



International Partnership
on Mitigation and MRV



United Nations
Framework Convention on
Climate Change

Anglophone African Regional Workshop
Converting INDCs into action: the role of NAMAs in INDC implementation
Addis Ababa, 2-4 May 2016

AFOLU - Supplements

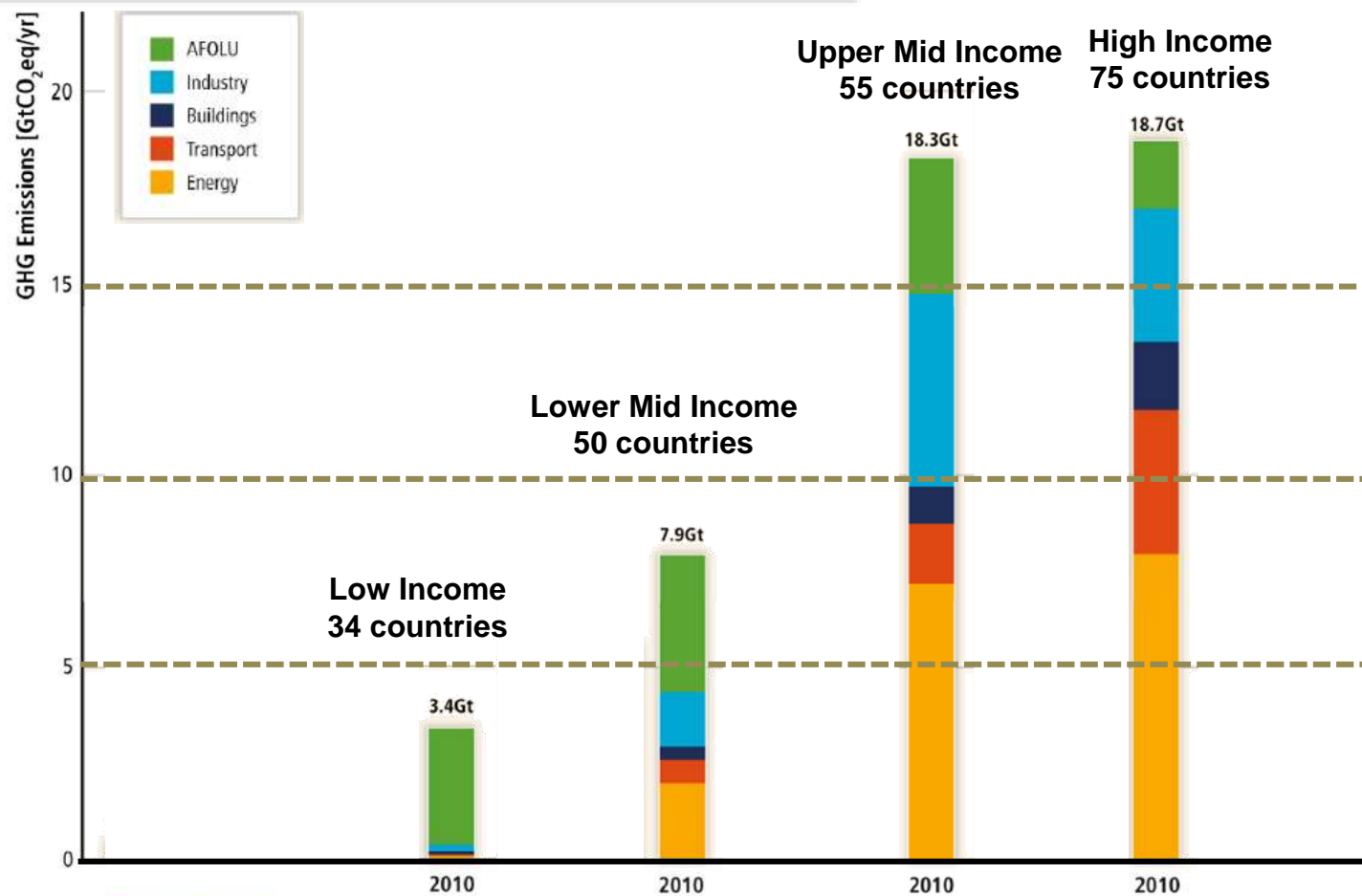
Martial Bernoux



Food and Agriculture Organization of the United Nations

www.fao.org/climatechange/micca

Different profiles according to "income" level





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

10 billion tonnes CO₂ eq in 2010

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

2 billion tonnes CO₂ eq in 2010

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



crops & livestock
(+5.0)



net forest conversion
(+3.8)



forest
(-1.9)

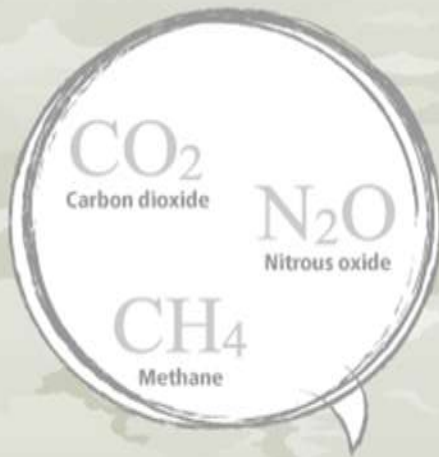


biomass fires
(+0.2)



degraded peatlands
(+1.0)

Figures are averages for the period 2001-2010, expressed in billion tonnes CO₂ eq



GREENHOUSE GAS EMISSIONS

**from Agriculture, Forestry
and Other Land Use**

in Africa



GREENHOUSE GAS EMISSIONS

from Agriculture, Forestry and Other Land Use

in Africa

Total emissions by sources from agriculture, forestry and other land uses were more than

1.870 million tonnes CO₂ eq

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

83 million tonnes CO₂ eq

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



crops & livestock
(+725)



net forest conversion
(+968)



forest
(-83)



biomass fires
(+132)



degraded peatlands
(+45)

Figures are averages for the period 2001-2010, expressed in million tonnes CO₂ eq



GREENHOUSE GAS EMISSIONS

from Agriculture, Forestry and Other Land Use

in Africa

Regional emissions from agriculture (crops & livestock) increased by 243% in the last 50 year

1961
232 million tonnes
CO₂ eq

2012

798
million tonnes
CO₂ eq



GREENHOUSE GAS EMISSIONS

from Agriculture, Forestry and Other Land Use

in Africa

The largest emitters in agriculture are:

38%



Enteric fermentation

27%



Manure left on pasture

24%



Burning of savannahs

3%



Synthetic fertilizers

3%



Paddy rice

2%



Manure management

Figures are averages for the period 2001-2010

Livestock-related emissions from enteric fermentation and manure contributed nearly two-thirds of the total.



Mitigation of Climate Change in Agriculture (MICCA) Programme

-
- Overview
- On the ground
- International fora
- Knowledge
- Events
- Resources

- Publications
- Articles
- Infographics
- Videos
- Presentations
- Tools**
- AFOLU Emissions Analysis tools**
- Learning

AFOLU Emissions Analysis Tools

The AFOLU Emissions Analysis Tools aim at supporting Member Countries in improving their national capacity to address the United Nation Framework Convention on Climate Change (UNFCCC) reporting requirements and to design climate policy actions (i.e. GHG Inventories, Nationally Appropriate Mitigation Actions – NAMAs – and Nationally Determined Contributions – NDCs) for the agriculture, forestry and other land use (AFOLU) sector.

