

# UNFCCC Capacity Building Activities on National Greenhouse Gas Inventories of non-Annex I Parties

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Coalition for Rainforest Nations



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**UN-REDD**  
PROGRAMME





- 1. Approach to Capacity Building**
- 2. Framework of operation**
- 3. Lessons learned**
- 4. Immediate future**



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**UN-REDD**  
PROGRAMME







# 1. Approach to Capacity Building



## How it all started...

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- 
- In 2006 / 2007, the secretariat received **requests for assistance** on GHG inventories from **8** non-Annex I Parties (**Cambodia, Indonesia, Lao, Malaysia, Philippines, Singapore, Thailand, Vietnam**).
  - Based on general mandate included in **Article 8, paragraph 2 (c)** of the Convention, as recalled in **Decision 17/CP.8**, the **UNFCCC secretariat will facilitate assistance to non-Annex I Parties**.
  - The requests received were to strengthen the capacity of SEA countries **to improve the quality of their national GHG inventories for the development of sustainable inventory management systems**.



# A Collaborative Approach

- **Nov. 2006 – San José (Costa Rica)**, US-EPA regional workshop on **CAALU**. First exchange of views on possible ways to address the needs expressed by NAI Parties from Southeast Asia. **UNFCCC secretariat to coordinate a pilot project** initiated with supplementary budget from USA to be reallocated to that effect.
- Recruitment of a **Regional Coordinator** (former IPCC staff).
- Preparation of Scoping Meeting (**country-driven** and **bottom-up approach**)
- **June 2007 – Manila (Philippines)**, 3-Day Scoping Meeting (8 SEA countries + IPCC, IRRI, US-EPA, WGIA, UNFCCC).
- **First draft project concept** produced and further refined during and after **WGIA 5 (September 2007 - Kuala Lumpur, Malaysia)**.
- **April 2008 – Singapore**, Workshop to officially **launch the SEA GHG Project** (EPA Templates, ALU workbooks).



# The Catalytic Role of the Secretariat

- The UNFCCC secretariat plays a **catalytic role** in:
  - Addressing non-Annex I Parties' **requests for assistance**
  - **Coordinating** with relevant organizations to avoid duplication of efforts, maximize efficiency and minimize costs
  - **Raising supplementary funding** from various Annex I Parties
  - **Coordinating the implementation** of activities (regional project document, recruitment of regional coordinator, MoU for workshops, logistics, etc.)
- **Lessons learned** from this pilot initiative will **facilitate further assistance** (potential replication) to non-Annex I Parties
- We stand ready to facilitate assistance to Parties as needed... and to the extent our own capacities allow us to.



# 2. Framework of operation

## • Decision 17/CP.8

[http://unfccc.int/files/essential\\_background/application/pdf/userman\\_nc.pdf](http://unfccc.int/files/essential_background/application/pdf/userman_nc.pdf)

**Decision 17/CP.8**

**Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention**

*The Conference of the Parties,*

*Recalling, in particular, Article 4, paragraphs 1, 3 and 7, Article 10, paragraph 2(a) and Article 12, paragraphs 1, 5 and 7, of the Convention,*

*Recalling also its decisions on communications from Parties not included in Annex I to the Convention (non-Annex I Parties) and, in particular, its decisions 10/CP.2, 2/CP.4, 12/CP.4, 8/CP.5, 31/CP.7 and 32/CP.7,*

*Recalling further that, by its decision 8/CP.5, it had initiated a process of reviewing the guidelines for the preparation of national communications from non-Annex I Parties, with the aim of improving them,*

*Having in mind that, at its seventh session, it had decided<sup>1</sup> to continue the process of reviewing the guidelines for the preparation of national communications from non-Annex I Parties, with a view to adopting them at its eighth session,*

*Acknowledging that the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention has made important contributions to the revision of the guidelines for the preparation of national communications from non-Annex I Parties,*

*Recognizing the important role of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention, in facilitating technical advice and support for the preparation of second and, where appropriate, third national communications from non-Annex I Parties, pursuant to decision 8/CP.8,*

1. *Decides:*

(a) That Parties not included in Annex I to the Convention (non-Annex I Parties) should use the guidelines contained in the annex to this decision for the preparation of second and, where appropriate, third national communications and, where appropriate, initial national communications, except where Parties have initiated the process of preparing second national communications and received funding under the established procedures or on an agreed full cost basis prior to the approval of the guidelines annexed to this decision;

