



GHG Inventory in agriculture

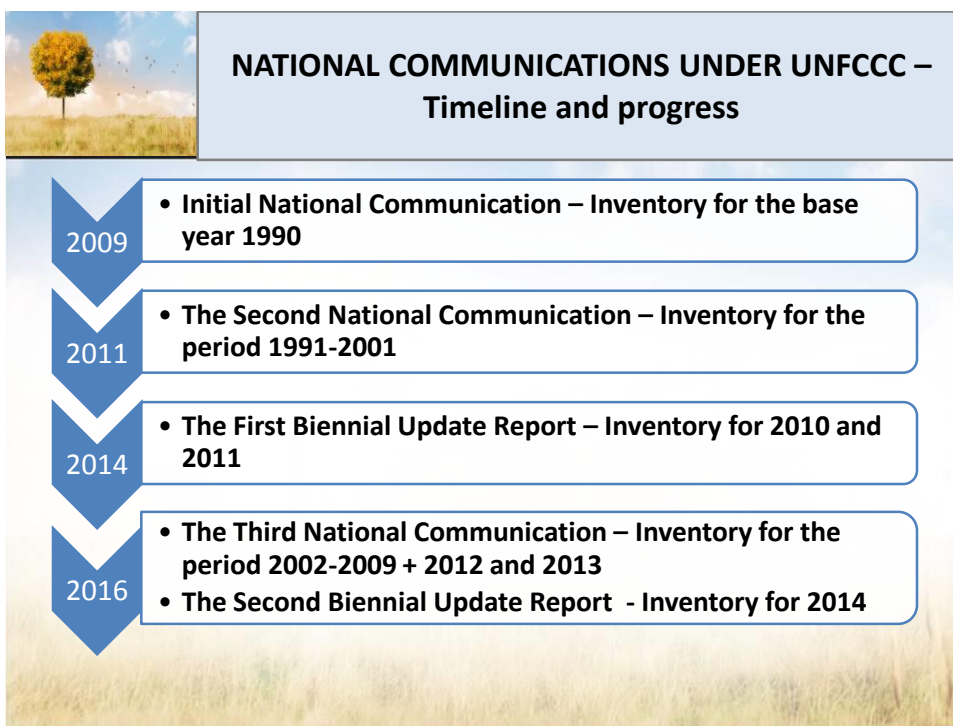
Hamid Čustović, Sabina Hodžić, Melisa Ljuša, Andrea Muharemović




BOSNIA AND HERZEGOVINA AND THE UNFCCC

- Bosnia and Herzegovina
 - Party of the UNFCCC from the 6th December 2000
 - Party of the Kyoto Protocol from the 15th July 2007
- UNFCCC Focal Point for B&H:
 - Institution: **Ministry of Physical Planning, Civil Engineering and Ecology of Republika Srpska (RS)**
 - Person: Ms. Svjetlana Radusin, assistant minister


With the financial support of GEF + technical assistance from the UNDP - reporting






PROCESS OF THE INVENTORY PREPARATION

- Collection and processing of activity data;
- Selecting emission factors in accordance with IPCC methodology and national circumstances;
- Estimating emissions in accordance with the IPCC methodology and recommendations;
- Compilation of the inventory including the National Inventory Report (NIR) and the Common Reporting Format (CRF).




METHODOLOGICAL ISSUES

- **Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (IPCC Guidelines) and IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (IPCC Good Practice Guidance) IPCC 1996;**
- **Tier 1 method (simplified method)** has been used along with the default EF specific for the animal type, climate zone (cool), geographical region (Eastern Europe) and the degree of the region development (developing country), IPCC, 1996



GENERAL ASSESSMENT OF THE COMPLETENESS

- Key source analyses performed
- Key category level and trend assessments performed in the TNC
- The completeness is evaluated following the IPCC methodology and appropriate use of the following notation keys: NO (not occurred); NE (not estimated); NA (not applicable);
- Gaps in the availability and collecting of activity data described where appropriate.