Emissions Overview

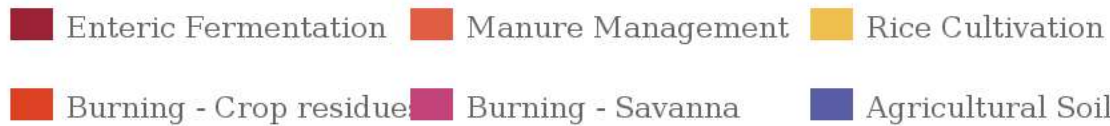
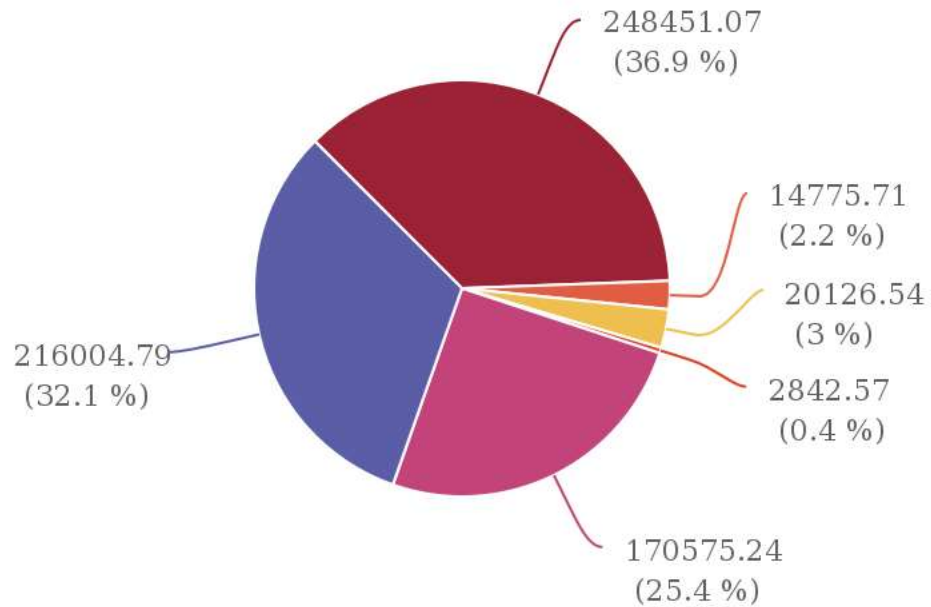
The tool gives users an overview of emissions and trends in the AFOLU sector for one or more user-specified countries. It also contextualizes the emissions within the respective region(s), continent(s), and the world. Such information can support countries in the preparation of NAMAs and NDCs.

[Go to the module](#)

<http://www.fao.org/in-action/micca/resources/tools/ghg/en/>

Africa

Gg CO₂eq (Average 1990-2012)

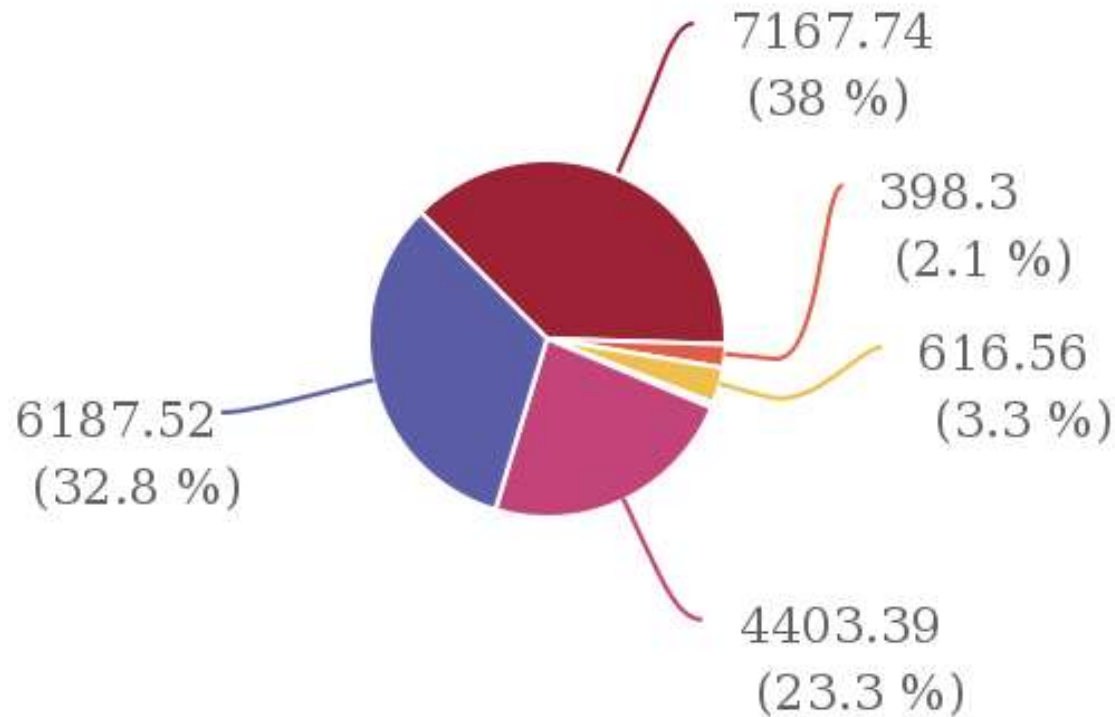


Source: FAO - AFOLU Emissions Analysis Tools

Africa
672 775,92 Gg CO₂eq (Average)

Angola, Egypt, Equatorial Guinea, Ethiopia, Gambia, Kenya, Lesotho, Liberia, Libya, Malawi, Mauritius, Namibia, Nigeria, Seychelles, Sierra Leone, Somalia, South Africa, Sudan (former), Swaziland, Zambia, Zimbabwe

Gg CO₂eq (Average 1990-2012)



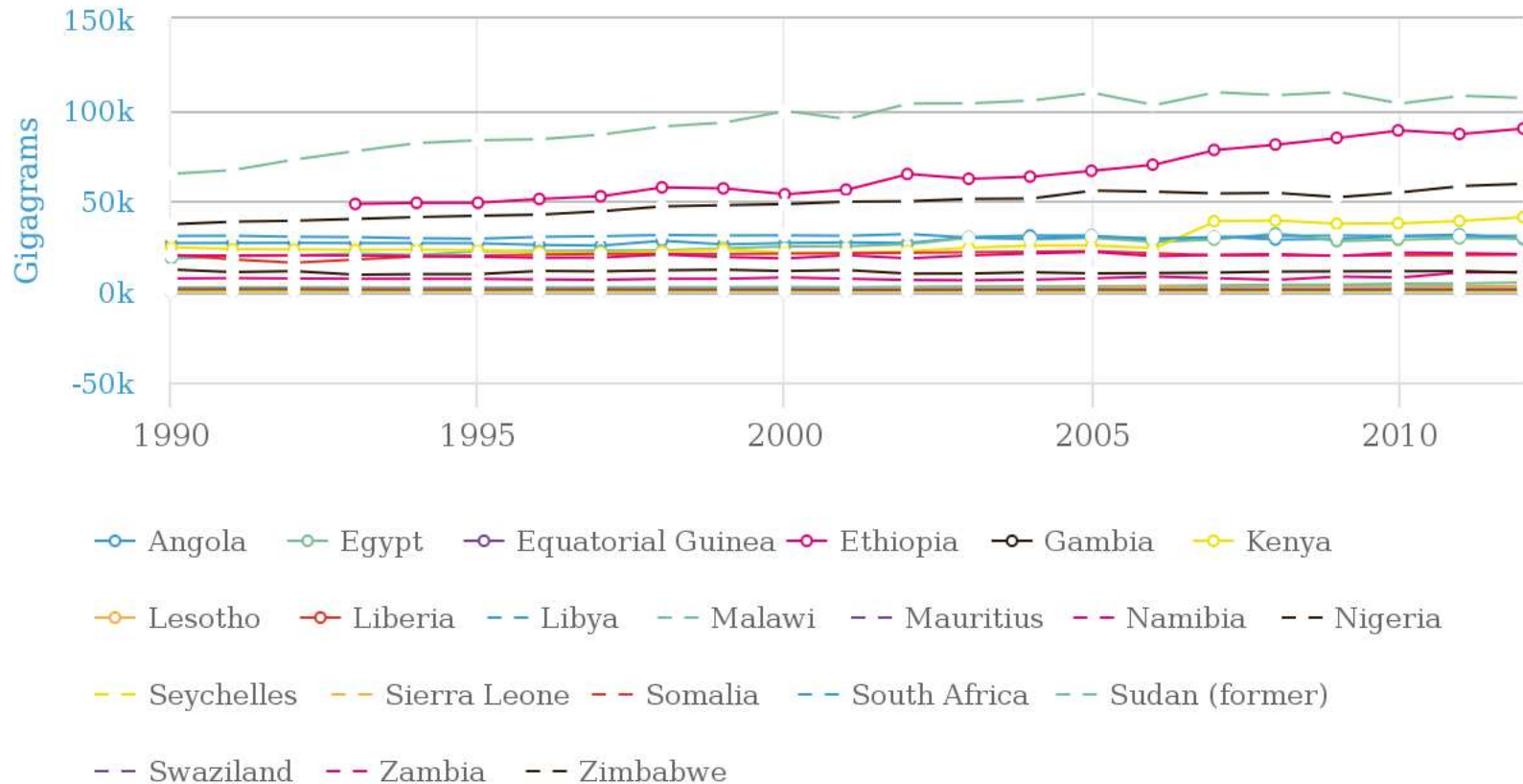
Enteric Fermentation
 Manure Management
 Rice Cultivation
 Burning - Crop residue
 Burning - Savanna
 Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Participants' countries
385 516,94 Gg CO₂eq (Average)

