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National GHG Inventory Systems: Regional Context & Best Practices

Regional African Workshops On REDD+ National Forest Monitoring
Systems & GHG National Inventory Systems

25-27 February 2014
Livingstone, Zambia



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety



Australian Government

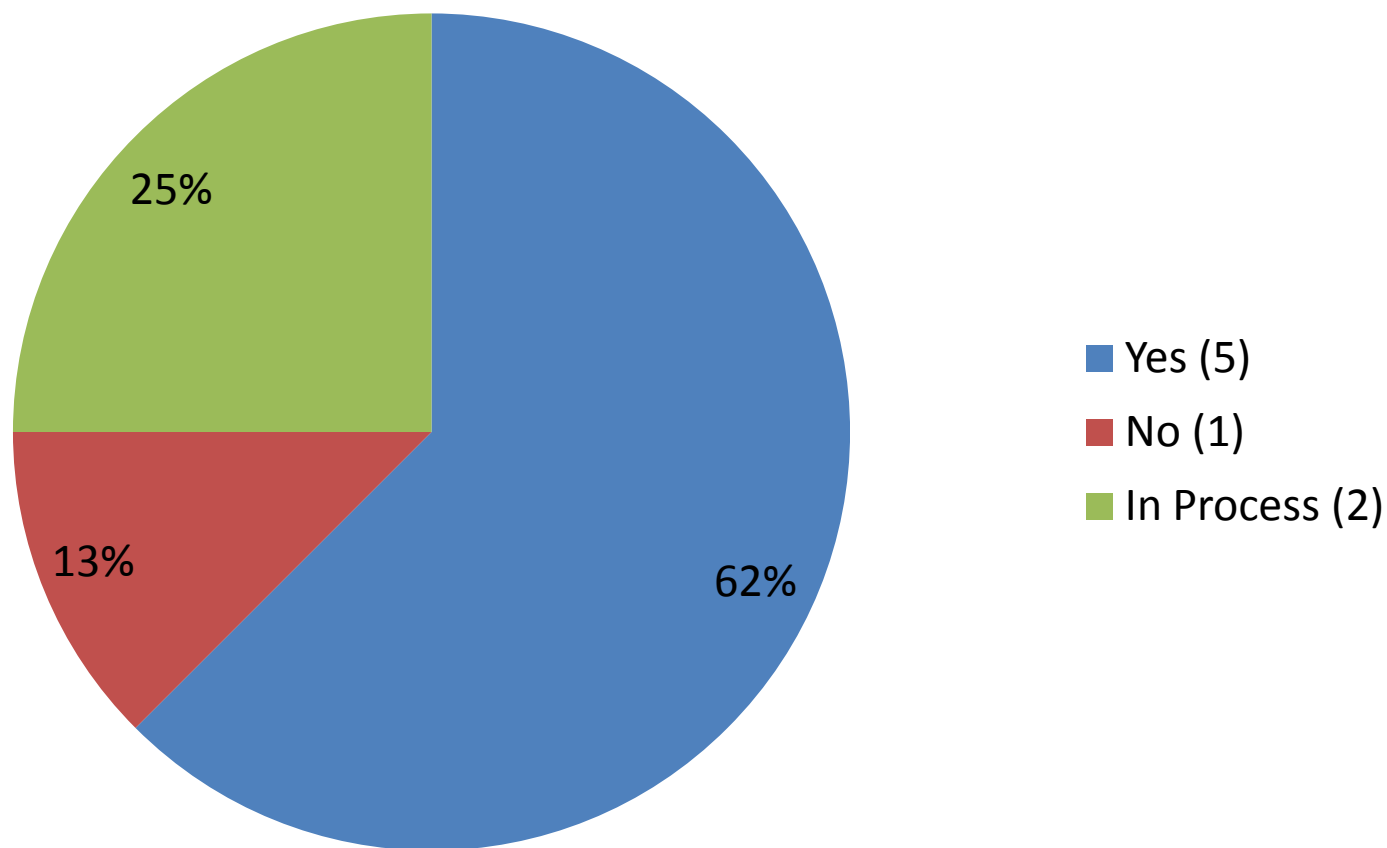
17 LECB countries will establish or strengthen National Inventory System



