



Use of the IPCC Inventory Software for National GHG inventories in the Agriculture, Forestry and Other Land Use (AFOLU) sector

Remote Training on the IPCC Inventory Software
for National Greenhouse Gas Inventories
for the Asia-Pacific and Eastern Europe Region

12 May 2022

Content

Use of dedicated data managers

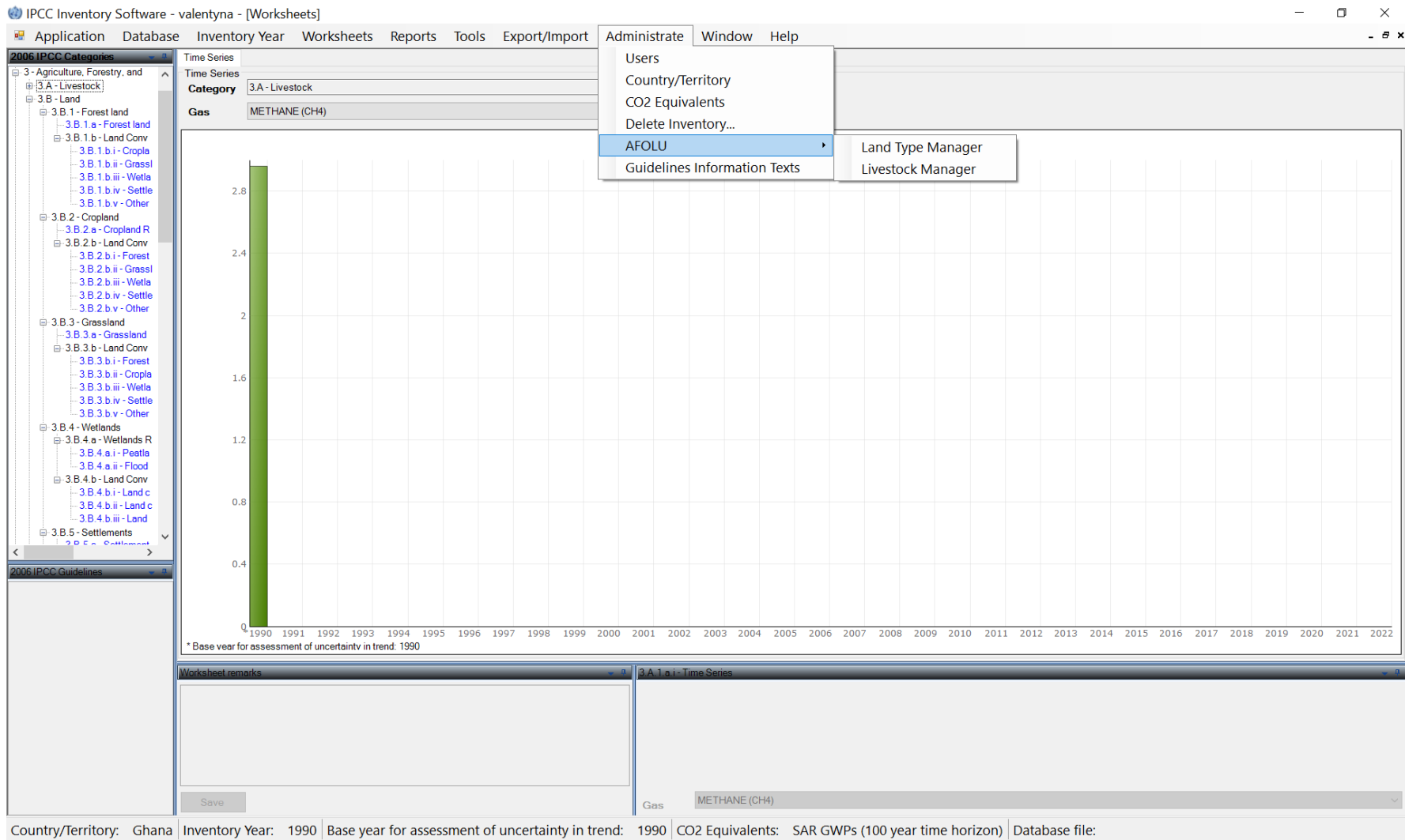
- ✓ Land Type Manager
- ✓ Livestock Manager

AFOLU specific worksheets

- ✓ 3.A Livestock
- ✓ 3.B Land
- ✓ 3.C Aggregate Sources and non-CO₂ Emissions Sources on Land

Input activity data, emission factors and other parameters (practical exercises)

Data Managers



Data Managers

Livestock Manager (basic stratification)

IPCC Inventory Software - valentyna - [Worksheets]

Application Database Inventory Year Worksheets Reports Tools Export/Import Administrate Window Help

2006 IPCC Categories

- 1 - Energy
- 2 - Industrial Processes and Product Use
- 3 - Agriculture, Forestry, and Other Land Use
 - 3.A - Livestock
 - 3.A.1 - Enteric Fermentation
 - 3.A.1.a - Cattle
 - 3.A.1.a.i - Dairy Cows
 - 3.A.1.a.ii - Other Cattle
 - 3.A.1.b - Buffalo
 - 3.A.1.c - Sheep
 - 3.A.1.d - Goats
 - 3.A.1.e - Camels
 - 3.A.1.f - Horses
 - 3.A.1.g - Mules and Asses
 - 3.A.1.h - Swine
 - 3.A.1.j - Other (please specify)
 - 3.A.2 - Manure Management
 - 3.A.2.a - Cattle
 - 3.A.2.a.i - Dairy cows
 - 3.A.2.a.ii - Other cattle
 - 3.A.2.b - Buffalo
 - 3.A.2.c - Sheep
 - 3.A.2.d - Goats
 - 3.A.2.e - Camels
 - 3.A.2.f - Horses
 - 3.A.2.g - Mules and Asses
 - 3.A.2.h - Swine
 - 3.A.2.i - Poultry
 - 3.A.2.j - Other (please specify)

