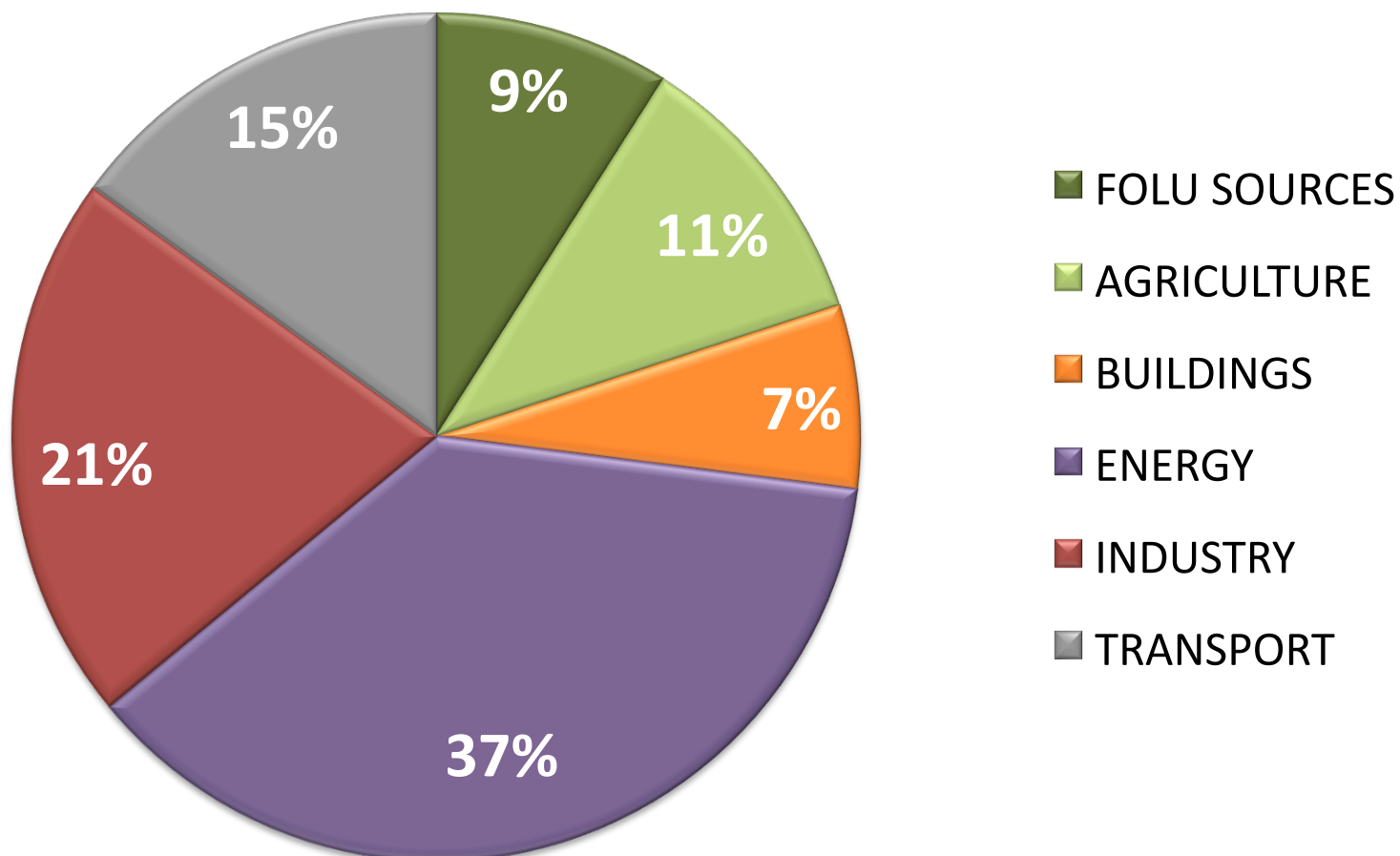


degraded peatlands  
(+0.8)

Figures are averages for the period 2001-2010, expressed in billion tonnes CO<sub>2</sub> eq



