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Key category analysis

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Inventory

- Mongolia prepared its first greenhouse gases (GHG) inventory in 1996 for the base year 1990 under the US Country Studies Programme
- Updated within the Asia Least-Cost Greenhouse Gas Abatement Strategy (ALGAS),
- As part of the enabling activities of preparation of the Initial National Communication (GEF/UNEP), the GHG inventories were updated to 1998 with base year 1994.
- **Capacity Building for Improving the Quality of Greenhouse Gas Inventories (Europe/CIS region) (RER/01/G31) (Albania, Armenia, Azerbaijan, Croatia, Georgia, Macedonia, Moldova, Mongolia, Slovenia, Tajikistan, Turkmenistan and Uzbekistan) June 2003**

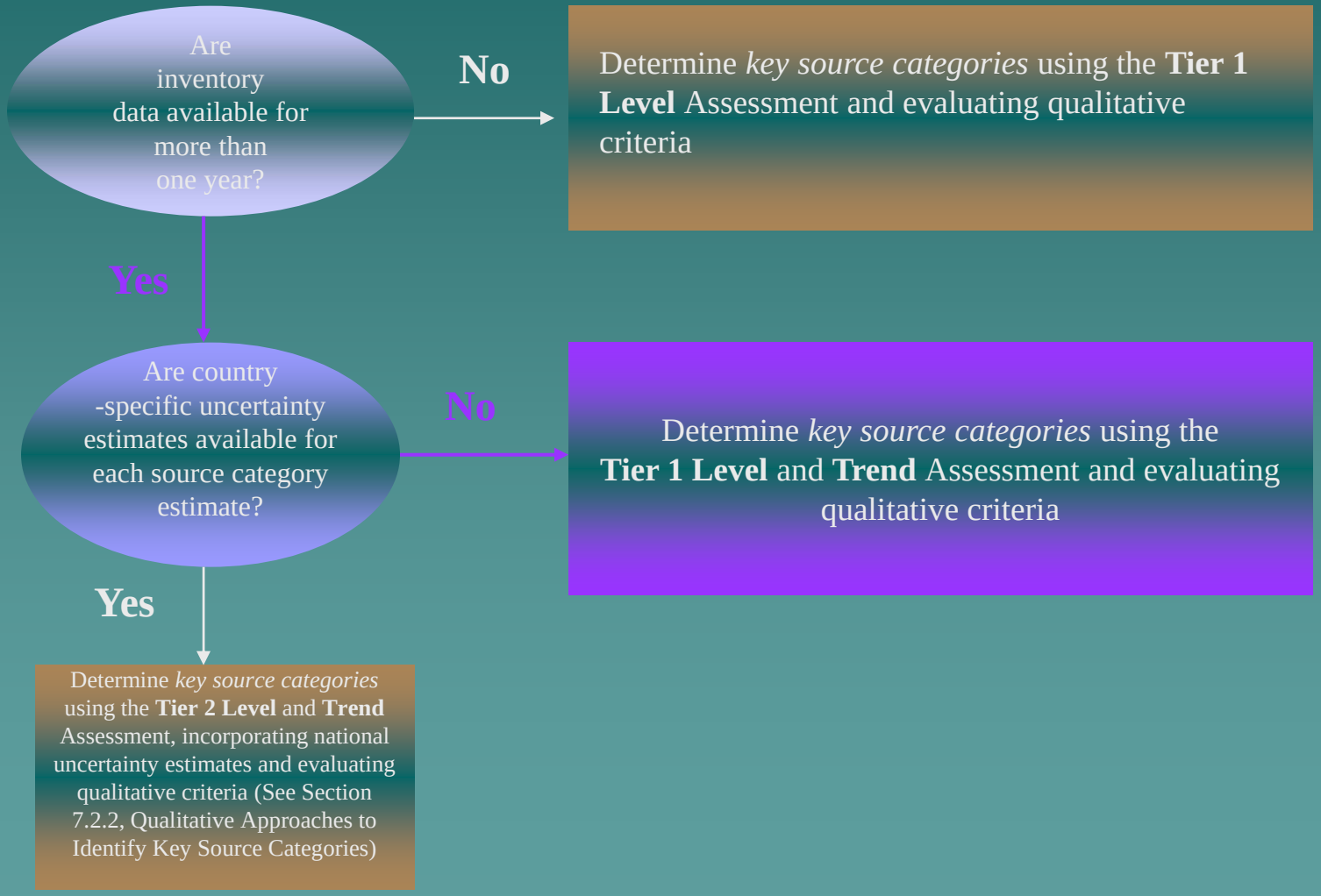
Improvements

- AD assessment
- EF assessment
- Methodology assessment

Methodologies

- IPCC Guidelines for National GHG Inventories (IPCC, 1995) and the Revised 1996 Guidelines (IPCC, 1997);
- GPG

Decision Tree to Identify Key Source Categories



Level assessment

EQUATION 7.1 GPG

Source Category Level Assessment = Source Category Estimate / Total Estimate

$$L_{x,t} = E_{x,t} / E_t$$

Level Assessment with LULUCF

	IPCC source categories	Direct Greenhouse Gas	Base year	Latest Year	Level assesment	Cumulative total
1	Fuel Combustion, Energy Industries	CO2	8444.7	8899.0	0.394	39.4
2	Agriculture, Enteric Fermentation	CH4	5005.6	6121.5	0.271	66.5
3	Land use change $ forestry, Grassland Conversion	CO2	3939.8	3883.9	0.172	83.6