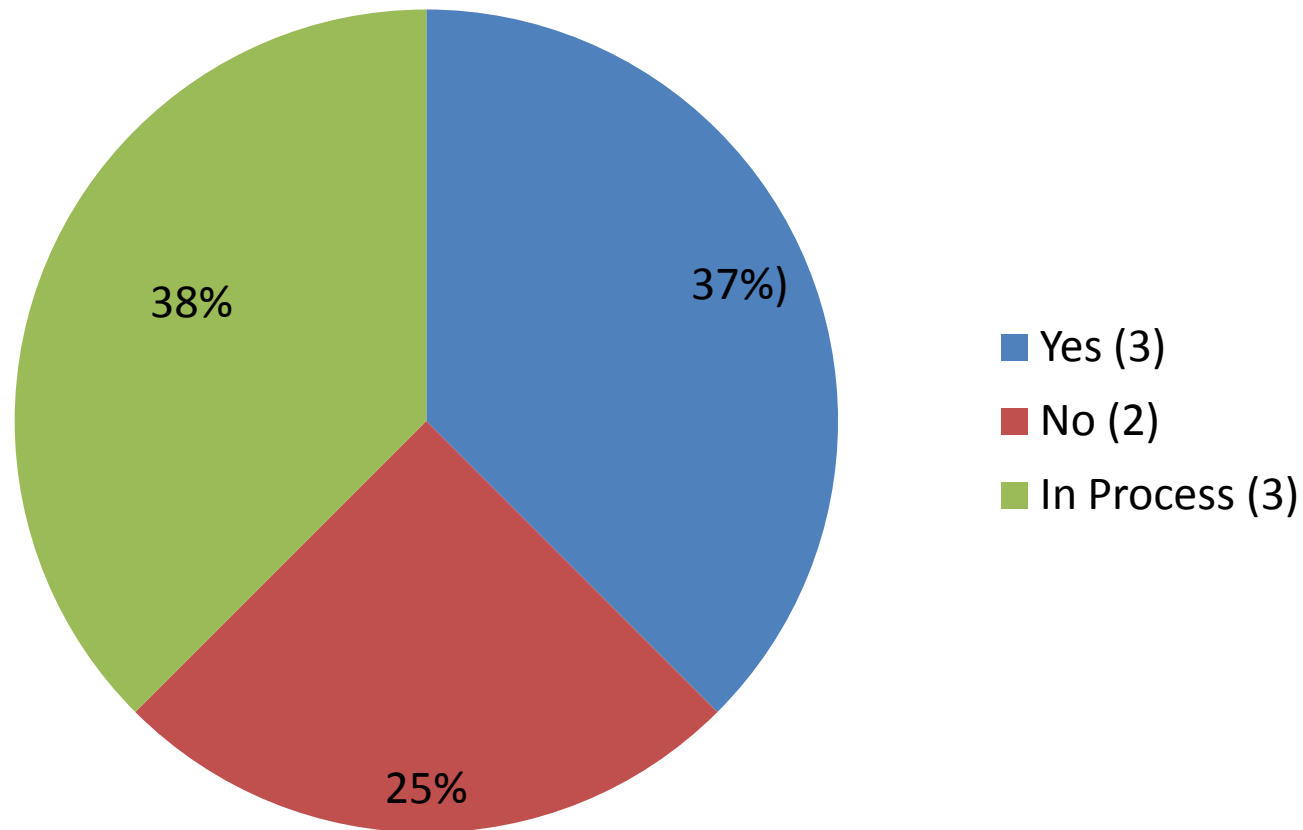
Key results to date include:

- **Philippines:** Supported development of Executive Order to institutionalize the National GHG Inventory System
- **Lebanon:** Ministry of Environment issued a Ministerial Decision introducing GHG emissions reporting for industries and commercial institutions
- **Chile:** Developed and launched pilot Carbon Management Programme to systematise measurement and monitor GHG emissions in the public and private sectors
- **Peru:** Collaborating with Ministry of Environment to define new Law and Bylaw for establishment of a Data Generation Network for the *“National System of GHG Inventories*