Agriculture Total

Gg CO₂eq



Source: FAO - AFOLU Emissions Analysis Tools

Thanks for your attention

FAO AFOLU NAMA Tool (module 3): <http://www.fao.org/3/a-i4642f.pdf>

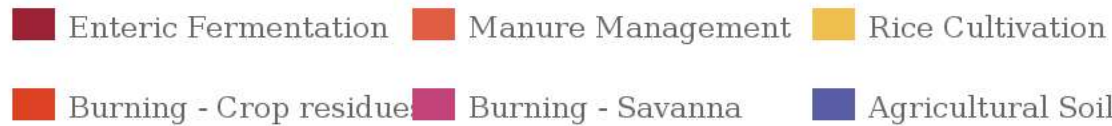
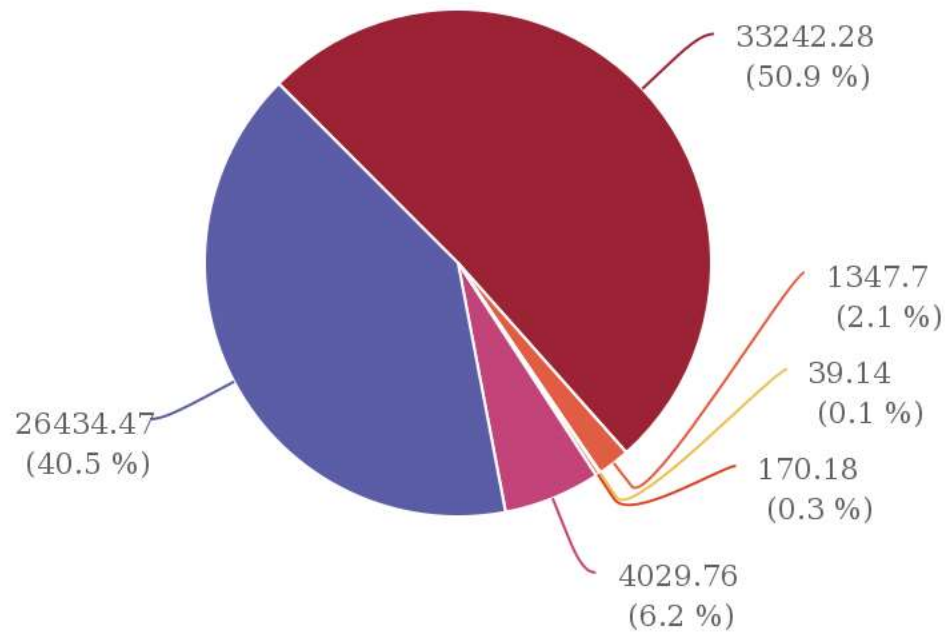
Email: martial.bernoux@fao.org



Annex 1 – Emission Profile per Country

Ethiopia

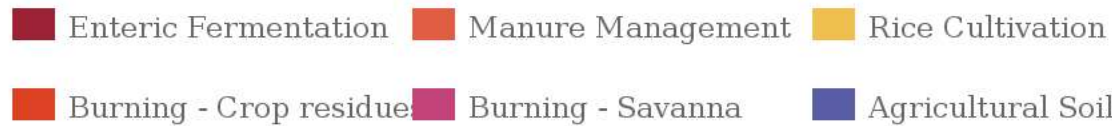
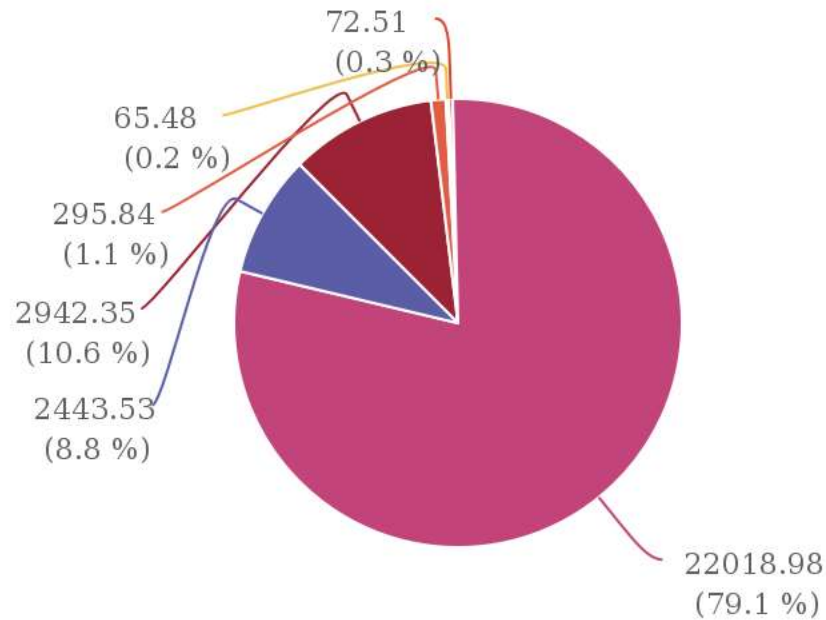
Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools

Angola

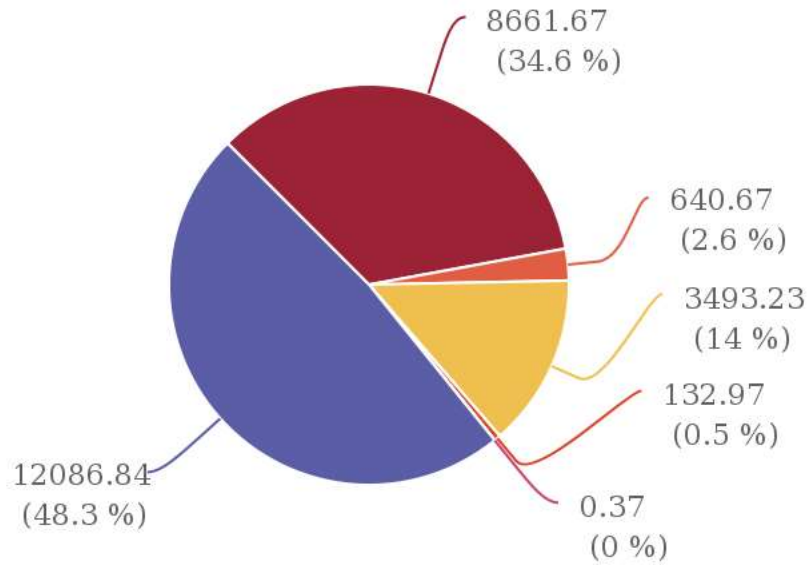
Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools

Egypt

Gg CO₂eq (Average 1990-2012)

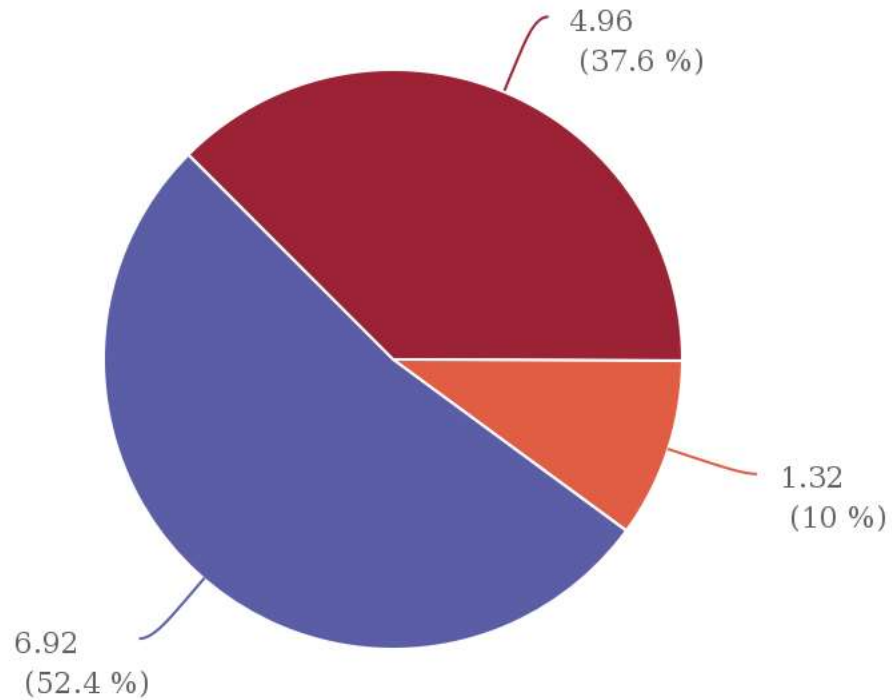


- Enteric Fermentation
- Manure Management
- Rice Cultivation
- Burning - Crop residue
- Burning - Savanna
- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Equatorial Guinea

Gg CO₂eq (Average 1990-2012)

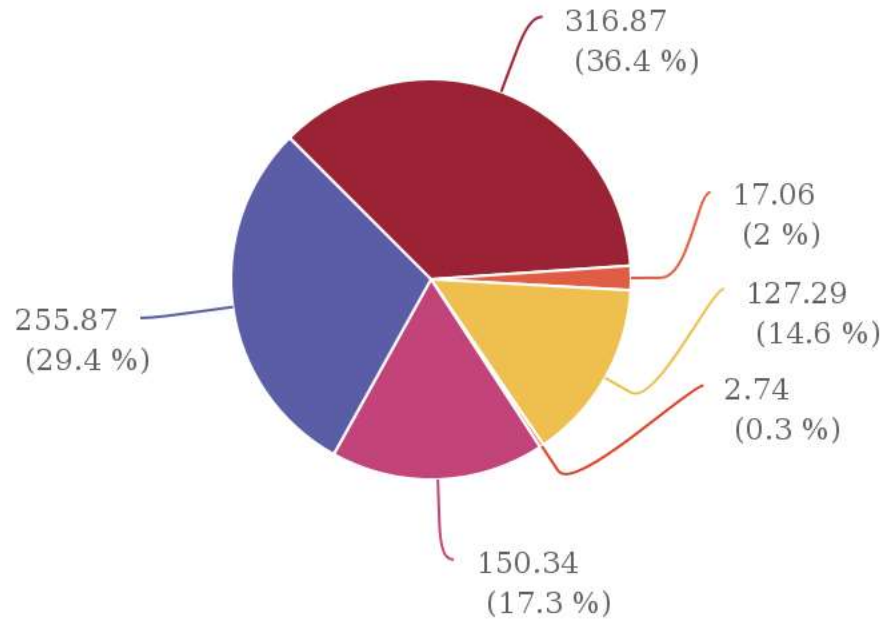


■ Enteric Fermentation ■ Manure Management ■ Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Gambia

Gg CO₂eq (Average 1990-2012)

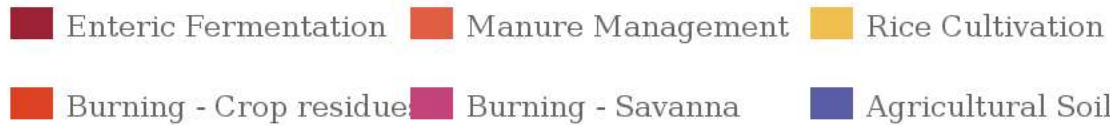
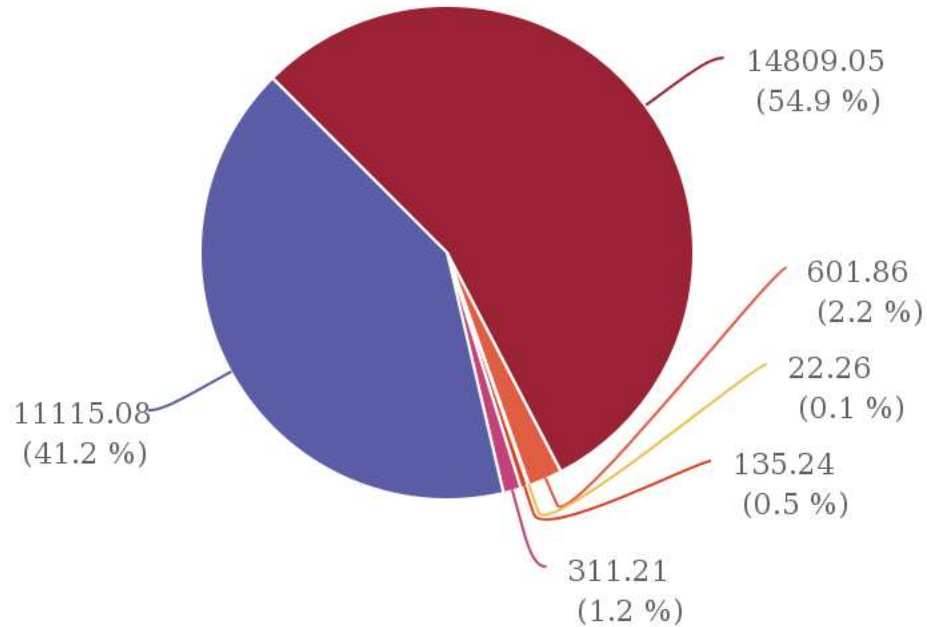


- Enteric Fermentation
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- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Kenya

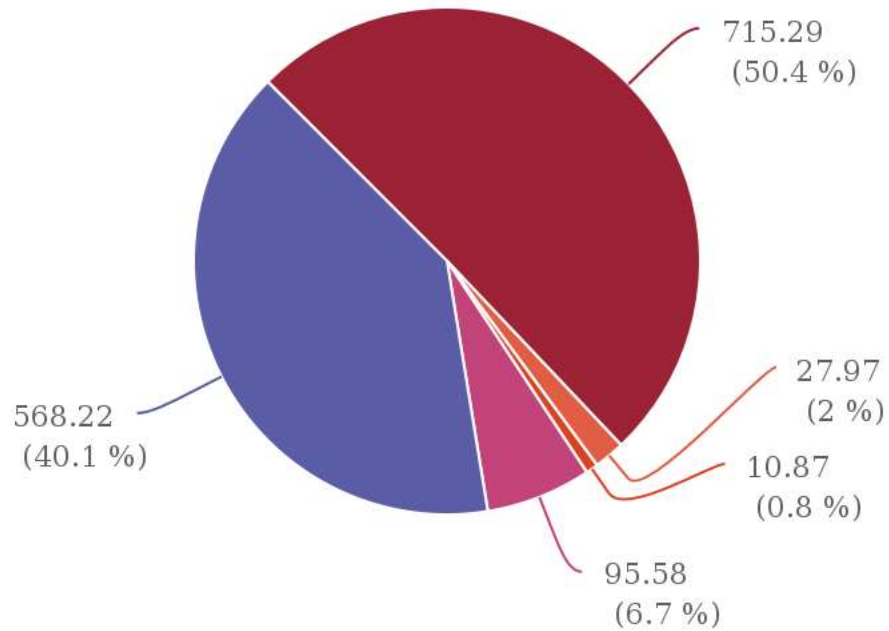
Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools

Lesotho

Gg CO₂eq (Average 1990-2012)

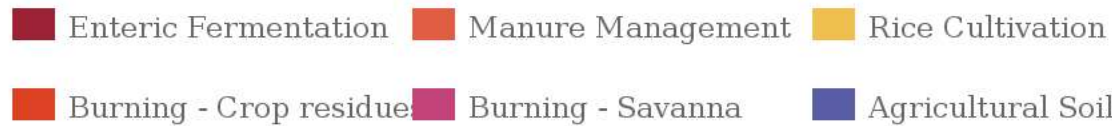
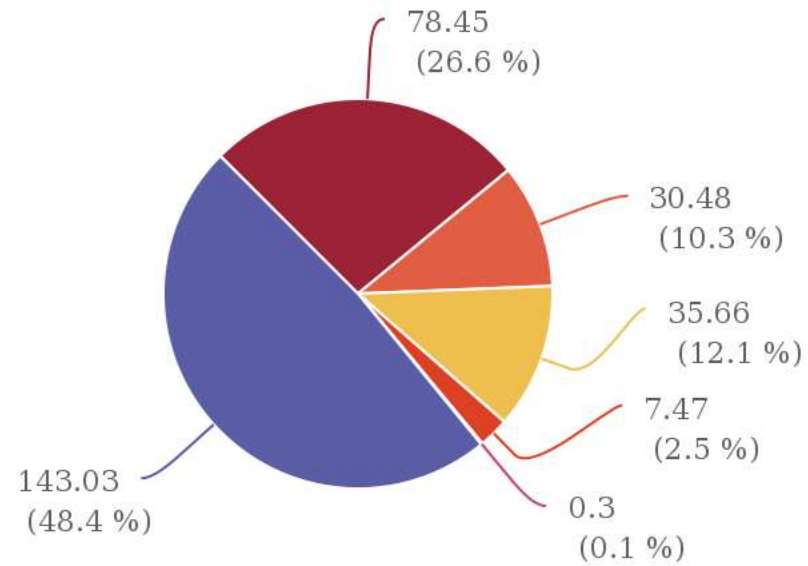


- Enteric Fermentation
- Manure Management
- Burning - Crop residues
- Burning - Savanna
- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Liberia

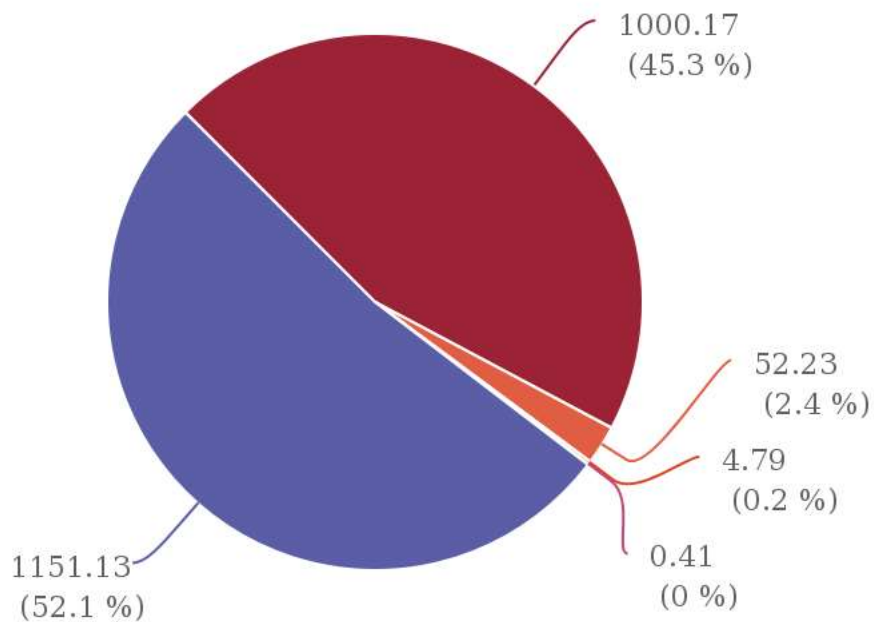
Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools

Libya

Gg CO₂eq (Average 1990-2012)

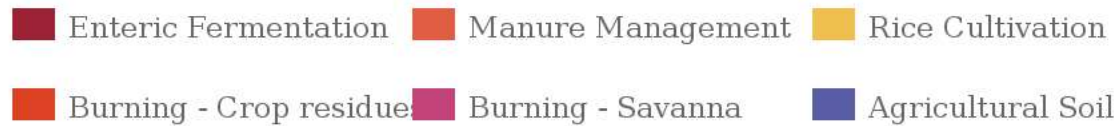
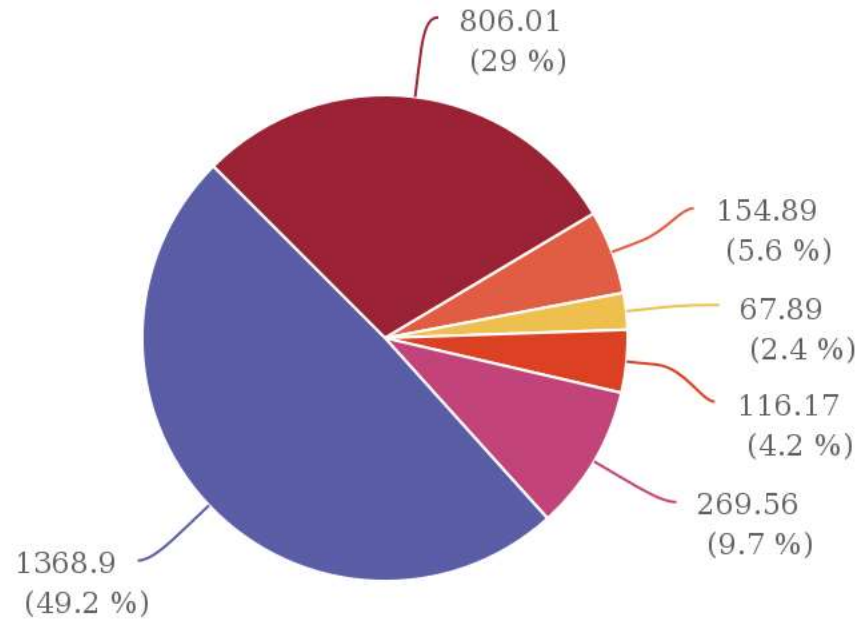


- Enteric Fermentation
- Manure Management
- Burning - Crop residues
- Burning - Savanna
- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Malawi