2006 IPCC Guidelines

Time Series

Livestock Manager

Geographical zones: Livestock | Manure Management System

Save Undo Close

Category	
Dairy Cows	
Other Cattle	
Buffalo	
Sheep	
Goats	
Camels	
Horses	
Mules and Asses	
Swine	
Poultry	

2014 2015 2016 2017 2018 2019 2020 2021 2022

User-defined Livestock categories will show under 3.A.1.j and 3.A.2.j respectively (Other - please specify)

Save

Gas: NITROUS OXIDE (N2O)

Country/Territory: Japan | Inventory Year: 1990 | Base year for assessment of uncertainty in trend: 1990 | CO2 Equivalents: SAR GWPs (100 year time horizon) | Database file: (C:\ProgramData\IPCC2006Software\ipcc2006.mdb)

Data Managers

Livestock Manager (enhanced stratification)

IPCC Inventory Software - valentyna - [Worksheets]

Application Database Inventory Year Worksheets Rep

2006 IPCC Categories

- 1 - Energy
- 2 - Industrial Processes and Product Use
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 - 3.A - Livestock
 - 3.A.1 - Enteric Fermentation
 - 3.A.1.a - Cattle
 - 3.A.1.a.i - Dairy Cows
 - 3.A.1.a.ii - Other Cattle
 - 3.A.1.b - Buffalo
 - 3.A.1.c - Sheep
 - 3.A.1.d - Goats
 - 3.A.1.e - Camels
 - 3.A.1.f - Horses
 - 3.A.1.g - Mules and Asses
 - 3.A.1.h - Swine
 - 3.A.1.j - Other (please specify)
 - 3.A.2 - Manure Management
 - 3.A.2.a - Cattle
 - 3.A.2.a.i - Dairy cows
 - 3.A.2.a.ii - Other cattle
 - 3.A.2.b - Buffalo
 - 3.A.2.c - Sheep
 - 3.A.2.d - Goats
 - 3.A.2.e - Camels
 - 3.A.2.f - Horses
 - 3.A.2.g - Mules and Asses
 - 3.A.2.h - Swine
 - 3.A.2.i - Poultry
 - 3.A.2.j - Other (please specify)
 - 3.B - Land
 - 3.C - Aggregate sources and non-CO2 emissions source
 - 3.D - Other
- 4 - Waste
- 5 - Other

2006 IPCC Guidelines

Country/Territory: Japan | Inventory Year: 1990 | Base year for assessment or uncertainty in trends: 1990 | CO2 equivalents: SAK:GWPPS (100 year time horizon) | Database file: (C:\ProgramData\IPCC\Software\ipcc2006.mdb)

Geographical zones Livestock Manure Management System

Save Undo Close

Category	
Dairy Cows	
Mature Dairy Cow	
Livestock Subdivision	
High-producing cows that have calved at least once and are used principally for milk production	
Low-producing cows that have calved at least once and are used principally for milk production	
Livestock Subcategory	
Other Cattle	
Buffalo	
Growing Buffalo	
Livestock Subdivision	
Calves pre-weaning	
Replacement dairy heifers	
Growing / fattening buffalo post-weaning	
Feedlot-fed buffalo on diets containing > 90 % concentrates	
Livestock Subcategory	
Mature Dairy Buffalo	
Livestock Subdivision	
High-producing cows that have calved at least once and are used principally for milk production	
Low-producing cows that have calved at least once and are used principally for milk production	
Livestock Subcategory	
Mature Non-dairy Buffalo	
Livestock Subdivision	
Cows used to produce offspring for meat	
Cows used to produce offspring for meat	
Cows used for more than one production purpose: milk, meat, draft	
Bulls used principally for breeding purposes	
Bullocks used principally for draft power	

2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

* Base v

Worksheets

Save

User-defined Livestock categories will show under 3.A.1.j and 3.A.2.j respectively (Other - please specify)

Data Managers

Livestock Manager – MMS Stratification

IPCC Inventory Software - valentyana - [Worksheets]

Application Database Inventory Year Worksheets Repo

2006 IPCC Categories

- 1 - Energy
- 2 - Industrial Processes and Product Use
- 3 - Agriculture, Forestry, and Other Land Use
 - 3A - Livestock
 - 3A.1 - Enteric Fermentation
 - 3A.1.a - Cattle
 - 3A.1.a.i - Dairy Cows
 - 3A.1.a.ii - Other Cattle
 - 3A.1.b - Buffalo
 - 3A.1.c - Sheep
 - 3A.1.d - Goats
 - 3A.1.e - Camels
 - 3A.1.f - Horses
 - 3A.1.g - Mules and Asses
 - 3A.1.h - Swine
 - 3A.1.j - Other (please specify)
 - 3A.2 - Manure Management
 - 3A.2.a - Cattle
 - 3A.2.a.i - Dairy cows
 - 3A.2.a.ii - Other cattle
 - 3A.2.b - Buffalo
 - 3A.2.c - Sheep
 - 3A.2.d - Goats
 - 3A.2.e - Camels
 - 3A.2.f - Horses
 - 3A.2.g - Mules and Asses
 - 3A.2.h - Swine
 - 3A.2.i - Poultry
 - 3A.2.j - Other (please specify)
- 3B - Land
- 3C - Aggregate sources and non-CO2 emissions source
- 3D - Other
- 4 - Waste
- 5 - Other