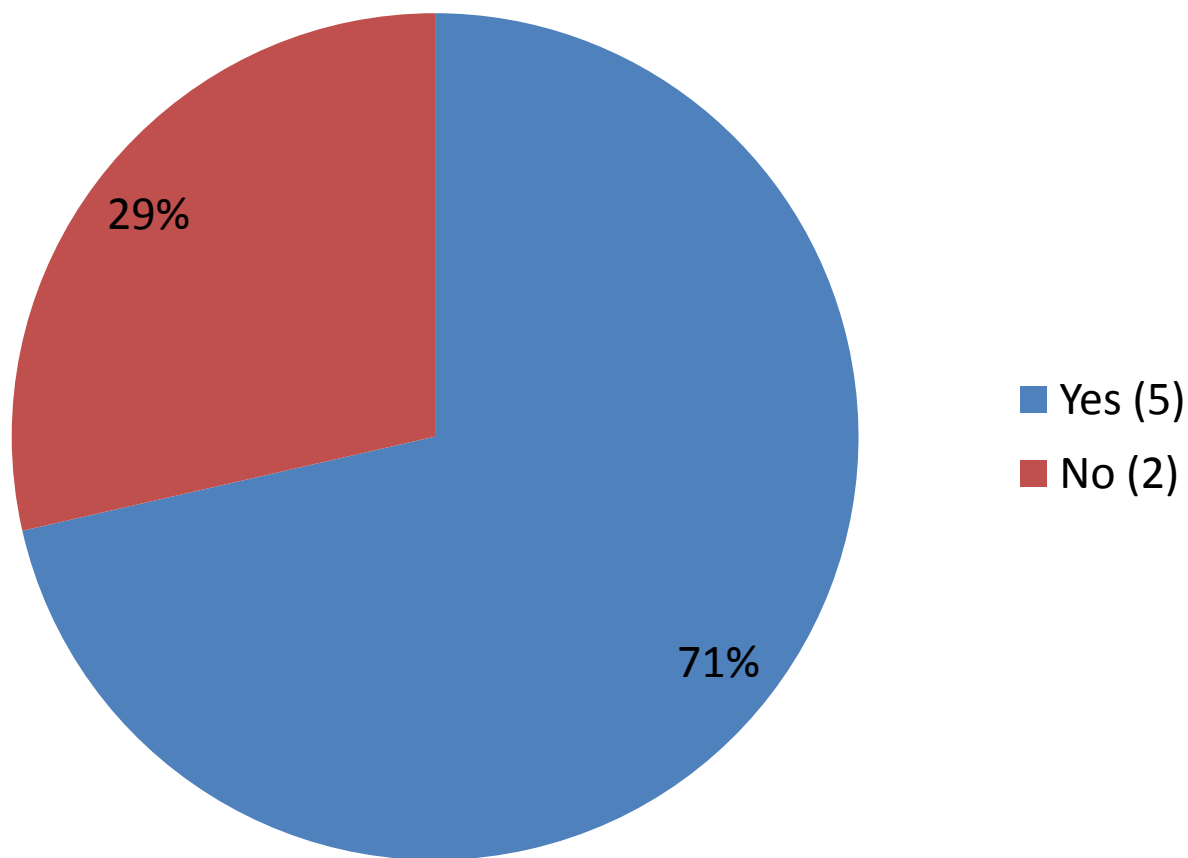
Has an operational unit been established with a clear mandate for the coordination of the GHG inventory? (n = 8)