# AFOLU % of Total Anthropogenic Emissions



IPCC AR5 WGIII Data Sources:  
EDGAR and FAOSTAT Emissions Database



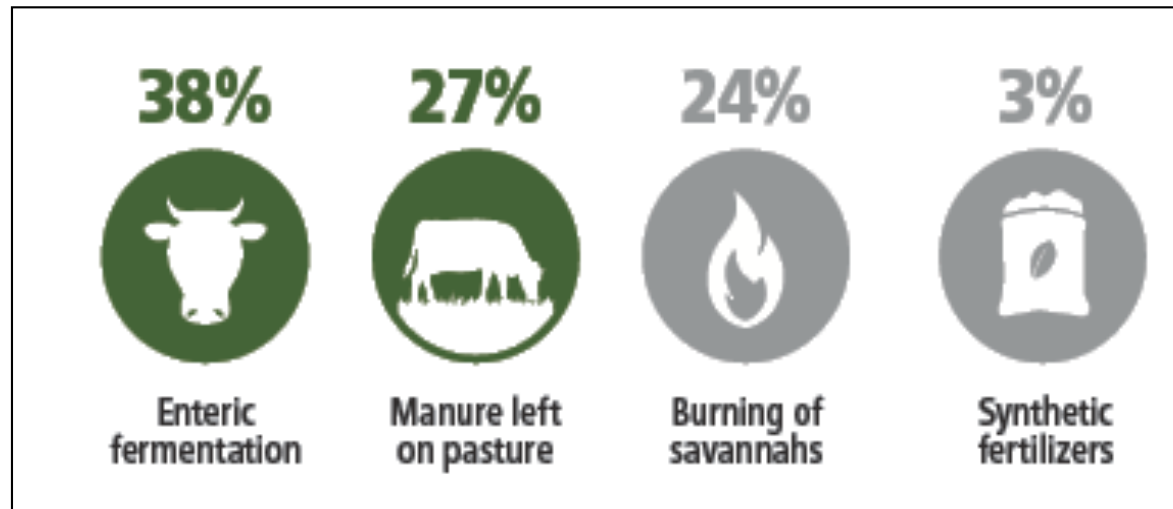
# Thank you!

[http://faostat3.fao.org/download/G1/\\*/E](http://faostat3.fao.org/download/G1/*/E)

[http://faostat3.fao.org/download/G2/\\*/E](http://faostat3.fao.org/download/G2/*/E)

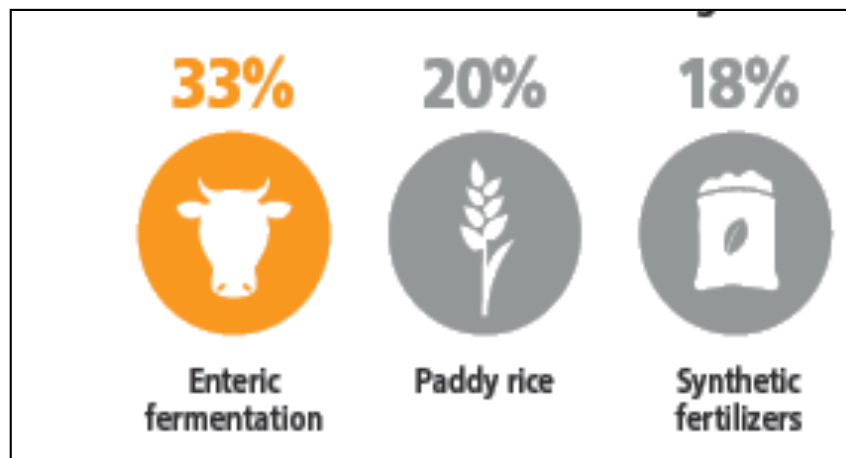


# Regional overview

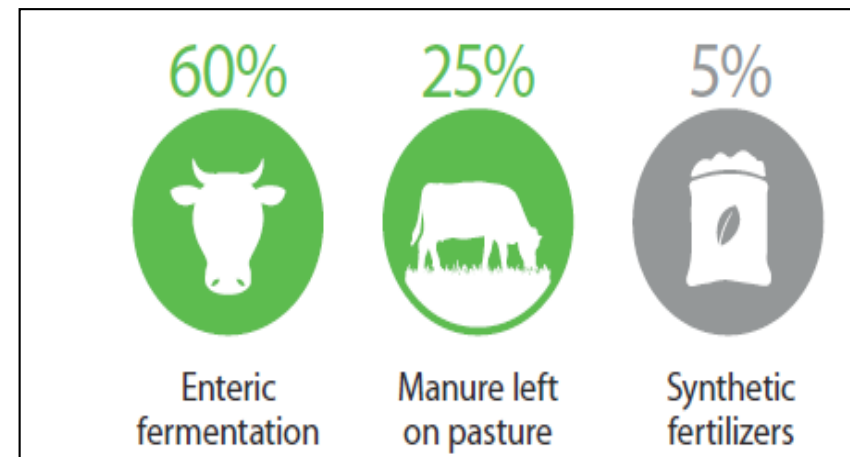


## Africa

## Asia



## Latin America



Average 2001-2010



# 2012 Growth Rates by Category