(b) That, in using these guidelines, non-Annex I Parties should take into account their development priorities, objectives and national circumstances;

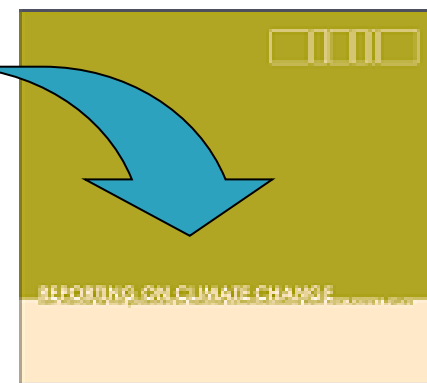
(c) That these guidelines should be used to provide guidance to an operating entity of the financial mechanism for funding the preparation of national communications from non-Annex I Parties;

(d) That the guidelines contained in the annex to this decision, together with the guidance to an operating entity of the financial mechanism provided in decision 8/CP.8, should be used for the preparation of second and, where appropriate, third national communications and, where appropriate, initial national communications;

<sup>1</sup> Decision 32/CP.7.



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[http://unfccc.int/resource/cd\\_roms/na1/ghg\\_inventories/index.htm](http://unfccc.int/resource/cd_roms/na1/ghg_inventories/index.htm)

[http://unfccc.int/files/national\\_reports/non-annex\\_i\\_natcom/submitted\\_natcom/application/pdf/17\\_cp.8.pdf](http://unfccc.int/files/national_reports/non-annex_i_natcom/submitted_natcom/application/pdf/17_cp.8.pdf)





# CGE Training materials

[http://unfccc.int/resource/cd\\_roms/na1/ghg\\_inventories/index.htm](http://unfccc.int/resource/cd_roms/na1/ghg_inventories/index.htm)


GHG Inventories - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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Address [http://unfccc.int/resource/cd\\_roms/na1/ghg\\_inventories/index.htm](http://unfccc.int/resource/cd_roms/na1/ghg_inventories/index.htm) Go

Non Annex I Training Package (CD ROM) [Acknowledgements](#) | [Contact us](#)



### GHG Inventories

The materials contained in this CGE training package, on national greenhouse gas (GHG) inventories, intends to provide the reader with the best possible synthesis of all the Intergovernmental Panel on Climate Change (IPCC) methodologies and tools available which could be of use for non-Annex I Parties and experts in the process of preparation of their national GHG inventories.

### Vulnerability & Adaptation

### Mitigation Assessments

### GHG Inventories

The present training package is directly designed to address the UNFCCC guidelines for the preparation of national communications from Parties not included in Annex I to the Convention ([decision 17/CP.8](#)), and is in no case intended to replace any of the IPCC methodologies or tools it is referring to in its various modules.

For further detail and explanation, the reader is therefore always encouraged to go back to the original IPCC documents or tools referred to.

- **Energy**
  - **Fuel combustion**
    - [Presentation](#)
    - [Fuel combustion](#)
    - [Handbook](#)
    - [Combustion training](#)
    - [Quiz](#)
    - [Energy quiz 1 test](#)
    - [Energy quiz 1 key](#)
  - **Fugitives**
    - [Presentation](#)
    - [Fugitives](#)
    - [Handbook](#)
    - [Fugitives training](#)
    - [Quiz](#)
    - [Fugitives quiz 1 test](#)
    - [Fugitives quiz 1 key](#)
    - [Fugitives quiz 2 test](#)
    - [Fugitives quiz 2 key](#)
- **Industrial processes**
  - [Presentation](#)
  - [Industrial processes](#)
  - [Handbook](#)
  - [Industrial processes handbook](#)
  - [Annex 1 Table](#)
  - [Annex 2 Table](#)
  - [Annex 3 Table](#)
- **Agriculture**
  - [Presentations](#)
  - [Agriculture 1 overview](#)

[Français](#) [Español](#)

### UNFCCC Software

In order to facilitate the tasks of non-Annex I Parties, the UNFCCC secretariat produced a software which incorporates all the elements a national GHG inventory could contain according to decision 17/CP.8. It is hoped that this software is flexible enough to accommodate the great variety of needs and constraints faced by non-Annex I Parties.

