

# The SEA GHG Project and its Relevant Activities to Support BUR1 Preparation

**WGIA 11<sup>th</sup> Meeting**  
**(5 - 7 July 2013, Tsukuba, Japan)**

**Presented by:**  
**Leandro Buendia**  
SEA GHG Project Coordinator



**United Nations**  
Framework Convention on  
Climate Change



# Durban Decision on BUR (Decision 2/CP.17)

Para 41 (a): Non-Annex I Parties, consistent with their capabilities and level of support provided for reporting, should submit:

- ✓ First Biennial Update Report (BUR1) by December 2014, including a GHG inventory no less than 4 years old

Annex III: Scope of BUR1, information on:

- ✓ national circumstances and institutional arrangements relevant to the preparation of the NC;
- ✓ national inventory of anthropogenic emissions by sources and removal by sinks
- ✓ mitigation actions and their effects, including associated methodologies and assumptions;
- ✓ constraints and gaps, and related financial, technical and capacity needs, including a description of support needed and received;
- ✓ level of support received to enable the preparation and submission of biennial update reports;
- ✓ domestic measurement reporting and verification (MRV)

# Status of BUR1 Preparation

SEA Participating Countries	BUR1?	Status of Project Activities (as of June 2013)
Cambodia	?	Project Cooperation Agreement (PCA) for the preparation of TNC sent to Executing Agency for signature
Malaysia	✓	TNC project proposal with BUR component submitted to GEF for review and approval
Papua New Guinea	✓ *	Still in the process of finalizing SNC; expressed interest to develop BUR1
Philippines	✓	TNC project proposal with BUR component under preparation
Thailand	✓	TNC project proposal with BUR component under preparation
Viet Nam	✓	Preparation of a MSP CEO Approval document for TNC and BUR underway

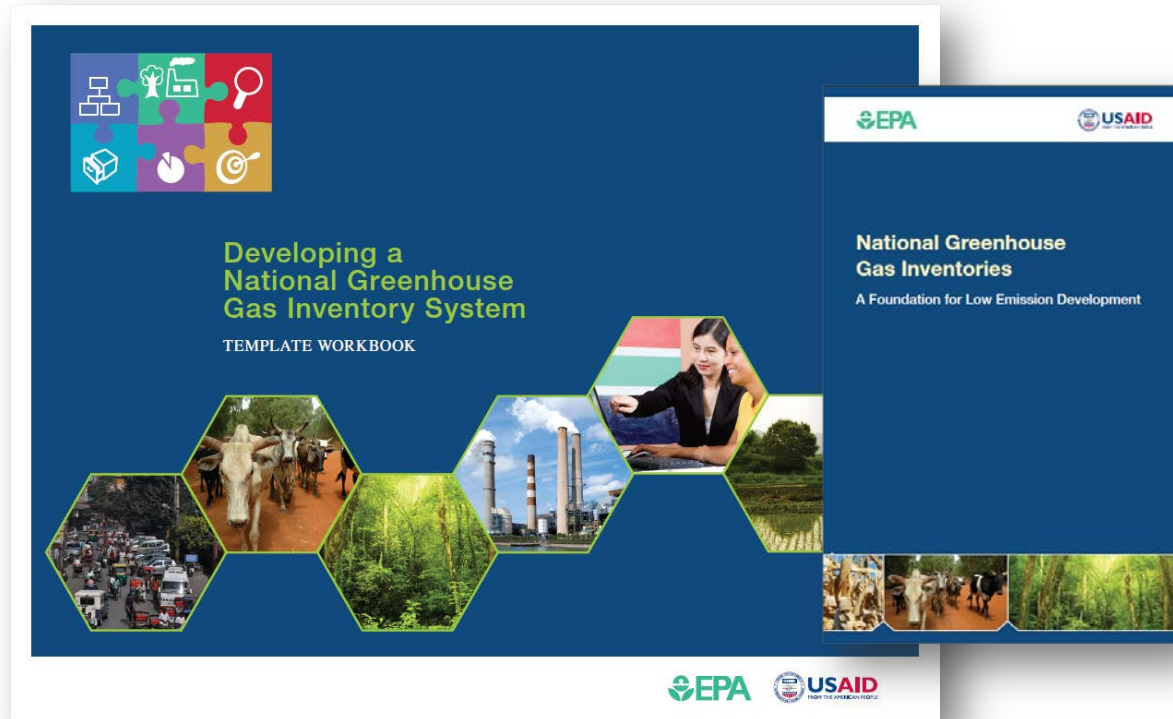
# What SEA Project is doing with participating countries?