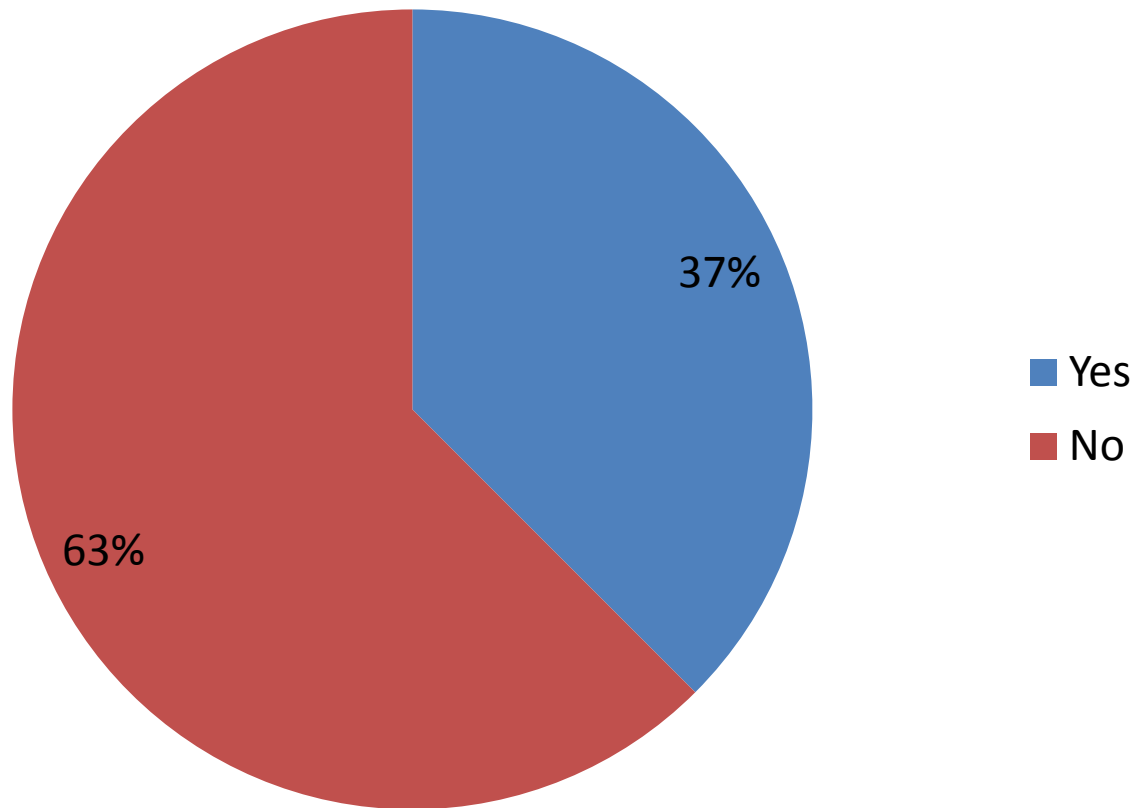
Have any institutions been given a clear mandate for the collection of sectoral data for the GHG inventory? (n = 8)