**New version 1.3.2 of software and manual available as of January 2007**

The software has been updated and users can now install the new version. If you have installed version 1.3.1 of the software, you should replace all the module files

[http://unfccc.int/resource/cd\\_roms/na1/acknowledgements.htm](http://unfccc.int/resource/cd_roms/na1/acknowledgements.htm) Local intranet



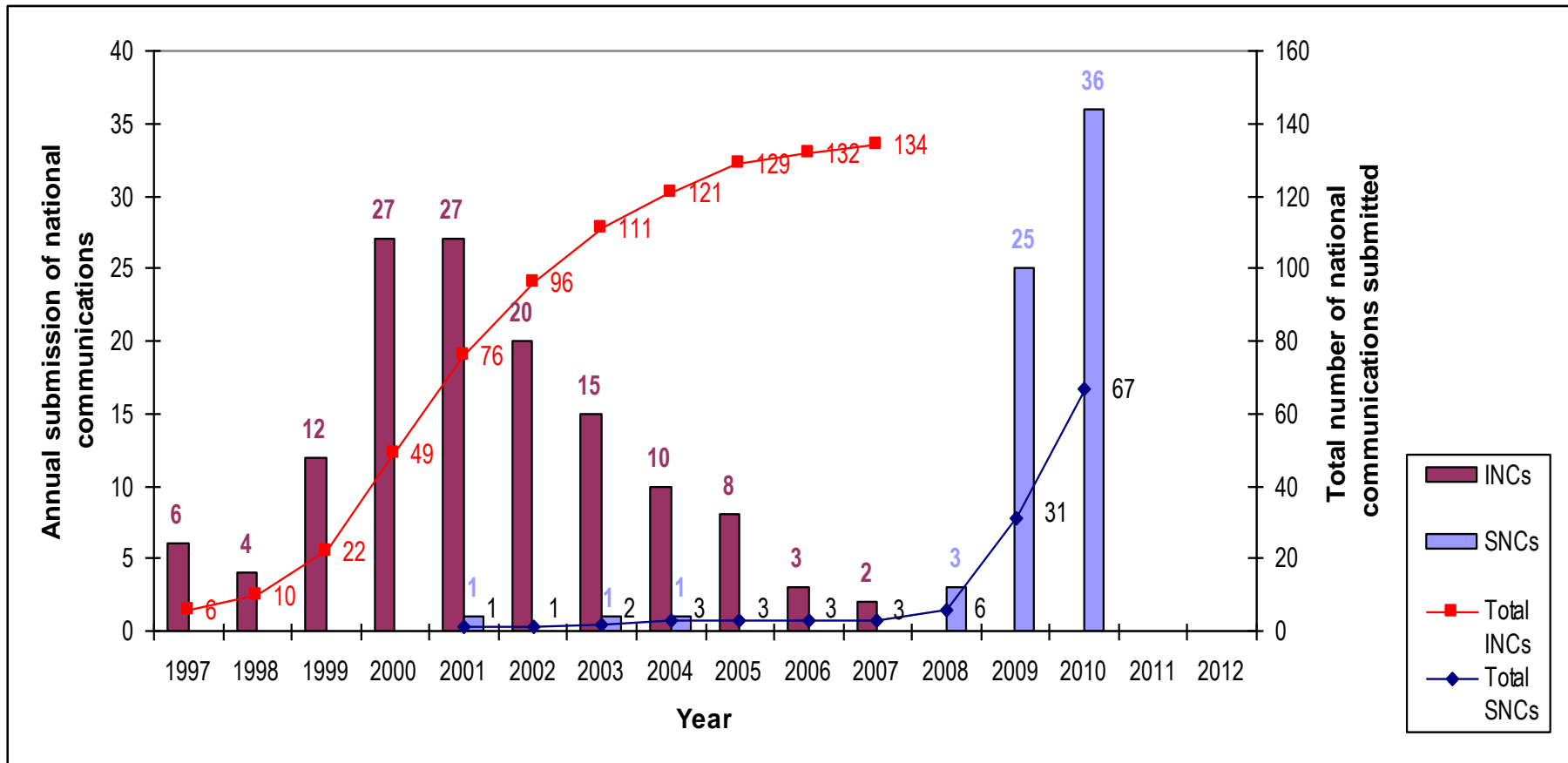
## Decision 8/CP.11

- Invites NAIP to prepare **project proposals**, even in advance of substantially completing their previous NCs, in order to avoid a lack of **continuity** in project financing
- Decides that NAIP **should** apply for the financing of their subsequent NCs at any time **between 3 to 5 years** of the initial disbursement of funds for the actual preparation of their previous NCs
- Shall make all efforts to **submit** their 2nd NC (or when appropriate 3rd) **within 4 years** of the disbursement of financial resources
- May use an **extension** of **up to 1 year** (after having informed the secretariat), but this shall not imply additional financial resources