- Help countries improve the **institutional capacity** of a country to establish a **sustainable inventory system**
  - ✓ Using template workbook for National GHG Inventory
- Help countries to develop a **complete Tier 1 or Tier 2 for Key Sectors (Agriculture/LULUCF and Energy Inventory)**
  - ✓ Providing technical assistance on methods, activity data collection and documentation
  - ✓ Completing a well-documented TACCC inventory using template and software



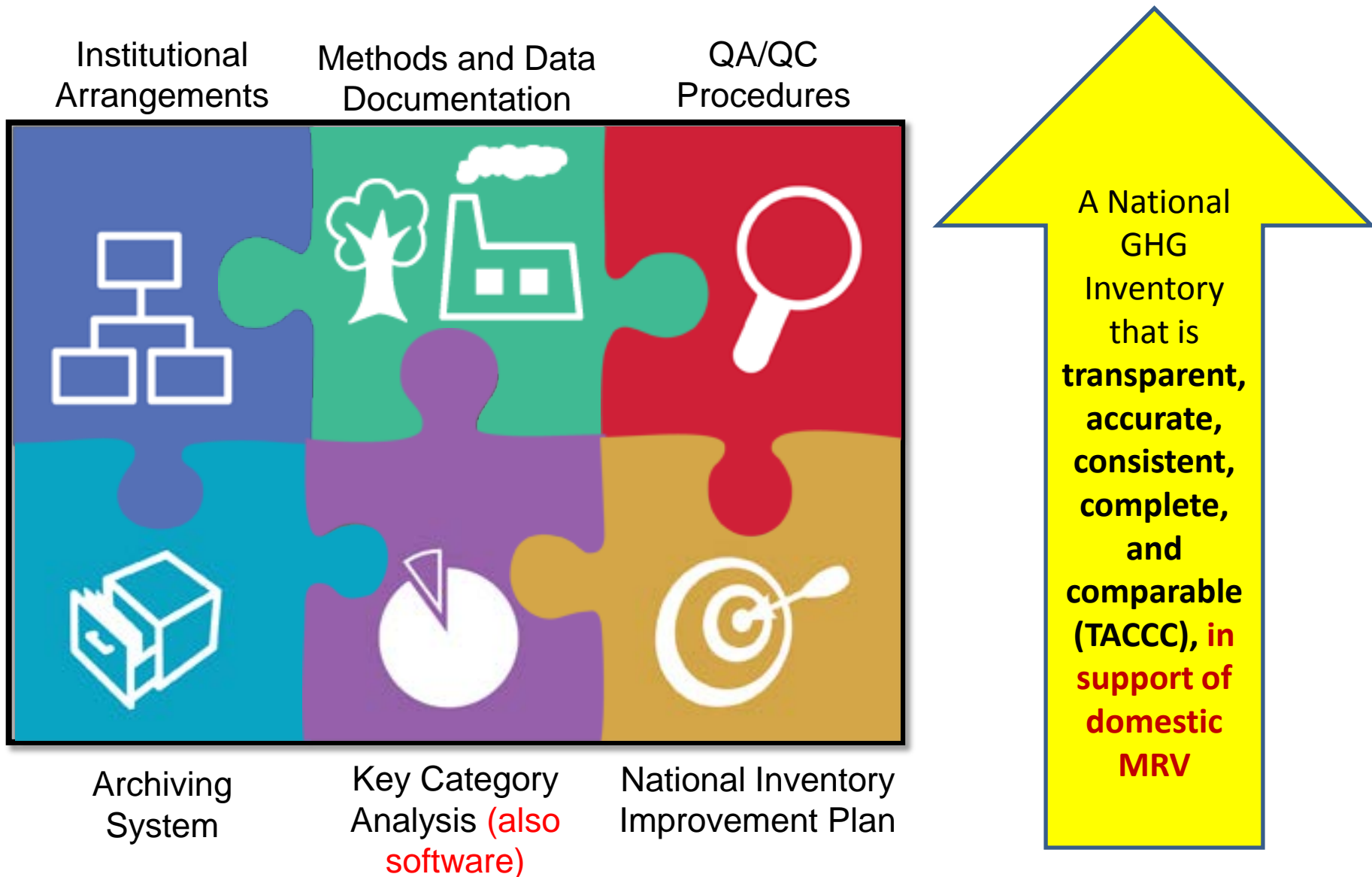
# Template Workbook for National GHG Inventory

Key elements of the IPCC and UNFCCC guidance were condensed into an easy-to-use National Template Workbook



- Based on inventory systems developed in concert with other countries
- Each template becomes a chapter of the National Inventory System Report
- Each template provides documentation of critical building blocks