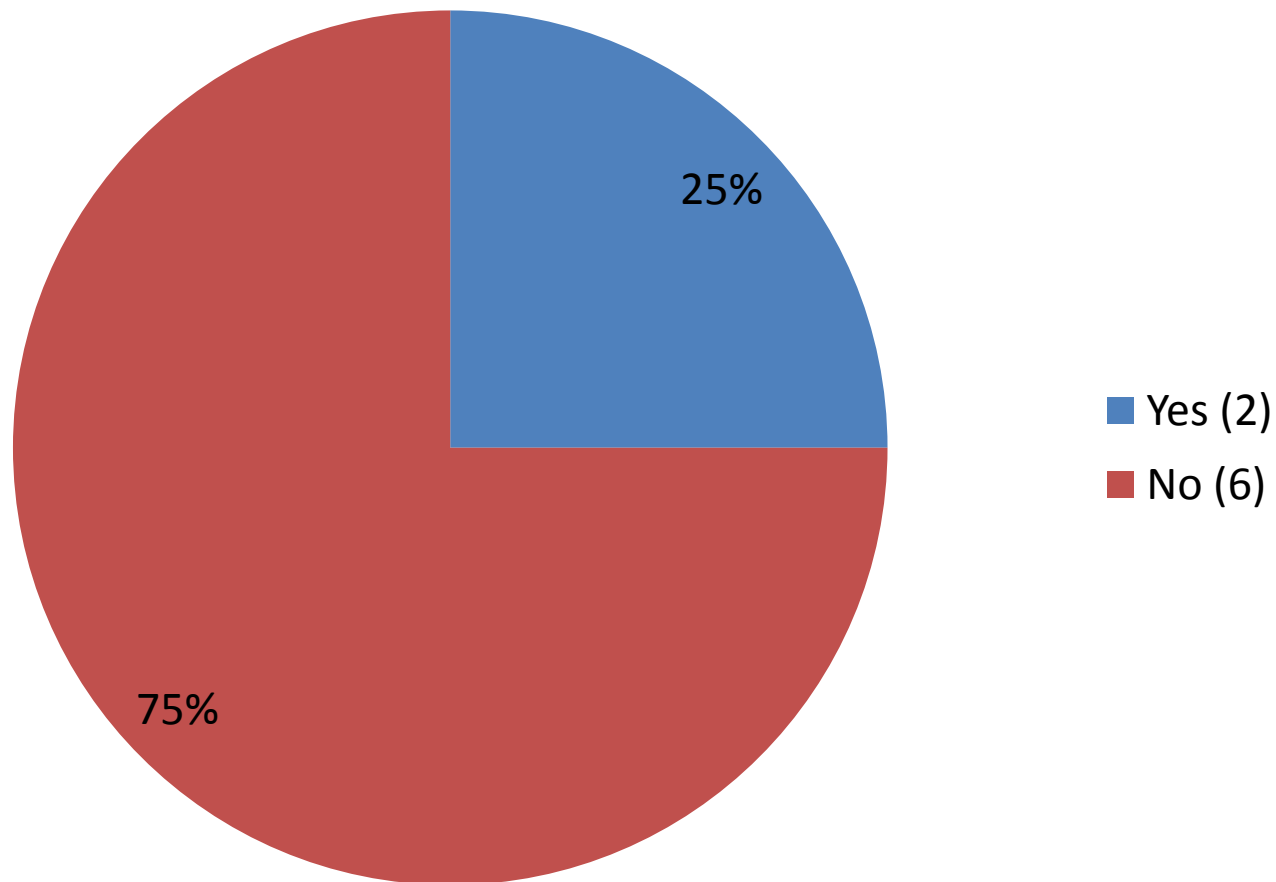
Does the GHG coordinating unit have budget dedicated to GHG inventory development? (n = 8)