# Submission of national communications



Source: UNFCCC/SBI/2007/10/Add.1

Oct. 2004 CGE GHG Training for LAC (Panama City)

Feb. 2005 CGE GHG Training for Asia (Shanghai)

Sep. 2006 CGE GHG Training for Africa (Pretoria)



# The importance of national GHG inventories

- **National communications** are the only commitment of non-Annex I Parties, and **GHG inventories** are a key component
- Essential to understand the reality of **emissions/uptake** and of their evolution over time
- **Prerequisite** to the design of **mitigation** policies and/or measures
- An **opportunity** to develop projects
- At the centre of negotiations on the **future** of the convention
- Most likely to be reported **more frequently**
- Clear need for a **system** to support the **continuous development** and **improvement** of GHG inventories



## 3. Lessons learned

- The **Southeast Asia** project work plan included specific objectives to **strengthen the capacity** of SEA countries to **improve the quality** of their national GHG inventory for the **development of sustainable inventory management systems**.

To strengthen the **institutional arrangement**, its functions, and operations of managing national GHG inventories

To enhance **technical capacity** of designated personnel in each sector (special attention to Agriculture and LULUCF)

To improve **national methodologies, AD and EF** through regional networking

To support the preparation of **inventory chapter of SNC** and subsequent NCs to UNFCCC

To develop **sustainable inventory management systems** in SEA



# Two ongoing projects

- Regional Capacity Building for Sustainable National **Greenhouse Gas Inventory Management Systems in Southeast Asia**
  - Phase 1 (**2008-2010**) - Cambodia, Indonesia, Lao, Malaysia, Papua New Guinea, Philippines, Thailand, and Vietnam
  - Phase 2 (**2011-2012**) - Cambodia, Indonesia, Malaysia, Papua New Guinea, Philippines, Thailand, and Vietnam
- Regional Capacity Building for Sustainable National **Greenhouse Gas Inventory Management Systems in Eastern and Southern Africa**
  - **2011-2013** - Botswana, Malawi, Mauritius, Namibia, Rwanda, South Africa, Tanzania, and Zambia



# The Project's Components

**Component 1: Improving National Inventory Management Systems**

**Component 2: Comprehensive multi-tier GHG software for Agriculture and LULUCF (ALU software)**

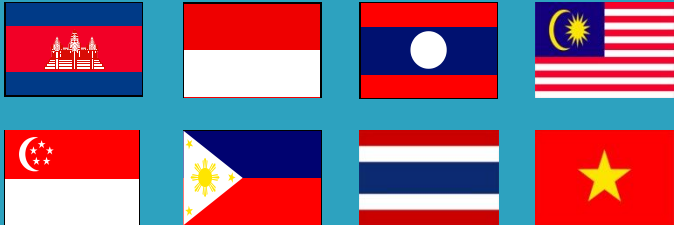

**Component 3: Targeted improvements to LULUCF sector (Forest land)**

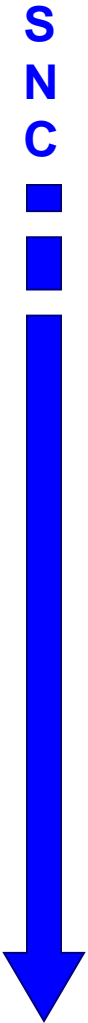
**Component 4: Targeted improvements to Agriculture sector**

**Component 5: Targeted improvements to Energy sector**



# SEA Regional GHG Inventory Project: Milestones

June 2007	<b>Scoping Meeting</b> <ul style="list-style-type: none"><li>- Introduced Tools</li><li>- Informed of existing regional networks and resources (WGIA, IRRI)</li></ul>	
Oct. 2007	Distribution of project work plan	
Oct. 2007 - April 2008	Countries review work plan submit endorsement letters	
April 2008	Kick-off meeting – Singapore	
May 2009	ALU introduction – Siem Reap	
Oct. 2009 - July 2010	ALU in-country trainings + Review of National Systems Tools Additional support USAID	
February 2010	Papua New Guinea joins the project	
Oct. 2010	Phase 1 – Closing Workshop Additional support from USAID Regional Development Mission in Asia	





