Progress on GRA in Thailand

Department of Livestock Development

Bangkok. THAILAND

9 April 2014

Contents

Thailand policies for CC in agricuture sector

Thailand involvement in GRA

Thailand's GRA activities in 2012-Now

Improved Inventory and Mitigation of Greenhouse Gases in Livestock Production in South East Asia

Benefit from GRA

Ways forward

Thailand policies for CC in agricuture

Policy

Green production

Start

-1st 2007-2011

-2nd 2012-now

Strategies

-Adaptation

-Mitgation

Thailand's Involvement in GRA

GRA was launched in December 2009

The Alliance member sign the Charter in June 2011

Thailand:

joined GRA on 4th January, 2011

confirmed its membership on 10th April, 2012

Thailand's GRA Activities in 2012-Now

1. Assign institutional contact points for each research groups

	**Cropland Research Group** ➢ Land Development Department
	**Livestock Research Group** ➢ Livestock Development
	**Paddy Rice Research Group** ➢ Rice Department
	**Soil carbon & nitrogen cycling cross-cutting group** ➢ Department of Agriculture
	**Inventory and measurement cross-cutting group** ➢ Office of Agricultural Economics

2. Inform researchers, academia, research institutes, research fund organizations, and greenhouse gas related organizations on Thailand's engagement in GRA

3. Identify research priorities for each research group

Livestock Research Group

Priority research

Improve animal feed: animal feed varieties, processing equipment, production standard, grass land research

Improve animal genetics to reduce GHG emission per unit of production

Improve farm management and production system such as convert waste to energy

Livestock GHG inventory and measurement

Research on the diversity of rumen microorganism

Capacity building of livestock GHG emission

4. International research collaboration and GRA research group meeting participation

South East Asia project development (Funded by New Zealand)

Objective: identify appropriate livestock classification systems and estimate emission across the regions

Participating countries: Indonesia, Malaysia, Thailand, Vietnam

Activities: Workshop/meeting in Bangkok (March 2012), Vietnam (September 2012), Indonesia (April 2013)

Training: Enteric methane measurement by SF6 training course at AgResearch. Newzealand

Improved Inventory and Mitigation of Greenhouse Gases in Livestock Production in South East Asia

-The Governments of Thailand and New Zealand jointly hosted a 2-day workshop on capacity building for the measurement and mitigation of greenhouse gases (GHGs) in South-East Asian livestock systems, on 14/15 March 2012 in Bangkok, Thailand.

-Four countries from the region participated in the workshop: Thailand, Indonesia, Malaysia and Viet Nam.

-The workshop was held under the auspices of the Livestock Research Group (LRG) of the Global Research Alliance on agricultural greenhouse gases (the Alliance), as part of a broader set of activities by the LRG to build regional capacity in developing countries.

Improved Inventor and Mitigation of Greenhouse Gases in Livestock Production in South East Asia(Cont)

-The workshop was sponsored by the New Zealand government through its Ministry for Primary Industries as part of its support for the Alliance.

-Subsequent to the workshop, the New Zealand Government agreed to fund a scoping study into current knowledge, scientific capacity and opportunities for further research to improve estimates of GHG emissions from livestock agriculture in the region and to identify mitigation opportunities.

Objectives

- Describe the key livestock systems and the main associated livestock emissions in the SE Asia region.

- Analyse the data set to identify common and, where relevant, country-specific priority areas for improvement of emissions estimates.

- Identify specific and realistic steps by which livestock emissions inventories can be improved or modified to better reflect regional systems and practices for the identified priority areas and to reduce biases and uncertainties in regional emissions estimates.

- Convene a workshop to discuss options, identify common priority actions, and agree on the final recommendations.

Regional priorities for improving emissions estimates and developing mitigation options

-Improve data collection of the beef cattle population

-Improve and refine region- and country-specific emission factors for enteric fermentation

-Improve and standardise the collection of data on pig manure management systems

-Undertake targeted measurements of ammonia and NO_x emission and N leaching from different manure management systems of pig production systems

-Develop a Tier 2 approach to livestock emissions

Benefit from GRA

-Option for mitigation and production efficiency

-Priority group of animal toimprove inventory system

-Invenventory system of GHG in country and region

-Capacty building

Ways Forward

Extend cooperation and networks in agriculture greenhouse gas research

Some priority researches/activities are already taken place

-Training course for Livestock GHG inventory and measurement

-Identify available data sets and additional data sets needed to prepare GHG inventory

-Building capacity to estimate agriculture GHG emission

- Ruminal micro-organism

-GHG inventory

-Nutrition and feeding system for mitigation option

-CH4 measurement

Ways Forward

-Next capacity buiding

- Genetics and selection for low carbon livestock
- N2O management
- CH4 measuremnt

Update priority research and incorporate it into the research budget

Thank you
for your attention

Department of Livestock Development
Ministry of Agriculture and Cooperatives
www.dld.go.th