Livestock Manager

Geographical zones Livestock Manure Management System

Save Undo Close

System	Definition
<input checked="" type="checkbox"/> Pasture/Range/Paddock	The manure from pasture and range grazing animals is allowed to lie as deposited, and is not managed.
<input type="checkbox"/> Daily spread	Manure is routinely removed from a confinement facility and is applied to cropland or pasture within 24 hours of excretion.
<input type="checkbox"/> Solid storage	The storage of manure, typically for a period of several months, in unconfined piles or stacks. Manure is able to be stacked due to the presence of a sufficient amount of bedding material or loss of moisture by evaporation.
<input type="checkbox"/> Dry lot	A paved or unpaved open confinement area without any significant vegetative cover where accumulating manure may be removed periodically.
<input type="checkbox"/> Liquid/Slurry	Manure is stored as excreted or with some minimal addition of water in either tanks or earthen ponds outside the animal housing, usually for periods less than one year.
<input type="checkbox"/> Uncovered anaerobic lagoon	A type of liquid storage system designed and operated to combine waste stabilization and storage. Lagoon supernatant is usually used to remove manure from the associated confinement facilities to the lagoon. Anaerobic lagoons are designed with varying lengths of storage (up to a year or greater), depending on the climate region, the volatile solids loading rate, and other operational factors. The water from the lagoon may be recycled as flush water or used to irrigate and fertilise fields.
<input type="checkbox"/> Pit storage below animal confinements	Collection and storage of manure usually with little or no added water typically below a slatted floor in an enclosed animal confinement facility, usually for periods less than one year.
<input type="checkbox"/> Anaerobic digester	Animal excreta with or without straw are collected and anaerobically digested in a large containment vessel or covered lagoon. Digesters are designed and operated for waste stabilization by the microbial reduction of complex organic compounds to CO2 and CH4, which is captured and flared or used as a fuel.
<input type="checkbox"/> Burned for fuel	The dung and urine are excreted on fields. The sun dried dung cakes are burned for fuel.
<input type="checkbox"/> Cattle and Swine deep bedding	As manure accumulates, bedding is continually added to absorb moisture over a production cycle and possibly for as long as 6 to 12 months. This manure management system also is known as a bedded pack manure management system and may be combined with a dry lot or pasture.
<input type="checkbox"/> Composting - invessel	Composting, typically in an enclosed channel, with forced aeration and continuous mixing.
<input type="checkbox"/> Composting - Static pile	Composting in piles with forced aeration but no mixing.
<input type="checkbox"/> Composting - Intensive windrow	Composting in windrows with regular (at least daily) turning for mixing and aeration.
<input type="checkbox"/> Composting - Passive windrow	Composting in windrows with infrequent turning for mixing and aeration.
<input type="checkbox"/> Poultry manure with litter	Similar to cattle and swine deep bedding except usually not combined with a dry lot or pasture. Typically used for all poultry breeder flocks and for the production of meat type chickens (broilers) and other fowl.
<input type="checkbox"/> Poultry manure without litter	May be similar to open pits in enclosed animal confinement facilities or may be designed and operated to dry the manure as it accumulates. The latter is known as a high-rise manure management system and is a form of passive windrow composting when designed and operated properly.
<input type="checkbox"/> Aerobic treatment	The biological oxidation of manure collected as a liquid with either forced or natural aeration. Natural aeration is limited to aerobic and facultative ponds and wetland systems and is due primarily to photosynthesis. Hence, these systems typically become anoxic during periods without sunlight.

* Only those Manure Management Systems that are selected here will appear in the worksheets

* 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

* Base year for assessment of uncertainty in trend: 1990

Worksheet remarks

3.C.4 - Time Series

Gas: NITROUS OXIDE (N2O)

Country/Territory: Japan | Inventory Year: 1990 | Base year for assessment of uncertainty in trend: 1990 | CO2 Equivalents: SAR GWPs (100 year time horizon) | Database file: (C:\ProgramData\IPCC2006Software\ipcc2006.mdb)

3.B. Land Stratification – Bio-physical Characteristics

- The IPCC Software creates unique combinations of:
 - ✓ soil
 - ✓ climate
 - ✓ vegetation zone
- Once a Land is assigned to one of those combination, conversion may occur only between land types created in the Land Manager for that specific combination.