# ALU in-country Training Workshops

2009

## PHILIPPINES

(20-23 October 2009  
Astoria Plaza Hotel, Manila,  
Philippines)

## THAILAND

(16-19 November 2009, Evason  
Hua Hin Resort & Six Senses Spa,  
Prachuab, Khiri Khan, Thailand)

2010

## VIET NAM

(02-05 February 2010, Hanoi  
Horison Hotel, 40 Cat Linh street,  
Hanoi, Viet Nam)

## CAMBODIA

(9-12 February 2010, Preah  
Sihanouk Province, Cambodia;  
follow up training on 7-9 July  
2010)

## MALAYSIA

(19-22 April 2010, Prince Hotel,  
Kuala Lumpur, Malaysia))

## INDONESIA

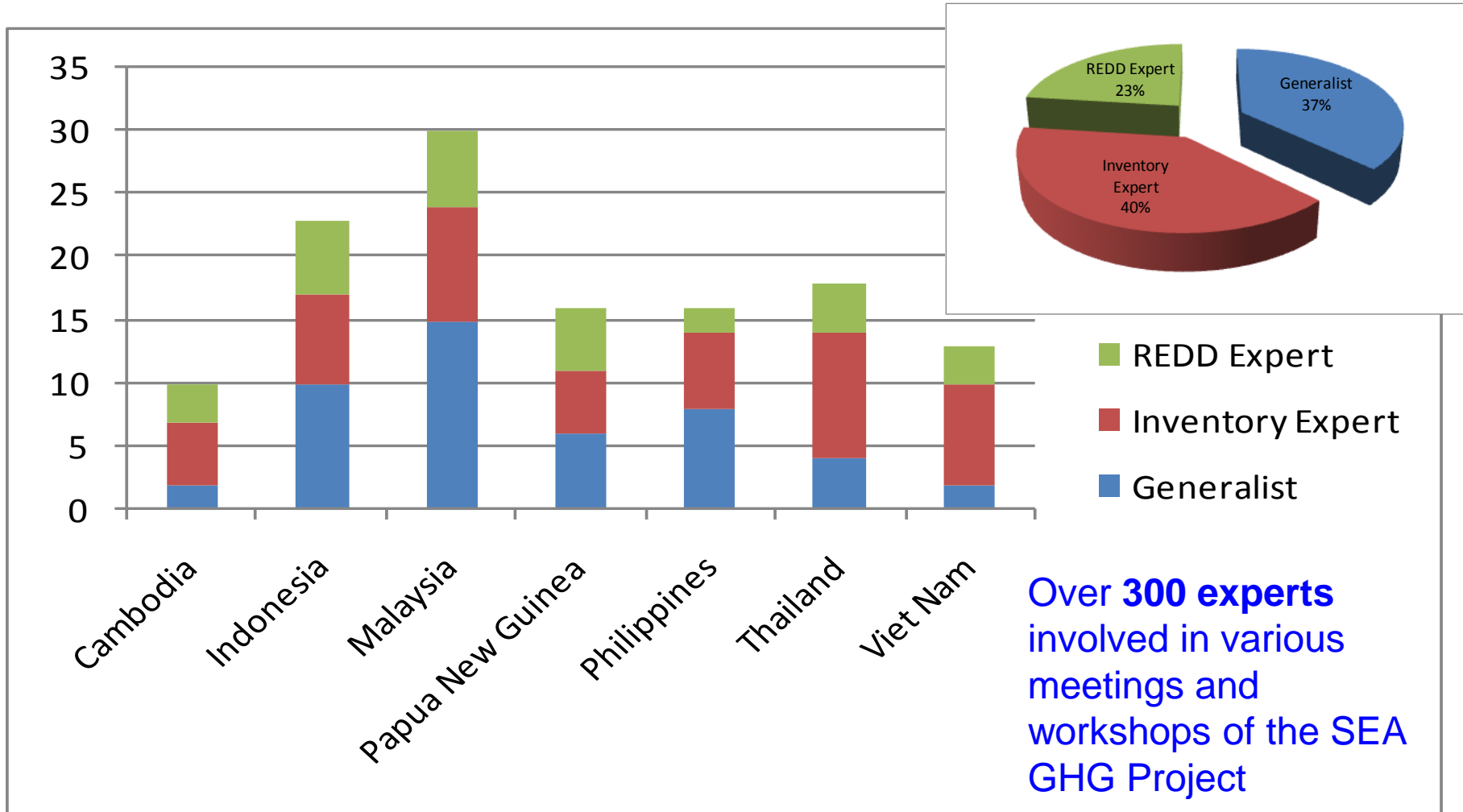
(26-29 April 2010  
Bogor, Indonesia)