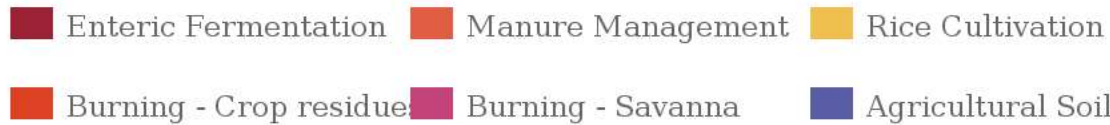
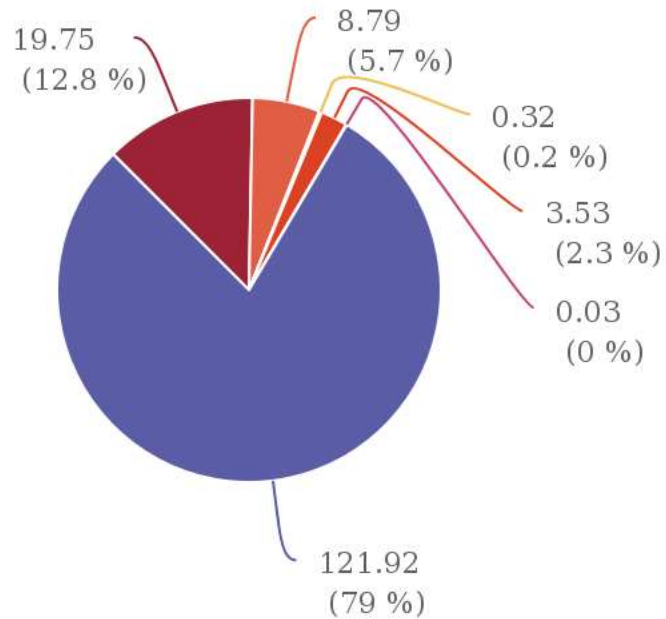
Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools

Mauritius

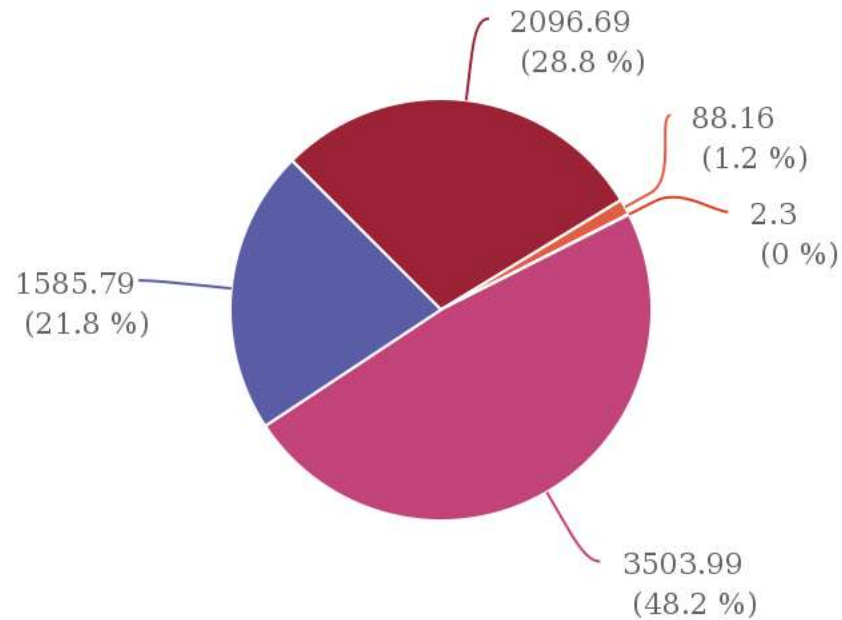
Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools

Namibia

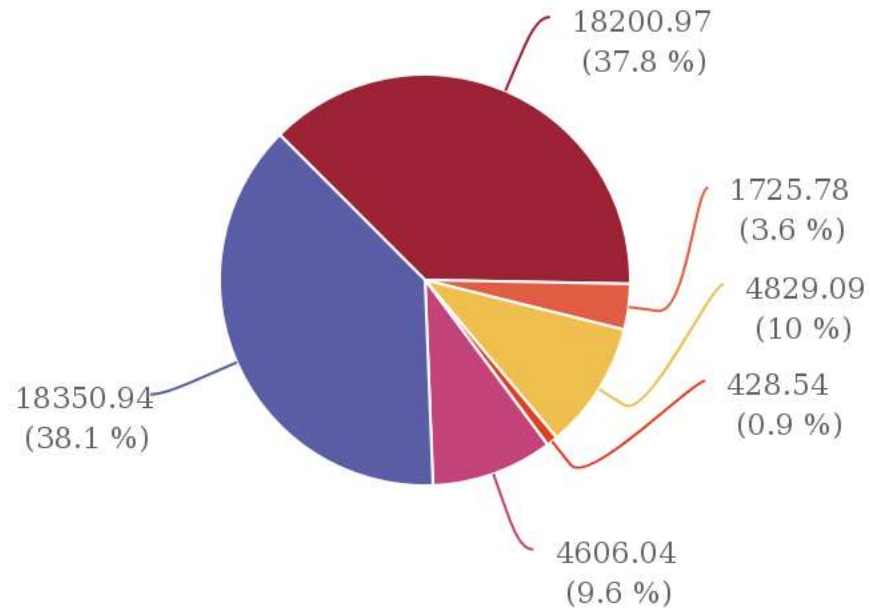
Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools

Nigeria

Gg CO₂eq (Average 1990-2012)

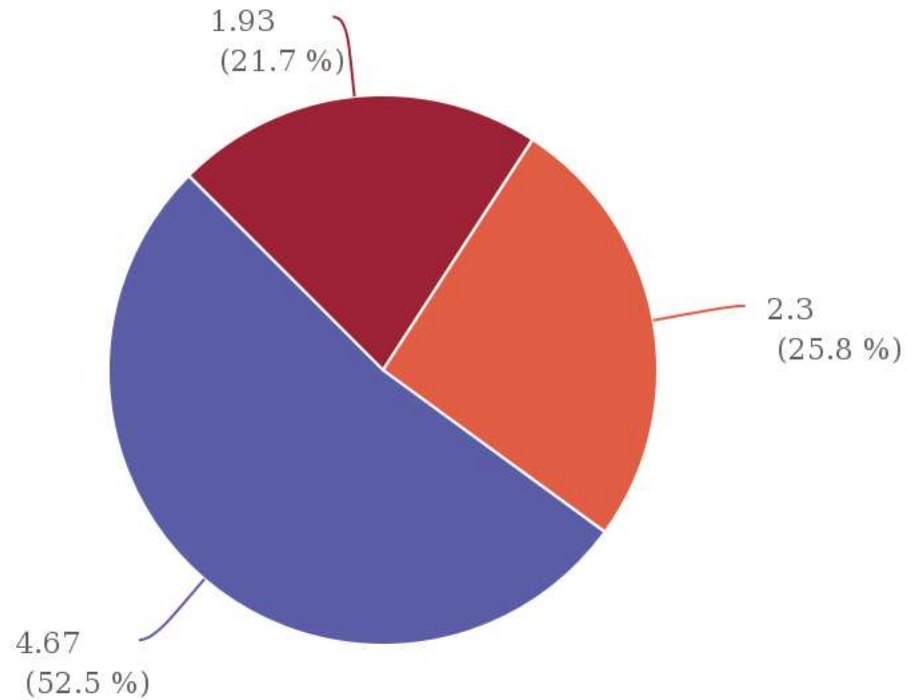


- Enteric Fermentation
- Manure Management
- Rice Cultivation
- Burning - Crop residue
- Burning - Savanna
- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Seychelles

Gg CO₂eq (Average 1990-2012)