Data Managers

Land Type Manager

IPCC Inventory Software - valentyna - [Worksheets]

Application Database Inventory Year Worksheets Reports Tools Export/Import Administrate Window Help

2006 IPCC Categories

- 3.B - Land
 - 3.B.1 - Forest land
 - 3.B.1.a - Forest land Remaining Forest land
 - 3.B.1.b - Land Converted to Forest land
 - 3.B.1.b.i - Cropland converted to Forest Land
 - 3.B.1.b.ii - Grassland converted to Forest Land
 - 3.B.1.b.iii - Wetlands converted to Forest Land
 - 3.B.1.b.iv - Settlements converted to Forest Land
 - 3.B.1.b.v - Other Land converted to Forest Land
 - 3.B.2 - Cropland
 - 3.B.2.a - Cropland Remaining Cropland
 - 3.B.2.b - Land Converted to Cropland
 - 3.B.2.b.i - Forest Land converted to Cropland
 - 3.B.2.b.ii - Grassland converted to Cropland
 - 3.B.2.b.iii - Wetlands converted to Cropland
 - 3.B.2.b.iv - Settlements converted to Cropland
 - 3.B.2.b.v - Other Land converted to Cropland
 - 3.B.3 - Grassland
 - 3.B.3.a - Grassland Remaining Grassland
 - 3.B.3.b - Land Converted to Grassland
 - 3.B.3.b.i - Forest Land converted to Grassland
 - 3.B.3.b.ii - Cropland converted to Grassland
 - 3.B.3.b.iii - Wetlands converted to Grassland
 - 3.B.3.b.iv - Settlements converted to Grassland
 - 3.B.3.b.v - Other Land converted to Grassland
 - 3.B.4 - Wetlands
 - 3.B.4.a - Wetlands Remaining Wetlands
 - 3.B.4.a.i - Peatlands remaining peatlands
 - 3.B.4.a.ii - Flooded land remaining flooded land
 - 3.B.4.b - Land Converted to Wetlands

2006 IPCC Guidelines

AFOLU Land Types

Land Use Subcategories

- Forest Land
 - Natural
 - Planted
 - Unmanaged
- Cropland
 - Annual_crops
 - Perennial
 - Rice cultivation
- Grassland
 - Rangeland
 - Unmanaged grassland
 - Unmanaged
- Wetlands
 - Peatland
 - Unmanaged
- Settlements
 - Infrastructure
- Other Land
 - Other Land
 - Unmanaged

Common Land Type Data

Country/Territory: Japan Continent: Asia

Land Use Subcategory: Natural

Climate Region: Cool Temperate Moist Soil Type: High Activity Clay Mineral

Forest Land Data

Ecosystem type: Temperate continental forest Continent type: Insular

Species: Other Broadleaf Age class (yr): >20 y

Natural Forest: Growing stock level (m3/ha): 41-100

Plantation: Carbon fraction of aboveground forest biomass (tonne C/tonne d.m.): 0.480

Ratio of below-ground biomass to above-ground biomass (R) (t root d.m./t shoot d.m.): 0.230

Biomass conversion and expansion factor for wood and fuelwood removal (BCEFr) (t / m3 wood volume): 1.550

Above-ground biomass in forests (t d.m. / ha): 120.000

Above-ground biomass growth in plantation/natural forests (t d.m. /ha/yr): 4.000

Reference soil organic carbon (SOC) stock (t C / ha): 95.000

Litter carbon stocks of mature forests (t C / ha): 16.000

Abandoned managed land:

Relative stock change factor

Land use (FLU): 1.000

Management (FMG): 1.000

Input (FI): 1.000

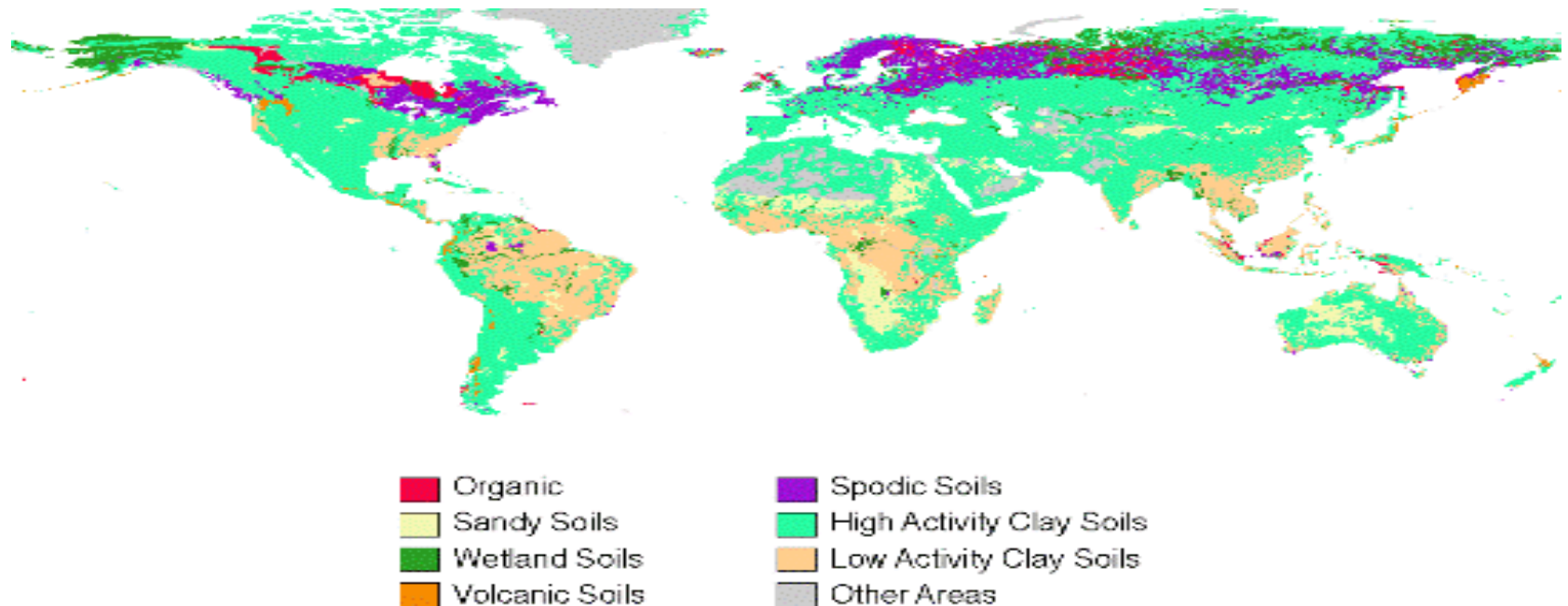
Buttons: Add Copy Delete Save Undo Close