DATA SOURCES

CRF Sector/Subsector	Type of data	Source of data
Agriculture	Livestock number <i>(lack of categorization livestock number and differences in collecting activity data on entity level)</i>	BH Agency for statistics Federal agency of statistics Republic agency for statistics FAO database <i>Expert estimation</i>
	Production of N-fixing crops and non N fixing crops	BH Agency for statistics Federal agency of statistics Republic agency for statistics FAO database <i>Expert estimation</i>
	Area of histosols	<i>Expert estimation</i>
	Activity data on mineral fertilisers	BH Agency for statistics Chambers of commerce Fertilizer company GIKIL Lukavac <i>Expert estimation</i>



AGRICULTURE GREENHOUSE GAS EMISSIONS

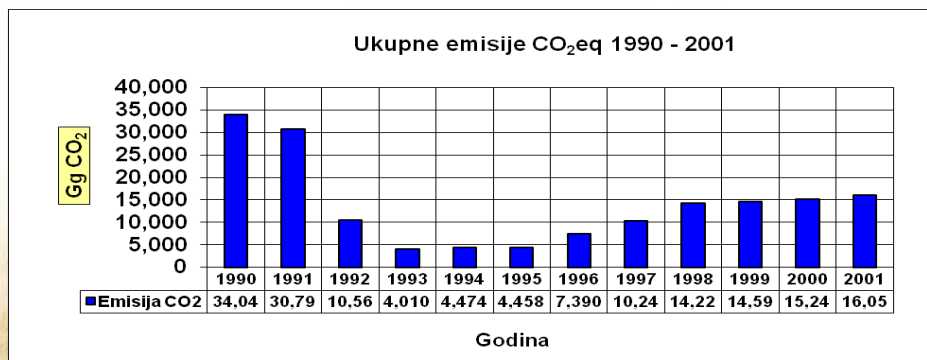
- GHG emissions from agriculture activities in B&H:
 - CH_4 emissions from enteric fermentation of domestic livestock,
 - CH_4 and N_2O emissions from manure management,
 - N_2O from agricultural soils (direct and indirect).

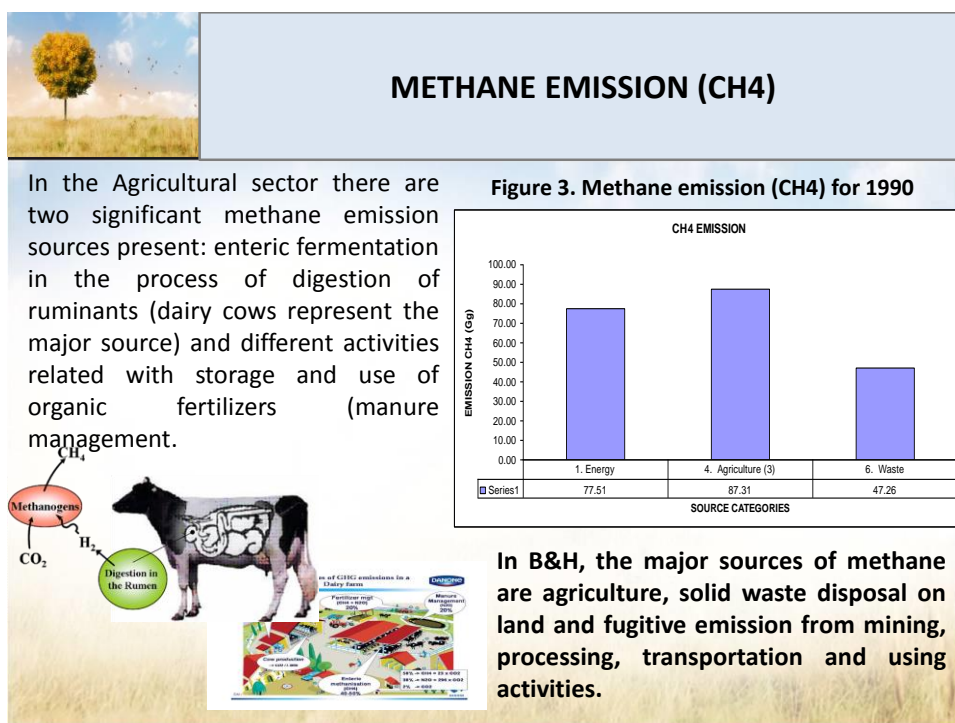
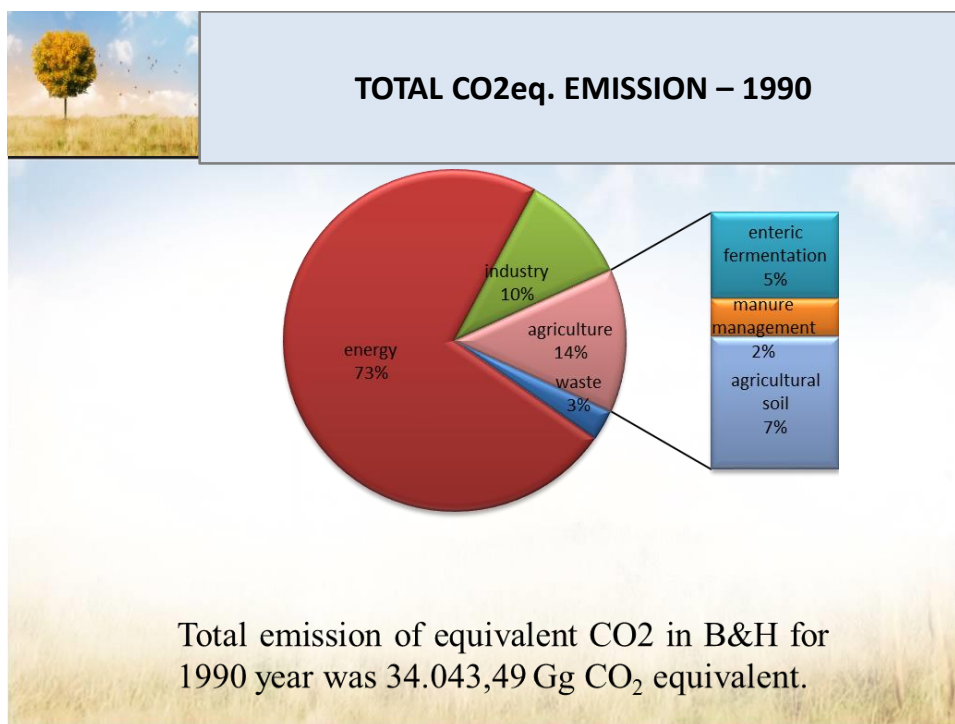