4	Land use change $ forestry, Biomass harvest	CO2	2359.0	2828.8	0.125	96.2
5	Fuel Combustion, Traditional biomass	CH4	275.1	306.6	0.014	97.5
6	Agriculture, Manure Management	CH4	179.3	218.4	0.010	98.5
7	Fugitive Emissions, Solid fuels	CH4	100.8	96.6	0.004	98.9
8	Waste, Solid Waste Disposal on Land	CH4	71.8	71.4	0.003	99.2
9	Fuel Combustion, Bunker	CO2	47.7	64.4	0.003	99.5
10	Industrial Processes, Cement Production	CO2	42.8	54.3	0.002	99.7
11	Industrial Processes, Lime Production	CO2	52.1	43.8	0.002	99.9
12	Fuel Combustion, Traditional biomass	N2O	31.0	24.8	0.001	100.0
13	Waste, Domestic and Commercial Wastewater	CO2	0.4	0.4	0.000	100.0
14	Waste, Industrial Wastewater	CO2	0.4	0.4	0.000	100.0

Level Assessment without LULUCF

	IPCC source categories	Direct Greenhouse Gas	Base year	Latest Year	Level assesment	Cumulative total
1	Fuel Combustion, Energy Industries	CO2	8444.7	8899.0	0.560	56.0
2	Agriculture, Enteric Fermentation	CH4	5005.6	6121.5	0.385	94.5
3	Fuel Combustion, Traditional biomass	CH4	275.1	306.6	0.019	96.4
4	Agriculture, Manure Management	CH4	179.3	218.4	0.014	97.8
5	Fugitive Emissions, Solid fuels	CH4	100.8	96.6	0.006	98.4
6	Waste, Solid Waste Disposal on Land	CH4	71.8	71.4	0.004	98.9
7	Fuel Combustion, Bunker	CO2	47.7	64.4	0.004	99.3
8	Industrial Processes, Cement Production	CO2	42.8	54.3	0.003	99.6
9	Industrial Processes, Lime Production	CO2	52.1	43.8	0.003	99.9
10	Fuel Combustion, Traditional biomass	N2O	31.0	24.8	0.002	100.0
11	Waste, Domestic and Commercial Wastewater	CO2	0.4	0.4	0.000	100.0
12	Waste, Industrial Wastewater	CO2	0.4	0.4	0.000	100.0