Country/Territory: Japan Inventory Year: 1990 Base year for assessment of uncertainty in trend: 1990 CO2 Equivalents: SAR GWPs (100 year time horizon) Database file: (C:\ProgramData\IPCC2006Software\ipcc2006.mdb)

Gas: METHANE (CH4)

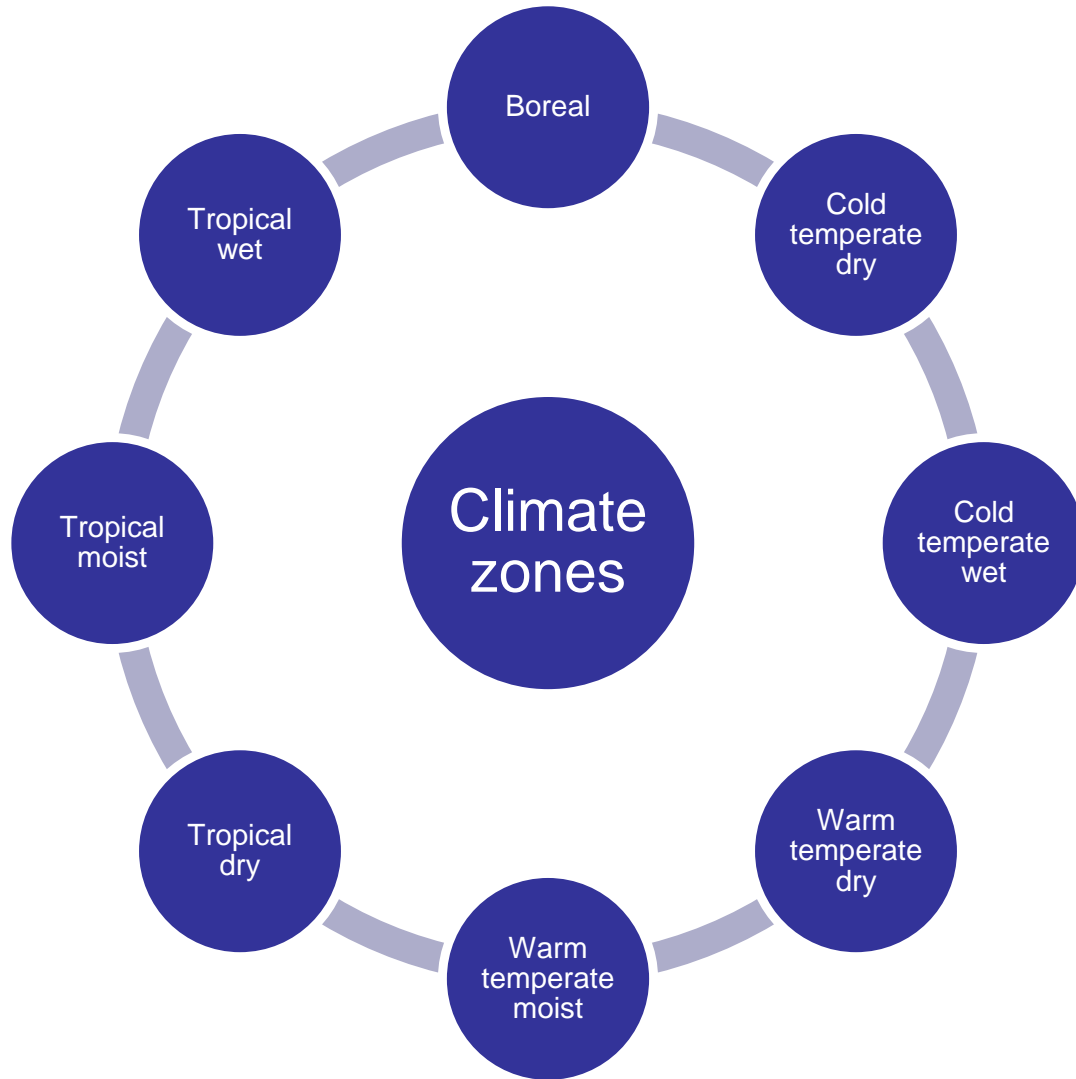
Land Stratification – Bio-physical Characteristics

Default country's soil types according to the 2006 IPCC Guidelines*



* derived from the World Harmonized Soil Database

Land Stratification – Bio-physical Characteristics



Land Stratification – Bio-physical Characteristics

Global Ecological Zones (GEZ)*

Tropical rainforest	Tropical moist deciduous forest	Tropical dry forest	Tropical shrubland	Tropical desert
Tropical mountain systems	Subtropical humid forest	Subtropical dry forest	Subtropical steppe	Subtropical desert
Subtropical mountain systems	Temperate oceanic forest	Temperate continental forest	Temperate steppe	Temperate desert
Temperate mountain systems	Boreal coniferous forest	Boreal tundra woodland	Boreal mountain systems	Polar