# The 6 National Inventory Templates

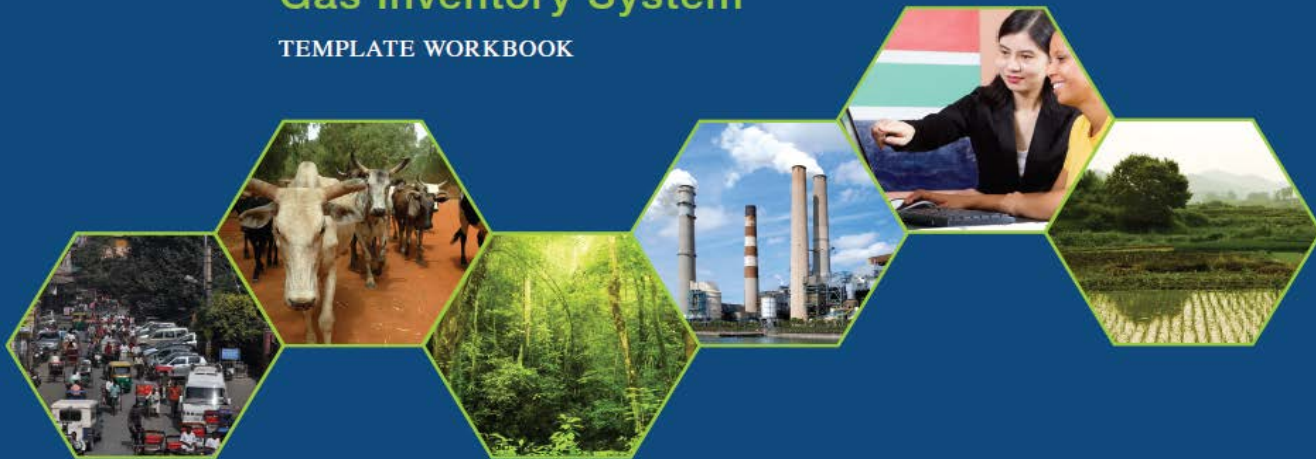




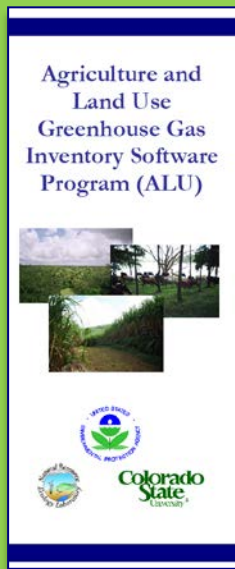
## [Country's] National Greenhouse Gas Inventory System Report

Developing a  
National Greenhouse  
Gas Inventory System

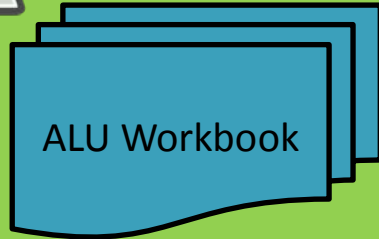
TEMPLATE WORKBOOK



# GHG Inventory Tools



## Agriculture and Land Use (ALU) Software and Workbook



Basis	1996 GL, GPG 2000, GPG 2003
Sector	Agriculture, LULUCF
Tier	1, 2
Additional Features	<ul style="list-style-type: none"> <li>✓ Mitigation Analysis</li> <li>✓ Uncertainty Analysis</li> <li>✓ Biomass Gain-Loss Method</li> <li>✓ Stock Difference Method</li> </ul>
Platform	Stand alone

### ALU Questionnaires for:

- ✓ Land use, climate, and soil data
- ✓ Forest management
- ✓ Agriculture management
- ✓ Livestock
- ✓ N Fertilizer and liming
- ✓ Sewage and sludge

### Agriculture and Land Use Greenhouse Gas Inventory Data Availability Assessment

This spreadsheet assesses existing data availability for the activity data needed to calculate emissions from agriculture and land use sources using IPCC Tier 1 or Tier 2 methods. The data assessment is organized according to the structure employed by the ALU tool; however, the assessment includes an upfront diagram mapping the relationship between data elements in ALU and IPCC source categories.

To fill out this assessment, click on each of the data elements listed below and fill out the responses required on each spreadsheet component. The Additional Information and Help sections contain useful information to help you as you fill out the assessment.

**Data Assessment Categories**

[Land Use, Climate, and Soil Data](#)

**Additional Information and Help**

[Mapping the ALU Data Elements to the IPCC Source Categories Help Section](#)