## PAPUA NEW GUINEA

(20-23 July 2010, Port Moresby,  
Papua New Guinea)



# Number of Experts Trained for ALU Software, by Expertise







# Lessons learned (1)

- US-EPA Template Workbook for National GHG Inventory:
  - Useful tool to implement the IPCC Good Practice Guidance for improving:
    - ✓ Transparency
    - ✓ Accuracy
    - ✓ Completeness
    - ✓ Consistency
    - ✓ Comparability
  - Effective tool to improve institutional memory
  - Useful materials in reviewing data and assumptions to inventory process
  - Good reference materials in drafting GHG inventory reports



## Lessons learned (2)

- ALU Software and Workbook:
  - Useful tool to better understand and implement the IPCC Guidelines and Good Practice Guidance for the Agriculture and LUCF sectors (complicated sectors)
  - A significant improvement of the UNFCCC Software which allows moving to Tier 2 approach
  - Allows to manage data more effectively
  - Facilitates quick access to IPCC default values and allows assigning of country-specific EF
  - Good QA/QC component which facilitates the review of data and assumptions
  - A useful tool for GHG inventory in REDD-related activities
  - Allows to evaluate “what if questions” (e.g. mitigation options)
  - Allows flexibility in generating reports even using the UNFCCC format



# Challenges, barriers, and opportunities (1)

- US-EPA Template Workbook:
  - Need to dedicate time and efforts to accomplish the 6 template workbook
  - Some data and information may not be readily available; additional efforts are required
  - Additional hands-on training (with examples) maybe required to fully appreciate the importance of the 6 templates



# Challenges, barriers, and opportunities (2)

- ALU Software and Workbook:
  - Completing the ALU Workbook's primary and secondary data elements is a big challenge:
    - ✓ These are the IPCC GL and GPG data requirements
    - ✓ Completed ALU Workbooks facilitate inputting of data into ALU Software
  - Need to dedicate time and efforts to gather data requirements
  - Team work is needed since it is a multi-disciplinary task



# Challenges, barriers, and opportunities (3)

- There are opportunities in using ALU Software and Templates in SEA countries key categories:
  - REDD
  - Forest Management
  - Rice cultivation
  - Livestock
- More exposures to GHG inventory tools, more chances of having a “sustainable inventory management” in the country, **so experts can come and go; but inventory continues and meets needs of policymakers**



## 4. Immediate future

- Overall goal is to help participating countries **develop a complete and solid Tier 1 or Tier 2 inventory**
  - Assist in process of completing a well documented TACCC inventory  
(IPCC GPG-Transparent, Accurate, Consistent, Complete, Comparable)
  - Provides a solid foundation to build on for the future
- **Coordinating with other efforts and assistance projects** (donors, international organizations)
  - WGIA, and JICA (Vietnam and Indonesia)
  - GIZ (Mexico and Indonesia)
- **Obtaining and processing satellite imagery** in 2011 for all countries from the two regional projects (at least for 1990, 1995, 2000, 2005)



# Moving forward: Guiding Principles

1. The process of producing a complete, **high-quality and well documented GHG inventory** forms the foundation for our assistance under this project
2. We understand that it's not good enough to explain or “train” experts on methods and data requirements—must “**learn by doing**”
3. **Activity data** is key—must work with each country, as requested, to help them overcome barriers with AD collection
4. Each country is unique—**flexibility** is important
5. Dedicated Regional Project Coordinator to oversee the day-to-day activities is essential—**follow up** is needed
6. A **sustained, long-term effort** is necessary for success (e.g. moving from Phase I to Phase II)
7. These principles have been followed for the development of the **Eastern and Southern Africa** project, also targeting the Agriculture and LULUCF sectors (**Kick-off workshop, 7-9 March 2011, Mauritius**)



# Thank you for your attention!

## For more Information, please contact:

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