* provided by FAO

AFOLU Specific Worksheets

3.B Land (3.B.1 – Forest Land)

IPCC Inventory Software - valentyna - [Worksheets]

Application Database Inventory Year Worksheets Reports Tools Export/Import Administrate Window Help

2006 IPCC Categories

- 3.B - Land
 - 3.B.1 - Forest land
 - 3.B.1.a - Forest land Remaining Forest land
 - 3.B.1.b - Land Converted to Forest land
 - 3.B.1.b.i - Cropland converted to Forest Land
 - 3.B.1.b.ii - Grassland converted to Forest Land
 - 3.B.1.b.iii - Wetlands converted to Forest Land
 - 3.B.1.b.iv - Settlements converted to Forest Land
 - 3.B.1.b.v - Other Land converted to Forest Land
 - 3.B.2 - Cropland
 - 3.B.2.a - Cropland Remaining Cropland
 - 3.B.2.b - Land Converted to Cropland
 - 3.B.2.b.i - Forest Land converted to Cropland
 - 3.B.2.b.ii - Grassland converted to Cropland
 - 3.B.2.b.iii - Wetlands converted to Cropland
 - 3.B.2.b.iv - Settlements converted to Cropland
 - 3.B.2.b.v - Other Land converted to Cropland
 - 3.B.3 - Grassland
 - 3.B.3.a - Grassland Remaining Grassland
 - 3.B.3.b - Land Converted to Grassland
 - 3.B.3.b.i - Forest Land converted to Grassland
 - 3.B.3.b.ii - Cropland converted to Grassland
 - 3.B.3.b.iii - Wetlands converted to Grassland
 - 3.B.3.b.iv - Settlements converted to Grassland
 - 3.B.3.b.v - Other Land converted to Grassland
 - 3.B.4 - Wetlands
 - 3.B.4.a - Wetlands Remaining Wetlands
 - 3.B.4.a.i - Peatlands remaining peatlands
 - 3.B.4.a.ii - Flooded land remaining flooded land
 - 3.B.4.b - Land Converted to Wetlands

Area Entry Table Land-Use Conversion Matrix Annual increase in carbon stocks in biomass Loss of carbon from wood removals Loss of carbon from fuelwood removals Loss of carbon from disturbance

Worksheet

Sector: Agriculture, Forestry, and Other Land Use

Category: Land

Subcategory: 3.B.1.a - Forest land Remaining Forest land

Sheet: Area Entry Table

1990

Data

Initial land use		Final land use		Area (ha)
Forest Land	Natural	Forest Land	Natural	10000
	Planted	Forest Land	Planted	10000
			Natural	0
	Unmanaged	Unmanaged	10000	

Land Type Manager

Worksheet remarks

3.B.1.a - Time Series

CARBON DIOXIDE (CO2) Emissions (Gg CO2 Equivalents)

* Base year for assessment of uncertainty in trend: 1990

Gas CARBON DIOXIDE (CO2)

Country/Territory: Japan Inventory Year: 1990 Base year for assessment of uncertainty in trend: 1990 CO2 Equivalents: SAR GWPs (100 year time horizon) Database file: (C:\ProgramData\IPCC2006Software\ipcc2006.mdb)

AFOLU Specific Worksheets

3.B Land (3.B.2.b.i – Forest Land converted to Cropland)

IPCC Inventory Software - valentyna - [Worksheets]

Application Database Inventory Year Worksheets Reports Tools Export/Import Administrate Window Help

2006 IPCC Categories

- 3.B - Land
 - 3.B.1 - Forest land
 - 3.B.1.a - Forest Land Remaining Forest land
 - 3.B.1.b - Land Converted to Forest land
 - 3.B.1.b.i - Cropland converted to Forest Land
 - 3.B.1.b.ii - Grassland converted to Forest Land
 - 3.B.1.b.iii - Wetlands converted to Forest Land
 - 3.B.1.b.iv - Settlements converted to Forest Land
 - 3.B.1.b.v - Other Land converted to Forest Land
 - 3.B.2 - Cropland
 - 3.B.2.a - Cropland Remaining Cropland
 - 3.B.2.b - Land Converted to Cropland
 - 3.B.2.b.i - Forest Land converted to Cropland**
 - 3.B.2.b.ii - Grassland converted to Cropland
 - 3.B.2.b.iii - Wetlands converted to Cropland
 - 3.B.2.b.iv - Settlements converted to Cropland
 - 3.B.2.b.v - Other Land converted to Cropland
 - 3.B.3 - Grassland
 - 3.B.3.a - Grassland Remaining Grassland
 - 3.B.3.b - Land Converted to Grassland
 - 3.B.3.b.i - Forest Land converted to Grassland
 - 3.B.3.b.ii - Cropland converted to Grassland
 - 3.B.3.b.iii - Wetlands converted to Grassland
 - 3.B.3.b.iv - Settlements converted to Grassland
 - 3.B.3.b.v - Other Land converted to Grassland
 - 3.B.4 - Wetlands
 - 3.B.4.a - Wetlands Remaining Wetlands
 - 3.B.4.a.i - Peatlands remaining peatlands
 - 3.B.4.a.ii - Flooded land remaining flooded land
 - 3.B.4.b - Land Converted to Wetlands