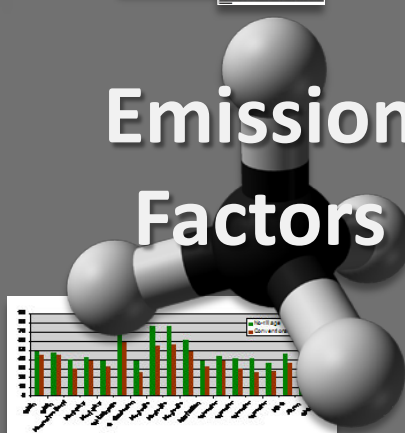
# Geographic Information Systems



# Management Activity Data



# Emission Factors



*Land Use/  
Cover  
Soils  
and  
Climate*

*National  
Agriculture  
and  
Forestry  
Statistics*

*IPCC  
Defaults  
or  
Country-  
Specific*

# ALU Inventory Software



N28									
A	B	C	D	E	F	G	H	I	
This spreadsheet contains sheet 1 of Worksheet 5-2, in accordance with the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.									
<b>MODULE LAND-USE CHANGE AND FORESTRY</b>									
<b>SUBMODULE FOREST AND GRASSLAND CONVERSION - CO2 FROM BIOMASS</b>									
<b>WORKSHEET 5-2</b>									
<b>SHEET 1 OF 8 BIOMASS CLEARED</b>									
SESSION example									
YEAR 2000									
<b>STEP 1</b>									
		A	B	C	D	E			
	Vegetation types	Area Converted Annually (kha)	Biomass Before Conversion (t dm/ha)	Biomass After Conversion (t dm/ha)	Net Change in Biomass Density (t dm/ha)	Annual Loss of Biomass (kt dm)			
					D = (B - C)	E = (A x D)			
16	Tropical Moist, Short Dry Season	tropical broadleaf forest - Deforestation	1717.219	20	8	12	20606.628		
17	Tropical Moist, Short Dry Season	tropical broadleaf forest - Shifting Cultivation	10.191	5	0	5	50.955		
18	<b>Subtotals</b>		1727.41				20657.583		
<b>Documentation box:</b> Grassland is not included here because Approach 2/3 land use data are required in ALU for reporting stock changes for grassland conversion (if applicable). Annual Loss of Biomass includes above-ground and below-ground woody biomass and herbaceous biomass loss through deforestation, shifting cultivation, and conversion of grassland. Column C is zero for shifting cultivation because it is assumed that all biomass is removed.									

**Generates detailed reports in a TACCC way and thus support domestic MRV**

# SEA GHG Project Accomplishments

- 8 Planning and Technical Meetings in 2011 (including technical consultations)
- 7 Follow Up Technical Workshops in 2012 (including technical consultations)
- **Several Technical Working Sessions /Consultations/Small Meetings) in 2013:**
  - ✓ **Malaysia (February )**
  - ✓ **Cambodia (February)**
  - ✓ **Viet Nam (March)**
  - ✓ **Papua New Guinea (May )**
  - ✓ **Thailand (January, June)**
  - ✓ **Philippines (February, April, June)**



## Lessons Learned so far...

- **Template Workbook for National GHG Inventory are useful:**
  - ✓ **institutional arrangement (IA) template** facilitates clear definition roles and responsibilities of all stakeholders for data sharing, management , QA/QC, compilation and reporting
  - ✓ **Method and data documentation (MDD) template** facilitates transparency in documentation and standardizes outputs for review and archiving
  - ✓ **QA/QC template** facilitates the development of QA/QC plans and procedures
  - ✓ **Archiving template** facilitates the development of archiving plans and procedures
  - ✓ **Key Category Analysis (KCA) template and Software** provides better understanding of what KCA is, and facilitates quantification and analysis of key categories
  - ✓ **National Inventory Improvement (NIIP) template** summarizes all potential areas for improvements of future inventories

- **ALU Software and Workbook is useful:**
  - ✓ good tool to **implement the IPCC methodology** in a TACCC manner
  - ✓ facilitates representation of land use in a **systematic and consistent** way (even for exporting GIS maps/text files)
  - ✓ Good **data management component and documentation** for data sharing and review (QA/QC);
  - ✓ **Mitigation Analysis Component** facilitates development of mitigation strategies for AFOLU sector.

# Gaps, Barriers, Challenges and Opportunities

- **Institutional Arrangements for NC3 and BUR1 are still being established:**
  - from “project-based approach” to institution-based approach”; takes time and requires higher level coordination (e.g. request for nomination, awareness raising, executive order, etc...)
  - more capacity building efforts at national and local levels (for data providers or compilers)
- **Data gaps to implement Tier 2 methods**
  - Tier 2 methods require more data and tools to facilitate data collection, calculations, verification, and reporting
- **Limited resources to begin with GHG Inventory for NC3 and BUR1**
  - No permanent staff/consultants to continue inventory activities
  - No budget allocation from existing funds; (of low priority)
- **Quick turn-over of people**
  - Trained people were assigned to new position or found a new job
  - Data went with the trained people; no continuity and loss of institutional memory

## Next Steps

- ✓ To continue organizing technical working sessions with participating countries, in small teams or working groups, with focus on building **institutional capacity** and support for **data improvements**, in support of developing NC3 and BUR1 in a TACCC manner...
- ✓ **Mid-term Review Workshop in October 2013 in Manila...**

**Thank you!**