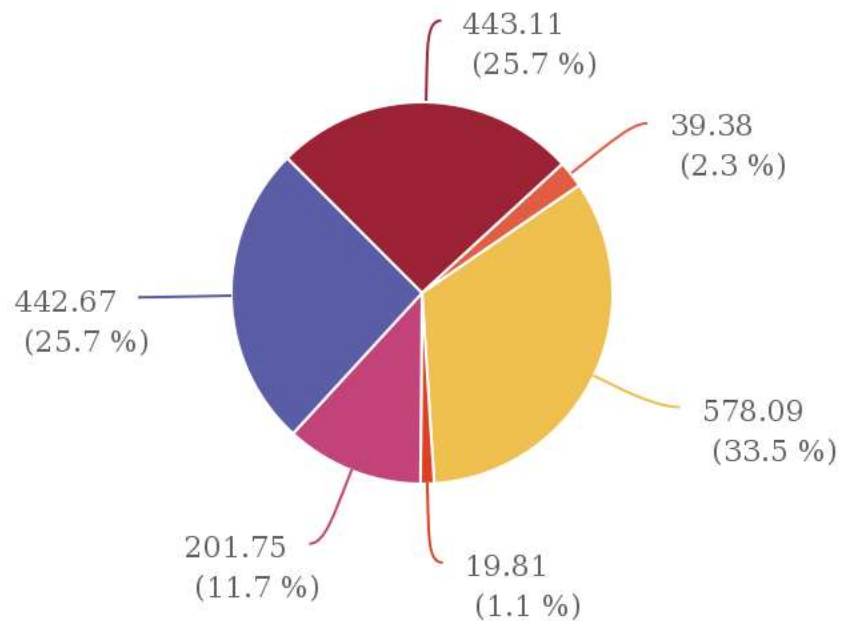


■ Enteric Fermentation ■ Manure Management ■ Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Sierra Leone

Gg CO₂eq (Average 1990-2012)

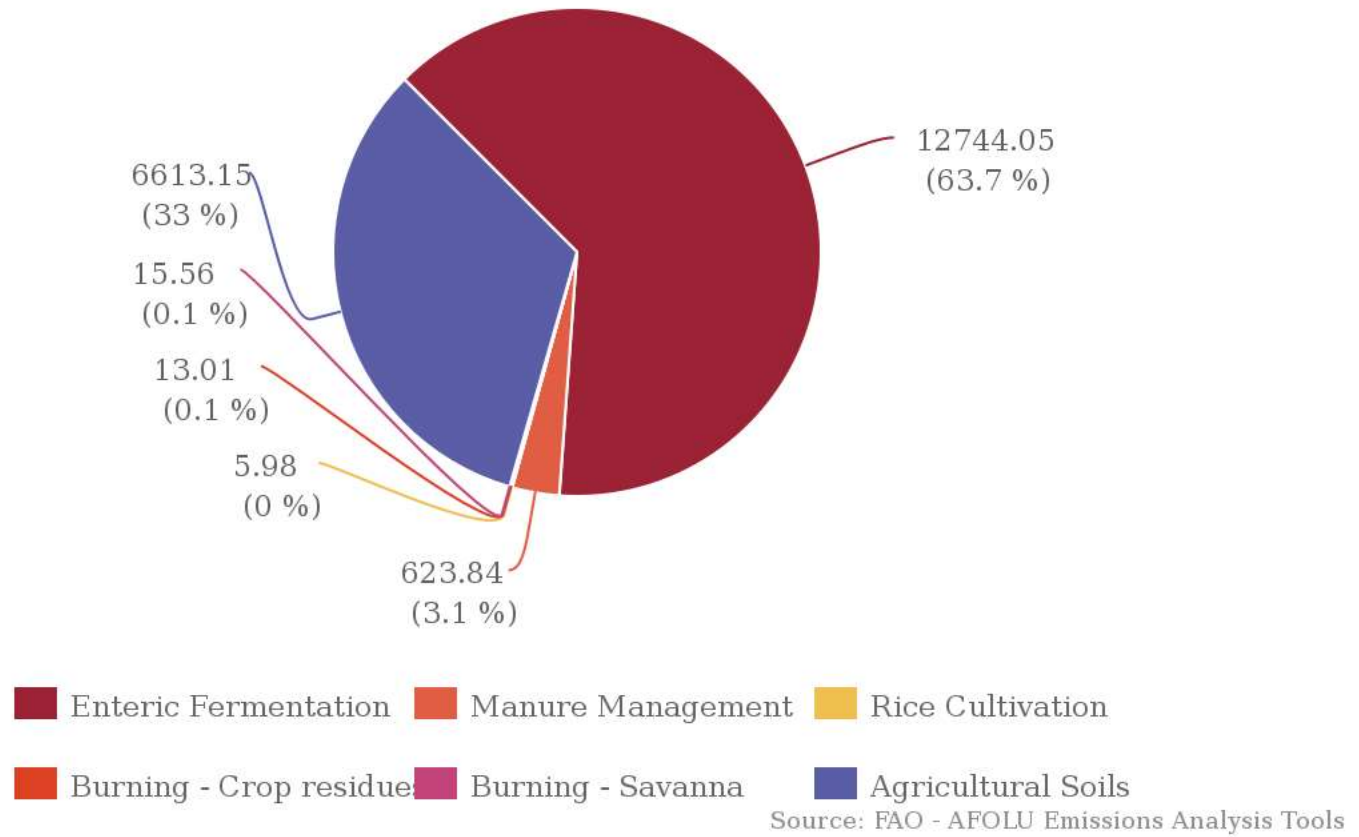


- Enteric Fermentation
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- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

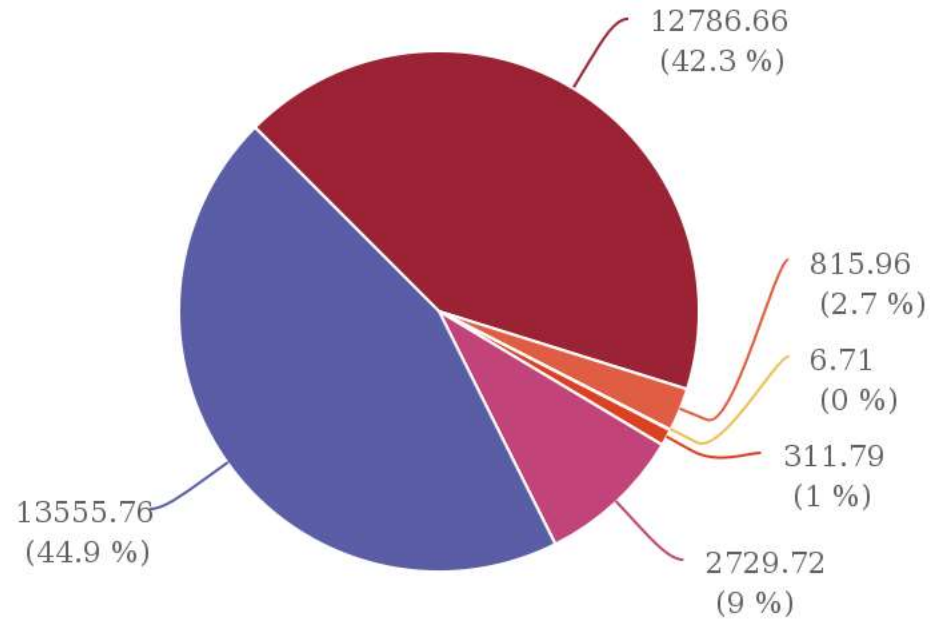
Somalia

Gg CO₂eq (Average 1990-2012)



South Africa

Gg CO2eq (Average 1990-2012)

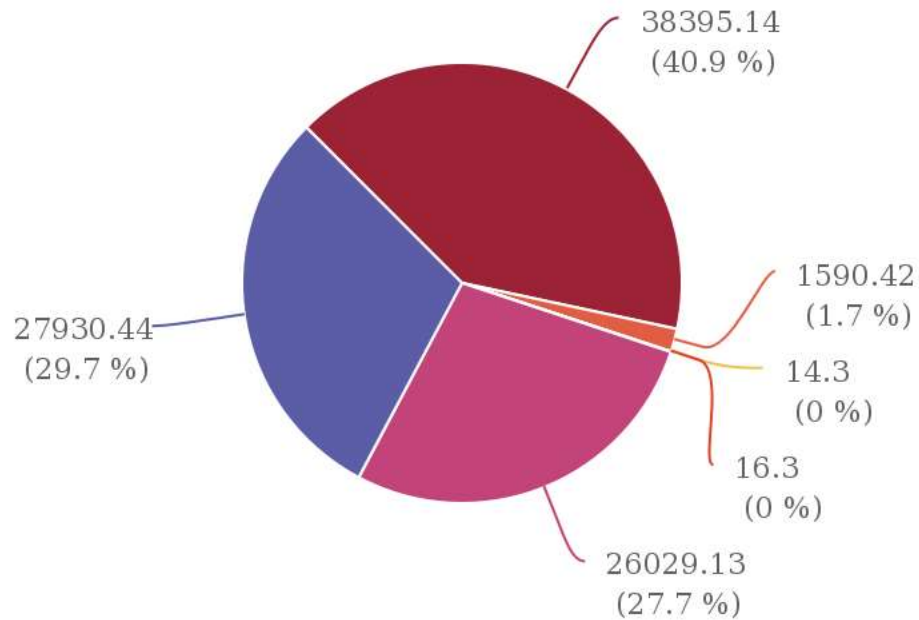


- Enteric Fermentation
- Manure Management
- Rice Cultivation
- Burning - Crop residue
- Burning - Savanna
- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Sudan (former)