2006 IPCC Guidelines

Area Entry Table Annual Area Table Land-Use Conversion Matrix Annual change in carbon stocks in biomass Annual change in carbon stocks in dead organic matter due to land conversion Annual char <

Worksheet

Sector: Agriculture, Forestry, and Other Land Use
 Category: Land
 Subcategory: 3.B.2.b.i - Forest Land converted to Cropland
 Sheet: Area Entry Table

1990

Data

Initial land use		Final land use		Area (ha)	
Forest Land	Natural	Cropland	Annual_crops	0	
	Planted		Perennial	1000	
			Annual_crops	0	
			Perennial	0	

Land Type Manager

Worksheet remarks

3.B.2.b.i - Time Series

CARBON DIOXIDE (CO₂) Emissions (Gg CO₂ Equivalents)

* Base year for assessment of uncertainty in trend: 1990

Gas: CARBON DIOXIDE (CO₂)

Save

Country/Territory: Japan Inventory Year: 1990 Base year for assessment of uncertainty in trend: 1990 CO₂ Equivalents: SAR GWPs (100 year time horizon) Database file: (C:\ProgramData\IPCC2006Software\ipcc2006.mdb)

3.C Aggregate Sources and non-CO₂ Emissions Sources on Land

All non-CO₂ emissions from Land are categorized according to the activity/process from which they are originated.

AFOLU Specific Worksheets

3.C Aggregate Sources and non-CO₂ Emissions Sources on Land (3.C.1.a – Biomass burning in forest lands)

IPCC Inventory Software - valentyna - [Worksheets]

Application Database Inventory Year Worksheets Reports Tools Export/Import Administrate Window Help

2006 IPCC Categories

- 3.B.5 - Settlements
 - 3.B.5.a - Settlements Remaining Settlements
 - 3.B.5.b - Land Converted to Settlements
 - 3.B.5.b.i - Forest Land converted to Settlements
 - 3.B.5.b.ii - Cropland converted to Settlements
 - 3.B.5.b.iii - Grassland converted to Settlements
 - 3.B.5.b.iv - Wetlands converted to Settlements
 - 3.B.5.b.v - Other Land converted to Settlements
- 3.B.6 - Other Land
 - 3.B.6.a - Other Land Remaining Other land
 - 3.B.6.b - Land Converted to Other land
 - 3.B.6.b.i - Forest Land converted to Other Land
 - 3.B.6.b.ii - Cropland converted to Other Land
 - 3.B.6.b.iii - Grassland converted to Other Land
 - 3.B.6.b.iv - Wetlands converted to Other Land
 - 3.B.6.b.v - Settlements converted to Other Land
- 3.C - Aggregate sources and non-CO₂ emissions sources on land
 - 3.C.1 - Emissions from biomass burning
 - 3.C.1.a - Biomass burning in forest lands**
 - 3.C.1.b - Biomass burning in croplands
 - 3.C.1.c - Biomass burning in grasslands
 - 3.C.1.d - Biomass burning in all other land
 - 3.C.2 - Liming
 - 3.C.3 - Urea application
 - 3.C.4 - Direct N₂O Emissions from managed soils
 - 3.C.5 - Indirect N₂O Emissions from managed soils
 - 3.C.6 - Indirect N₂O Emissions from manure management
 - 3.C.7 - Rice cultivation
 - 3.C.8 - Other (please specify)
- 3.D - Other

1 of 3 Emissions from Biomass Burning | 2 of 3 Emissions from Biomass Burning | 3 of 3 Emissions from Biomass Burning

Worksheet

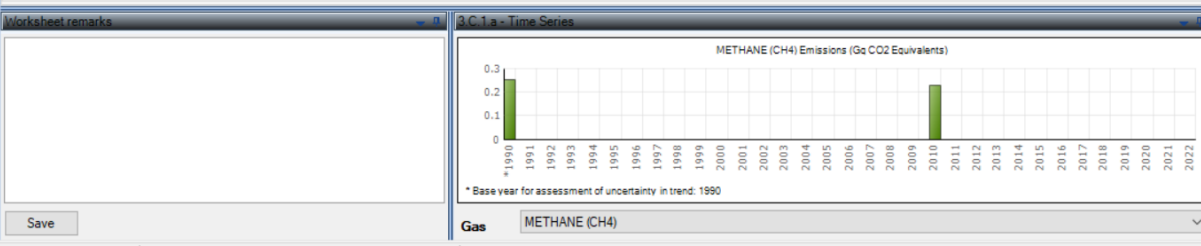
Sector: Agriculture, Forestry and Other Land Use
 Category: Emissions from biomass burning
 Subcategory: 3.C.1.a - Biomass burning in forest lands
 Sheet: Sheet 1 of 3 - Emissions from Biomass Burning in Forest lands (Forest land remaining Forest land)

Data

Gas: METHANE (CH₄)

Land Use Category	Equation 2.2	Equation 2.27								
Initial land use	Land use during reporting year	Subcategories for reporting year	Available area (ha)	Area burnt (ha)	Burning Type	Mass of fuel available for combustion (tonnes/ha)	Combustion factor	Emission Factor (g GHG / (kg dm burnt))	Emissions from fire (tonnes GHG)	
			A	BT	Table 2.4 Defaults are Mass Burnt (MB * Cf)	Table 2.6 1 if default values are used	Table 2.5	Lfire = A * MB * Cf * Gef / 1000		
Forest Land	Forest Land	Natural	10000	100	Wildfire Biomass	19.8	1	6.1	12.078	
		Land Use Category	Subcategories for reporting year							
Total		Forest Land	Natural							12.078
			Planted							

Land Type Manager | Uncertainties | Delete selected rows | Time Series data entry...