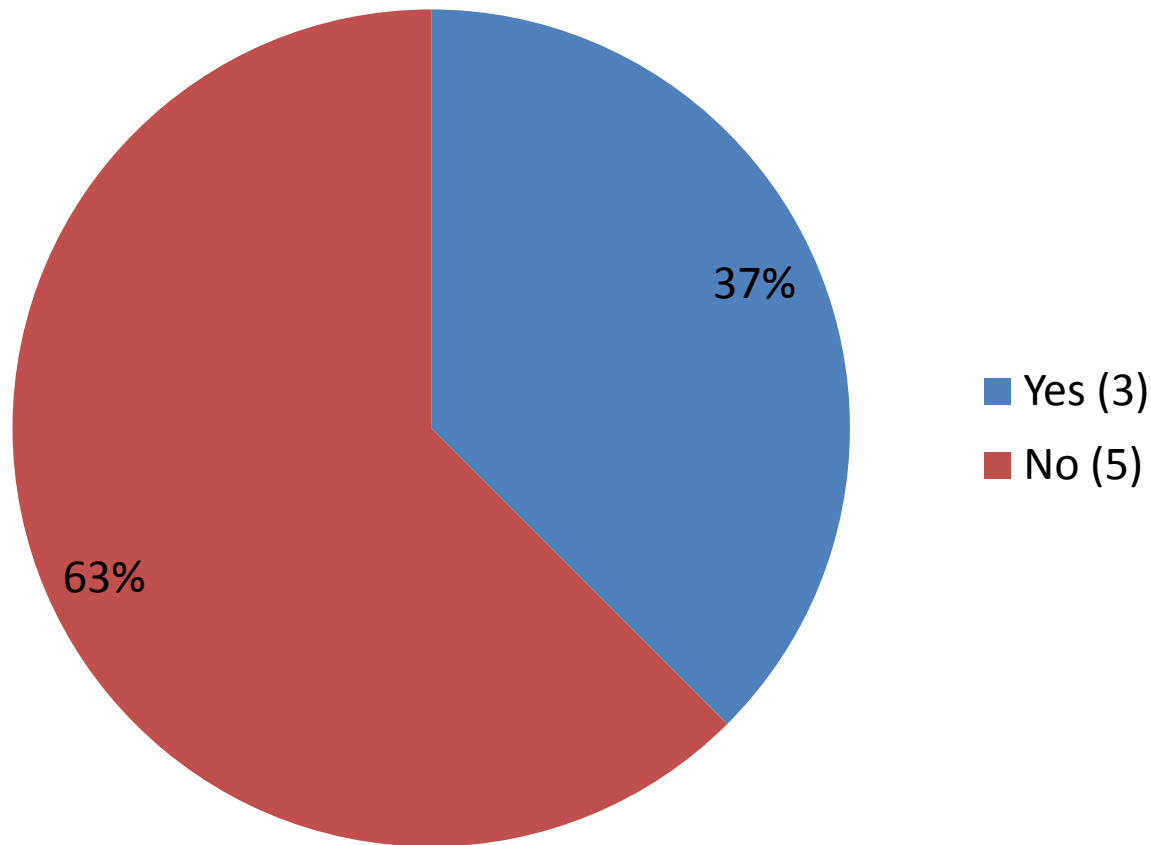
Do sectoral data providers have budget dedicated to GHG inventory development? (n = 8)