Trend assessment

EQUATION 7.22

Source Category Trend Assessment = (Source Category Level Assessment)

. | (Source Category Trend – Total Trend) |

$$T_{x,t} = L_{x,t} \cdot \left| \{[(E_{x,t} - E_{X,0}) / E_{x,t}] - [(E_t - E_0) / E_t]\} \right|$$

Trend Assessment with LULUCF

	IPCC source categories	Direct Greenhouse Gas	Base year	Latest Year	Level assesment	Trend assessment	Contribution to the trend	Cumulative total
1	Fuel Combustion, Energy Industries	CO2	8444.7	8899.0	0.394	0.016	0.221	22.1
2	Agriculture, Enteric Fermentation	CH4	5005.6	6121.5	0.271	0.025	0.344	56.5
3	Land use change & forestry, Grassland Conversion	CO2	3939.8	3883.9	0.172	0.018	0.254	81.9
4	Land use change & forestry, Biomass harvest	CO2	2359.0	2828.8	0.125	0.009	0.131	95.0
5	Fuel Combustion, Traditional biomass	CH4	275.1	306.6	0.014	0.000	0.002	95.2
6	Agriculture, Manure Management	CH4	179.3	218.4	0.010	0.001	0.012	96.4
7	Fugitive Emissions, Solid fuels	CH4	100.8	96.6	0.004	0.001	0.008	97.2
8	Waste, Solid Waste Disposal on Land	CH4	71.8	71.4	0.003	0.000	0.004	97.6
9	Fuel Combustion, Bunker	CO2	47.7	64.4	0.003	0.000	0.007	98.3
10	Industrial Processes, Cement Production	CO2	42.8	54.3	0.002	0.000	0.004	98.7
11	Industrial Processes, Lime Production	CO2	52.1	43.8	0.002	0.001	0.008	99.5
12	Fuel Combustion, Traditional biomass	N2O	31.0	24.8	0.001	0.000	0.005	100.0
13	Waste, Domestic and Commercial Wastewater	CO2	0.4	0.4	0.000	0.000	0.000	100.0
14	Waste, Industrial Wastewater	CO2	0.4	0.4	0.000	0.000	0.000	100.0

Trend Assessment without LULUCF

	IPCC source categories	Direct Greenhouse Gas	Base year	Latest Year	Level assesment	Trend assessment	Contribution to the trend	Cumulative total
1	Fuel Combustion, Energy Industries	CO2	8444.7	8899.0	0.560	0.0225	0.369	36.9
2	Agriculture, Enteric Fermentation	CH4	5005.6	6121.5	0.385	0.0350	0.575	94.4
3	Fuel Combustion, Traditional biomass	CH4	275.1	306.6	0.019	0.0002	0.004	94.7
4	Agriculture, Manure Management	CH4	179.3	218.4	0.014	0.0012	0.020	96.7
5	Fugitive Emissions, Solid fuels	CH4	100.8	96.6	0.006	-0.0008	-0.013	95.3
6	Waste, Solid Waste Disposal on Land	CH4	71.8	71.4	0.004	0.0004	0.007	96.1
7	Fuel Combustion, Bunker	CO2	47.7	64.4	0.004	0.0007	0.011	97.2
8	Industrial Processes, Cement Production	CO2	42.8	54.3	0.003	0.0004	0.007	97.9
9	Industrial Processes, Lime Production	CO2	52.1	43.8	0.003	0.0008	0.013	99.1
10	Fuel Combustion, Traditional biomass	N2O	31.0	24.8	0.002	0.0005	0.009	100.0
11	Waste, Domestic and Commercial Wastewater	CO2	0.4	0.4	0.000	0.0000	0.000	100.0
12	Waste, Industrial Wastewater	CO2	0.4	0.4	0.000	0.0000	0.000	100.0

Thank you for your attention