Country/Territory: Japan | Inventory Year: 1990 | Base year for assessment of uncertainty in trend: 1990 | CO₂ Equivalents: SAR GWPs (100 year time horizon) | Database file: (C:\ProgramData\IPCC2006Software\ipcc2006.mdb)

AFOLU Specific Worksheets

3.C Aggregate Sources and non-CO₂ Emissions Sources on Land (3.C.7 – Rice cultivation)

IPCC Inventory Software - valentyana - [Worksheets]

Application Database Inventory Year Worksheets Reports Tools Export/Import Administrate Window Help

2006 IPCC Categories

- 3.B.5 - Settlements
 - 3.B.5.a - Settlements Remaining Settlements
 - 3.B.5.b - Land Converted to Settlements
 - 3.B.5.b.i - Forest Land converted to Settlements
 - 3.B.5.b.ii - Cropland converted to Settlements
 - 3.B.5.b.iii - Grassland converted to Settlements
 - 3.B.5.b.iv - Wetlands converted to Settlements
 - 3.B.5.b.v - Other Land converted to Settlements
 - 3.B.6 - Other Land
 - 3.B.6.a - Other land Remaining Other land
 - 3.B.6.b - Land Converted to Other land
 - 3.B.6.b.i - Forest Land converted to Other Land
 - 3.B.6.b.ii - Cropland converted to Other Land
 - 3.B.6.b.iii - Grassland converted to Other Land
 - 3.B.6.b.iv - Wetlands converted to Other Land
 - 3.B.6.b.v - Settlements converted to Other Land
- 3.C - Aggregate sources and non-CO₂ emissions sources on land
 - 3.C.1 - Emissions from biomass burning
 - 3.C.1.a - Biomass burning in forest lands
 - 3.C.1.b - Biomass burning in croplands
 - 3.C.1.c - Biomass burning in grasslands
 - 3.C.1.d - Biomass burning in all other land
 - 3.C.2 - Liming
 - 3.C.3 - Urea application
 - 3.C.4 - Direct N₂O Emissions from managed soils
 - 3.C.5 - Indirect N₂O Emissions from managed soils
 - 3.C.6 - Indirect N₂O Emissions from manure management
 - 3.C.7 - Rice cultivation
 - 3.C.8 - Other (please specify)
- 3.D - Other

Annual CH₄ emissions from rice

Worksheet

Sector: Agriculture, Forestry and Other Land Use

Category: Rice cultivation

Subcategory: 3.C.7 - Rice cultivation

Sheet: 1 of 1 Annual CH₄ emissions from rice

Data

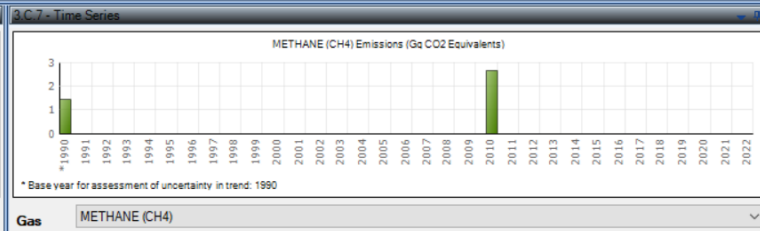
Gas: METHANE (CH₄)

	Equation 2.2	Equation 5.1			Equation 5.2			Equation 5.3		
	Available area (ha)	Annual harvested area (ha/yr)	Cultivation period (Day)	Baseline emission factor for continuously flooded fields without organic amendments (kg CH ₄ /ha)	Scaling factor to account for the differences in water regime during the cultivation period	Scaling factor to account for the differences in water regime in the pre-season before the cultivation period	Application rate of organic amendment in fresh weight (tonnes / ha)	Conversion factor for organic amendment	Scaling factor for both types and amount of organic amendment applied	Scaling factor for soil by rice culti. etc., if available
Rice ecosystem	Subcategories for reporting year	A	t	EF _c	SF _w	SF _p	ROAI	CFOAI	SF _o = (1+ROAI)*CFOAI *0.59	SF _{s,r}
Rainfed	Rice cultivation	1000	1000	135	1.3	0.28	1.22	5	0.05	1.14071
Rice ecosystem										
Tot										
Upland										
Irrigated										
Rainfed										
Deep Water										

Uncertainties Time Series data entry...

Worksheet remarks

Save



Country/Territory: Japan | Inventory Year: 1990 | Base year for assessment of uncertainty in trend: 1990 | CO₂ Equivalents: SAR GWPs (100 year time horizon) | Database file: (C:\ProgramData\IPCC\2006Software\ipcc2006.mdb)

Practical Exercises on:

- ✓ 3.A.1.a.i Enteric fermentation/ dairy cows
- ✓ 3.A.2.a.i Manure management/ dairy cows
- ✓ 3.A.1.a.ii Enteric fermentation/ other cattle
- ✓ 3.A.2.a.ii Manure management/ other cattle
- ✓ 3.B.2.b.i Forest land converted to Cropland [Deforestation]
- ✓ 3.C.1.a Biomass burning in forest lands
- ✓ 3.C.7 Rice cultivation

Thank you!