Does the inventory team have a documented QA/QC plan? (n=8)



Are the GHG experts within the national administration specialised enough to meet future GHG inventory reporting requirements? (n=8)



Do you have the following information documented?

	Yes	No
Source of the GHG Inventory data and rationale/assumption for its selection	75% (6)	25% (2)
GHG estimation methodology used for each data source, including rationale for methodological selection	62.5% (5)	37.5% (3)
Uncertainties	14.3% (1)	85.7 (6)

(= 8)

Lessons learned from Annex I countries in developing national inventory systems



- Inventory planning roles, responsibilities and collaboration between relevant organisations should be formalized as much as possible, potentially through the use agreements or law
- QA/QC activities, national inventory improvement plans, archiving, and documentation should be implemented in a timely manner
- Important to have capacity building to strengthen the skills of national experts
- Regular and sufficient financial resources are needed to maintain the NIS

Lessons learned from regional UNDP-GEF inventory project (12 countries)

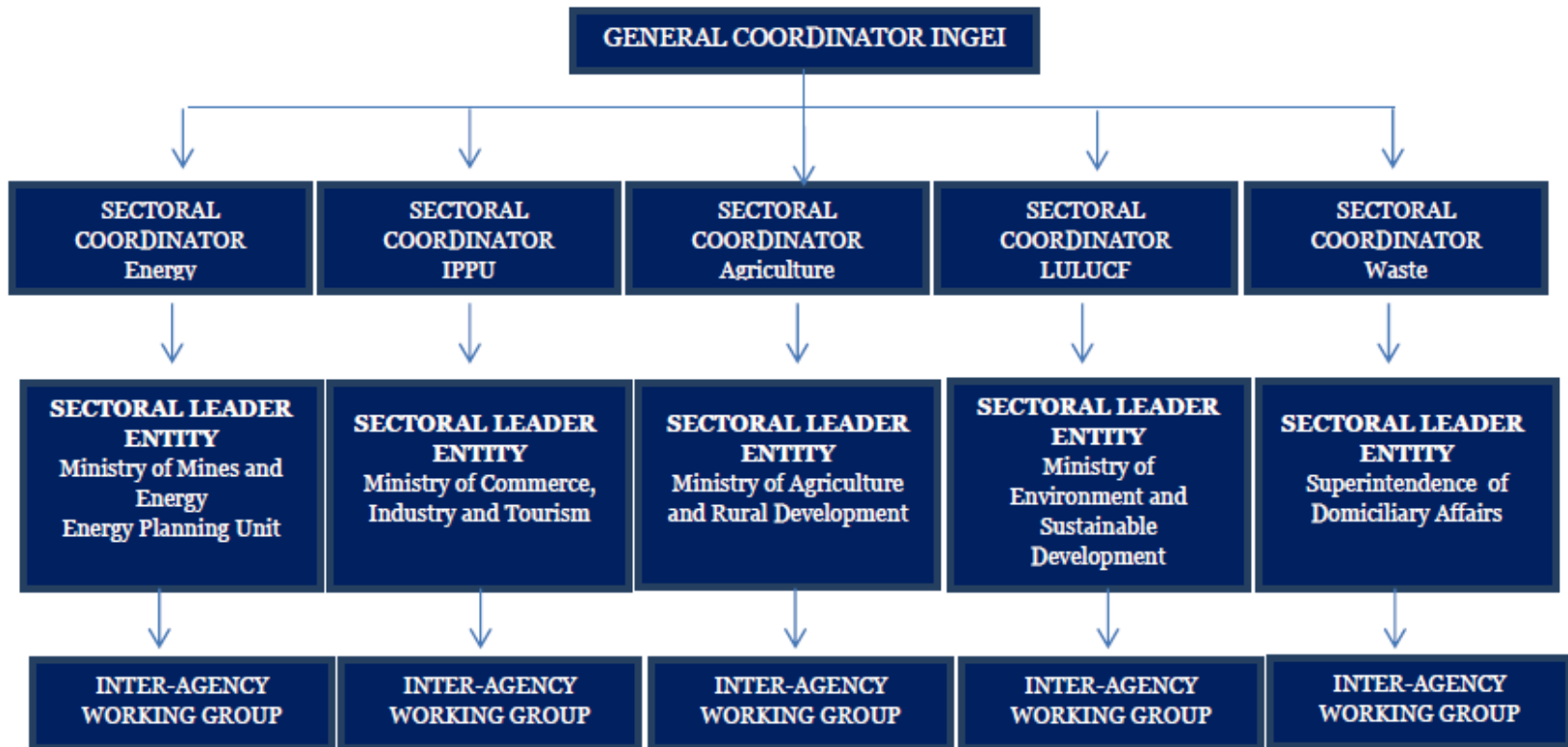


- Developing an NIS is iterative process
- Set priorities – you can not do all in one year
- Enthusiastic (qualified) GHG INV coordinator is key
- Results can be achieved by different strategies – national circumstances have to be considered
- Communicate regularly with stakeholders to raise awareness
- Involve universities /students
- Documentation is critical success factor for sustainability of the system

Case Study #1: Colombia's National Inventory System

Capacity Area	Challenges	Solutions/Best Practice
Institutional	Difficult process to access the necessary data; caused many delays	<ul style="list-style-type: none"> •Inter-institutional agreements •Formation of sectoral working groups, including public, private and academic entities
Human Resources	<ul style="list-style-type: none"> •One of multiple tasks IDEAM officials is tasked with •Staff retention is an issue given lack of incentives 	<ul style="list-style-type: none"> •Recognized need for staff fully committed to inventory •1 part-time staff member fully committed now
Information/Technology	Compilation of information is time-consuming and inefficient	Design a centralized information system

Colombia's National Inventory System: Distribution of GHG Inventory Sectoral Working Groups