Gg CO2eq (Average 1990-2012)



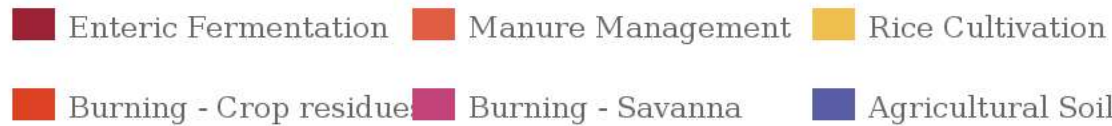
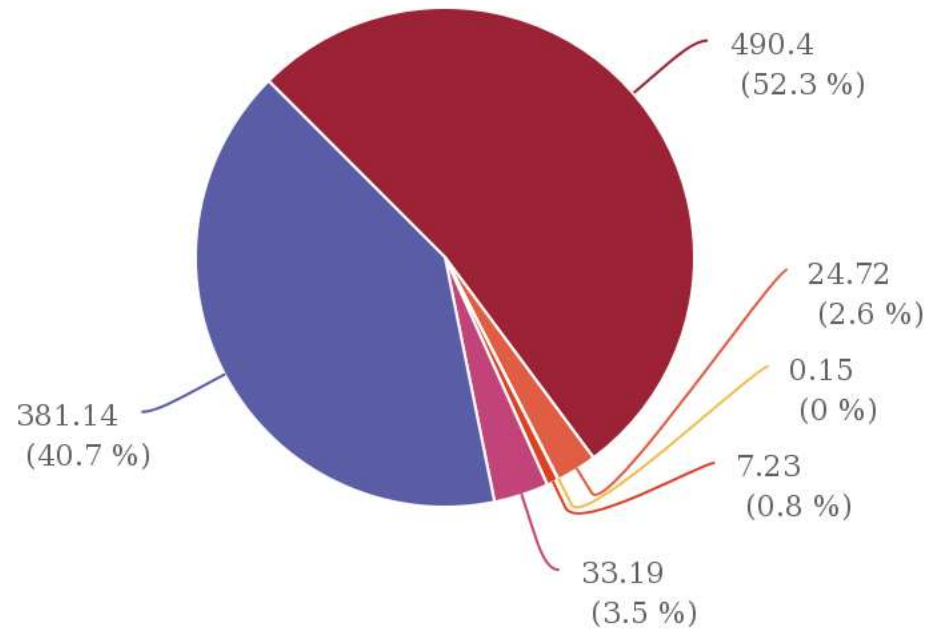
- Enteric Fermentation
- Manure Management
- Rice Cultivation
- Burning - Crop residue
- Burning - Savanna
- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

* South Sudan + Sudan – Period is prior to 2012

Swaziland

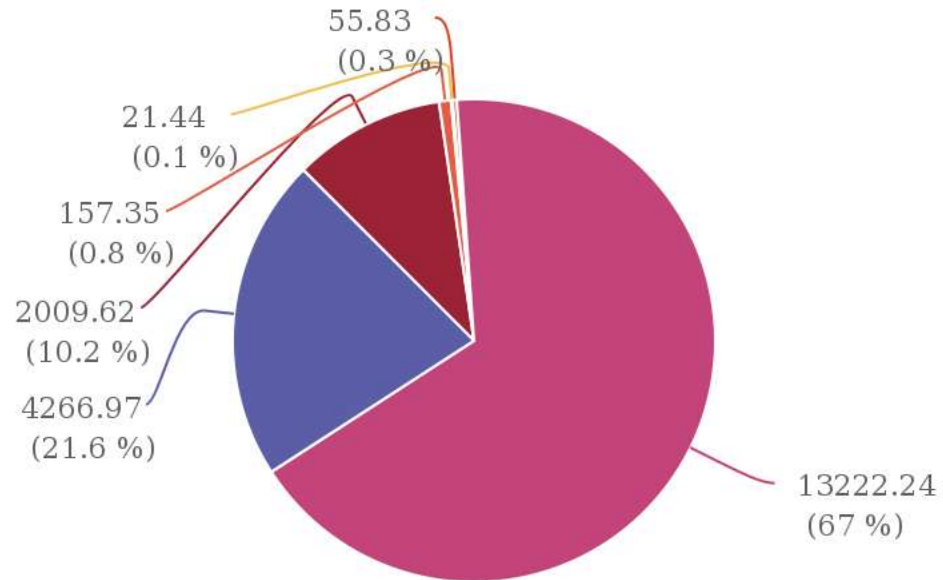
Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools

Zambia

Gg CO₂eq (Average 1990-2012)

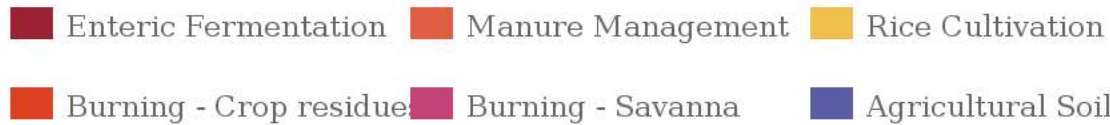
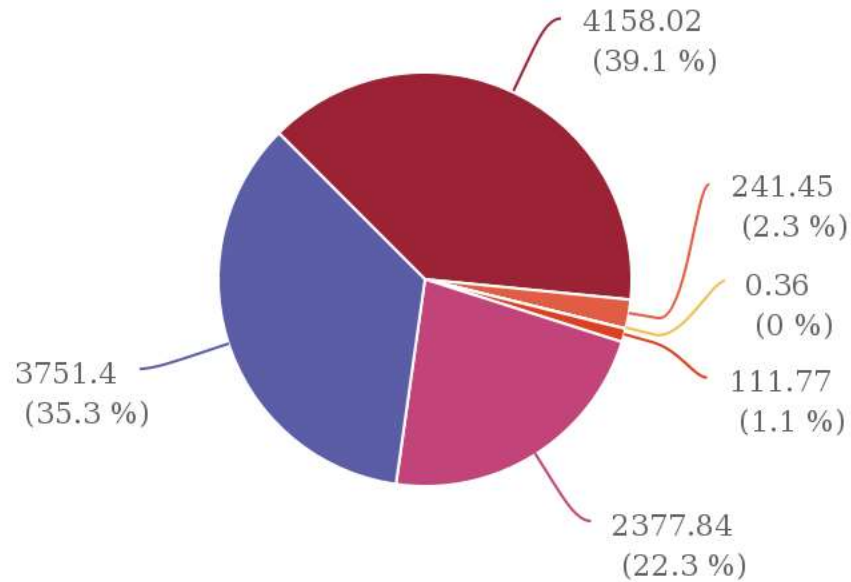


- Enteric Fermentation
- Manure Management
- Rice Cultivation
- Burning - Crop residue
- Burning - Savanna
- Agricultural Soils

Source: FAO - AFOLU Emissions Analysis Tools

Zimbabwe

Gg CO₂eq (Average 1990-2012)



Source: FAO - AFOLU Emissions Analysis Tools