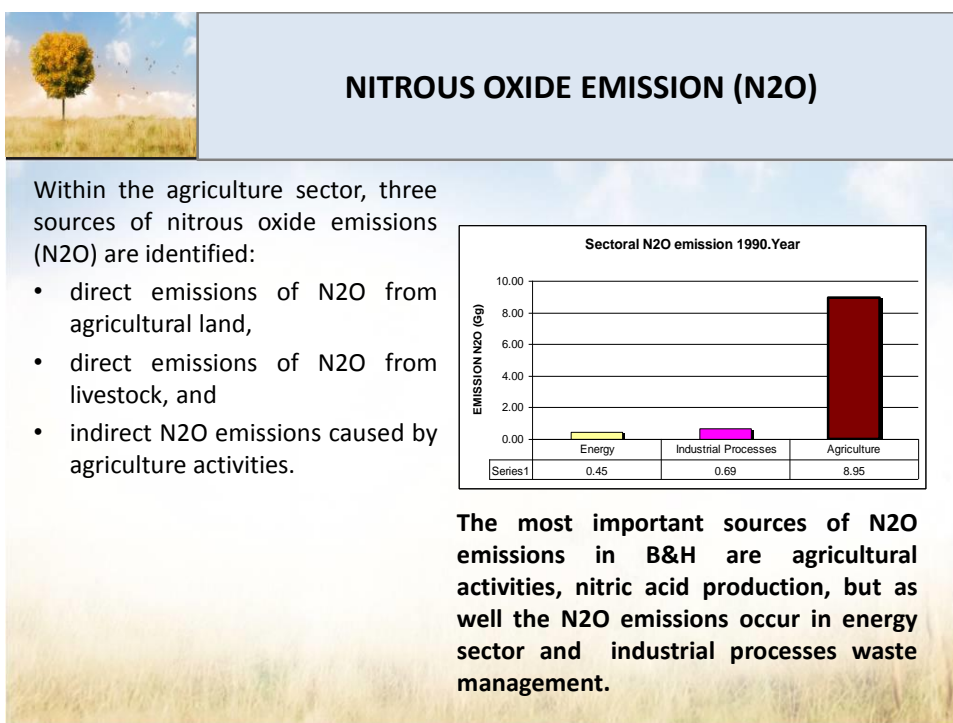
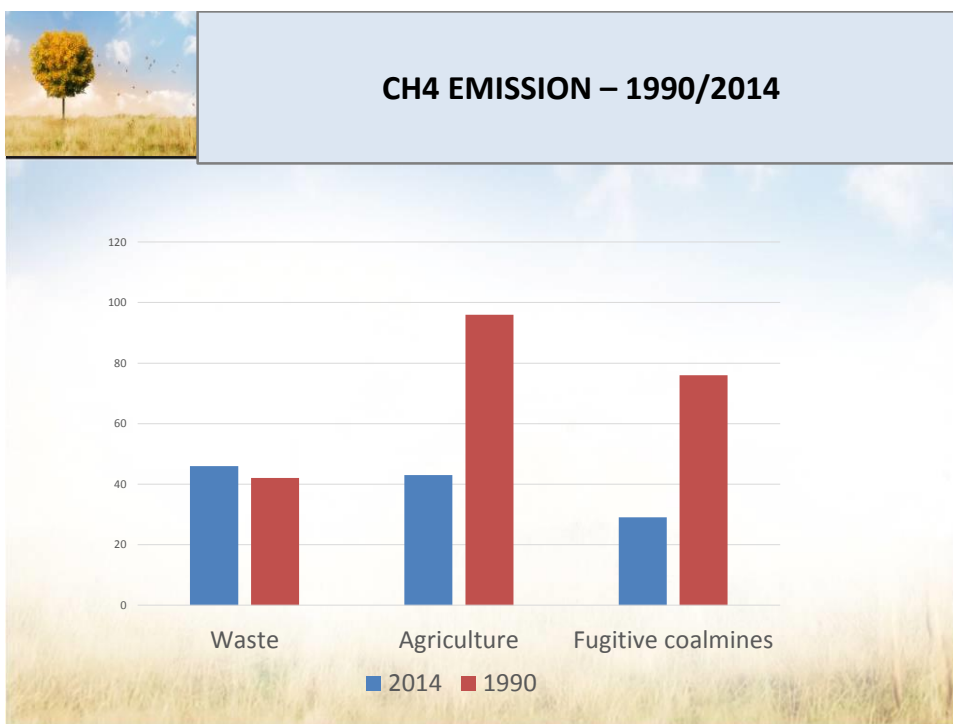
TOTAL EMISSION $\text{CO}_2\text{eq.}$ IN B&H INC