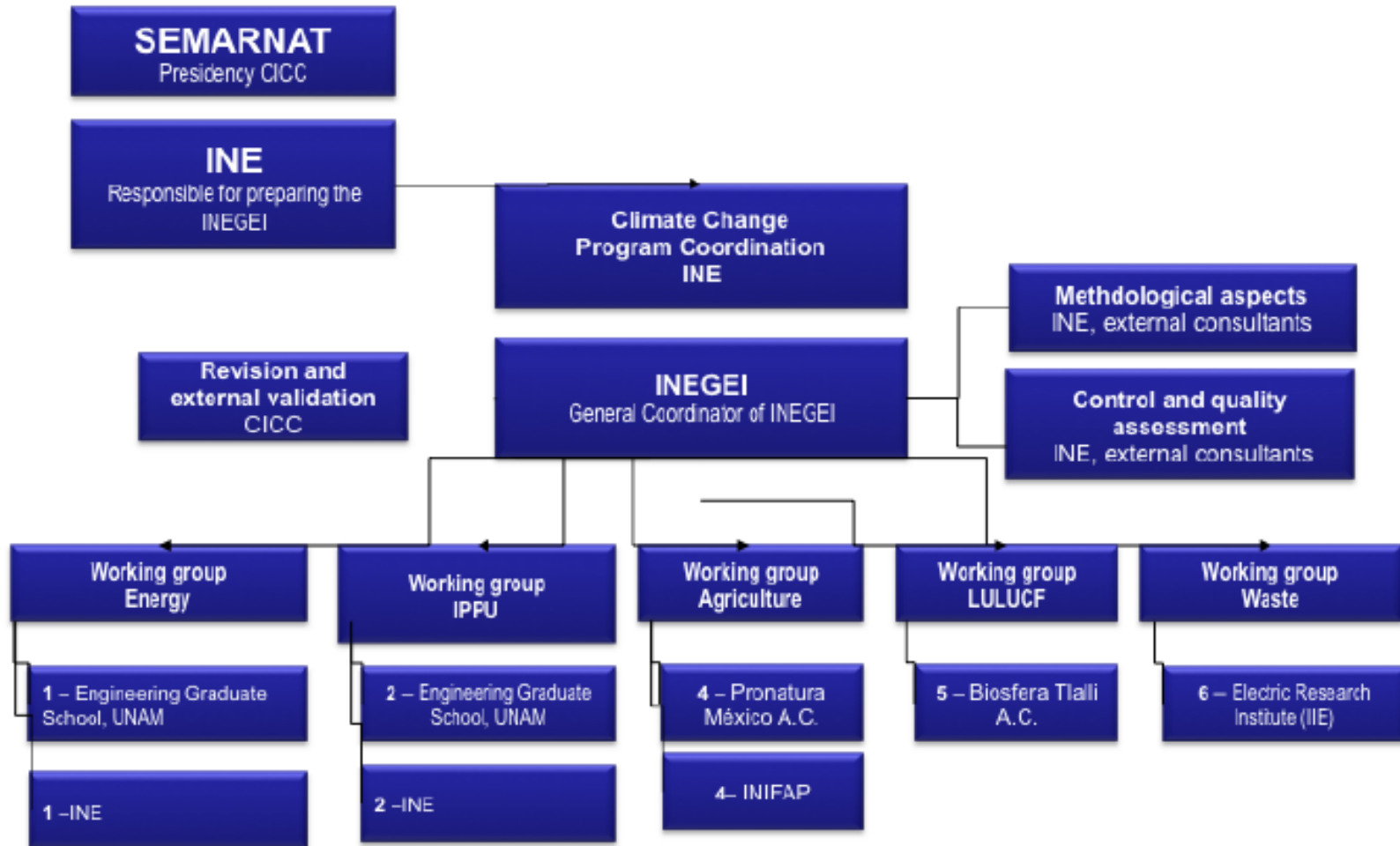


Case Study #2: Mexico's National Inventory System



Capacity Area	Challenges	Solutions/Best Practice
Institutional	<ul style="list-style-type: none"> •Technical work as well as coordination carried out by research institution •No QA function performed and no cohesive improvement planning 	<ul style="list-style-type: none"> •Institutionalized within the lead institution •CCA-UNAM solely responsible for emission estimation
Human Resources	For early inventories, lacked necessary technical capacity within INECC	Gradually increased number of specialists within INECC and offered continuous training to support long-term performance
Information/Technology	<ul style="list-style-type: none"> •Incomplete data availability for the following inventory cycle •Staff spent most of their time on administrative procedures to recover data 	<ul style="list-style-type: none"> •Creation of institutional databases •Strong technical training has decreased time and need to go back to participating institutions for explanations

Mexico: Summary of National GHG Inventory Arrangements



Good practices contributing to effective inventory system (WRI, 2004)

1. Sustained institutional arrangements (not tied solely to e.g., GEF funding cycles)
2. Identification and enabling of a lead agency to manage the national GHG inventory process
3. Sectoral coordinating institutions with well-defined roles, responsibilities, and processes
4. Detailed institutional mandates and data-sharing agreements that include work schedules
5. Processes to archive inventory information and retain institutional memory
6. Sufficient, well managed, and sustained financial resources
7. Taking an iterative approach to improving the GHG NIS

Discussion Questions

1. How can GHG inventory systems gain support from key government agencies?
2. What incentives can be provided to sustain such inventory systems?
3. How can GHG inventories prepared under the National Communications be used as an entry point for the design of inventory systems?