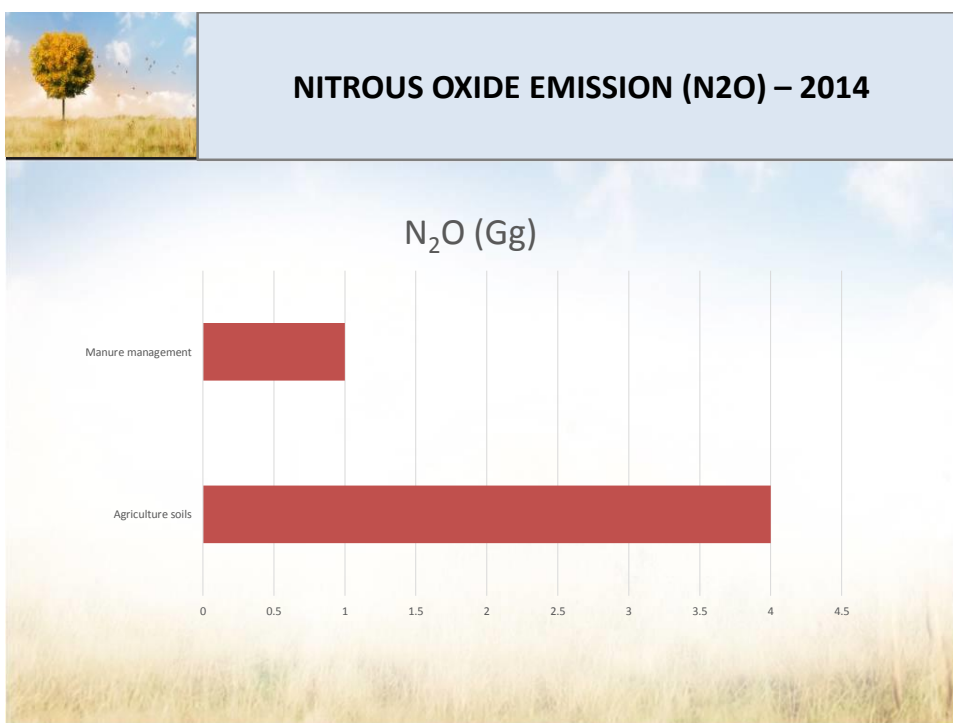
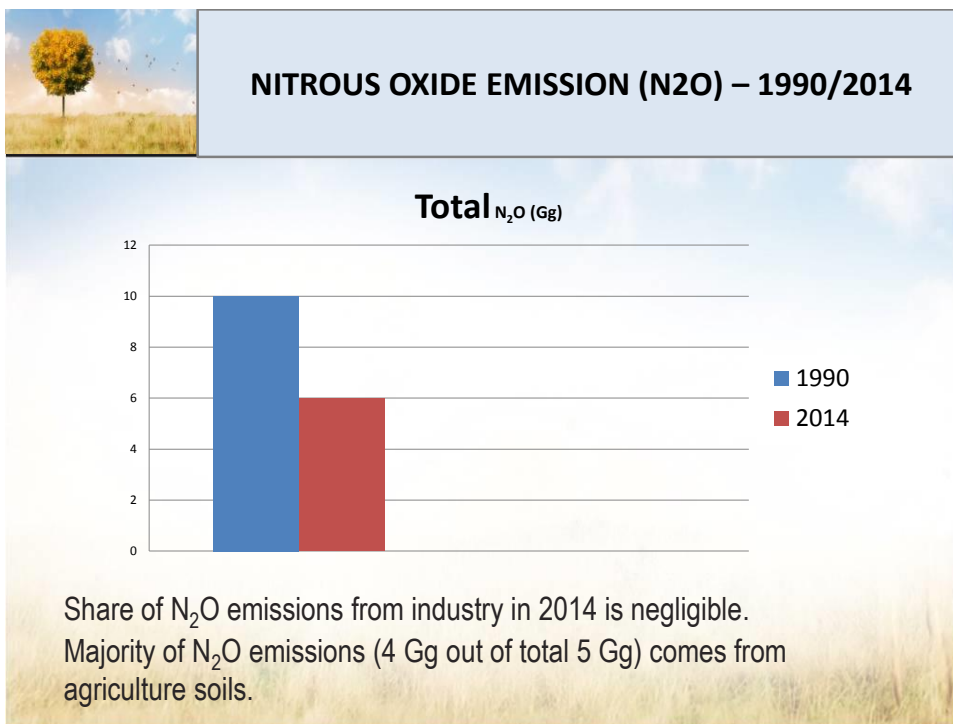
The contribution of the individual sectors to total emissions and removals of the greenhouse gases.

Energy sector is the largest contributor to greenhouse gas emissions with 73. percent, followed by Industrial processes with 10.0 percent, Agriculture with 14 percent, Waste with 3%.











GAPS / NEEDS / WANTED IMPROVEMENTS - 1

- Statistical data not fully harmonized in the country – difference in the methodology of data collection on different levels;
- Credibility of data questionable;
- Lack of (reliable) data is main constrain for application of higher TIER method(s);
- Lack of relevant regulations for implementation of the data gathering commitment;



GAPS / NEEDS / WANTED IMPROVEMENTS - 2

- Lack of activity data needed for reporting to IPCC and implementing commitments under UNFCCC;
- Lack of administrative capacities for preparation of high-quality subordinate legislation governing the activity data collection;
- There is a need for financial resources, expert assistance in the institutional strengthening and the development of the national system for the inventory compilation (entire cycle), QA/QC and reporting.



GAPS / NEEDS / WANTED IMPROVEMENTS - 3

- Identified key categories: agriculture soils and enteric fermentation;
- Improvement of TIER method – especially or at least for the key categories;
- Harmonization of the activity data collection;
- Categorization of activity data;
- Capacity building



Thank you for your attention!