



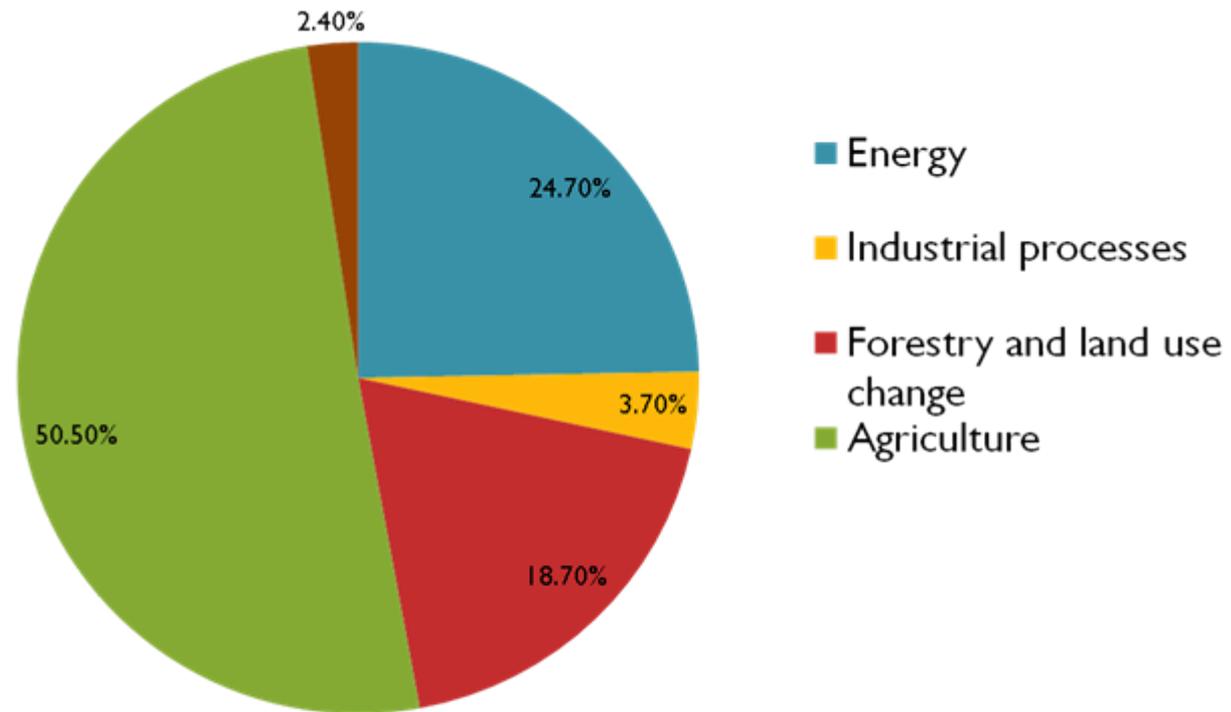
# **UPDATE OF AGRICULTURE ACTIVITIES - VIET NAM**

Agriculture Subcommittee Meeting  
New Delhi, Indian  
2 – 5 March 2010

# Agenda

- Overview of livestock sector in Viet Nam
- Biogas projects
- Potential and Challenges for biogas development in agriculture sector
- Next steps

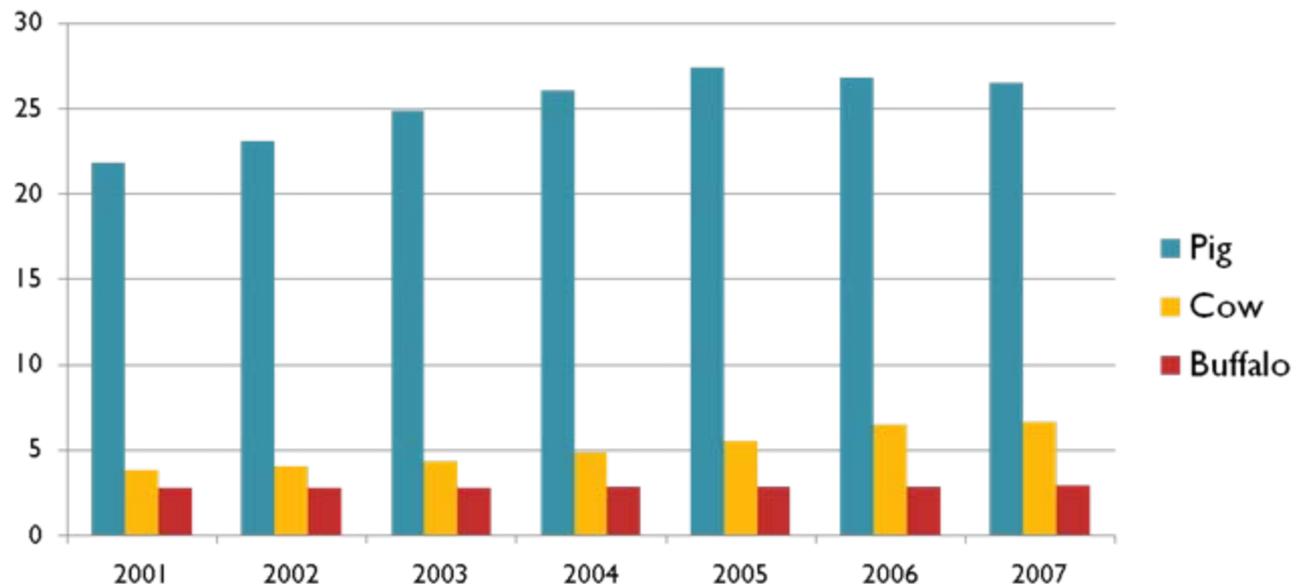
# GHGs emission



Source: Viet Nam National Communication, 2003

# Livestock Growth in 2000-2007 (million)

Livestock	2001	2002	2003	2004	2005	2006	2007
Pig	21.8	23.1	24.9	26.1	27.4	26.8	26.5
Cow	3.89	4.06	4.39	4.91	5.54	6.5	6.7
Buffalo	2.81	2.81	2.83	2.87	2.92	2.93	2.99



# Livestock Growth



# NUMBER OF FARMS IN WHOLE COUNTRY

Order	Areas	Pig farm	Poultry farm	Cow farm	Buffalo farm	Goat farm	Total
	Whole country	7,475	2,837	6,405	247	757	17,721
A	<i>North</i>	3,069	1,274	,547	222	201	6,313
1	Northeast	534	76	150	38	46	844
2	Northwest	113	43	295	79	24	554
3	Red River Delta	1,927	900	290	1	39	3157
4	North Central	495	255	812	104	92	1758
B	<i>South area</i>	4,406	1,563	4,858	25	556	11,408
6	South Central	351	414	620	2	4	1391
7	High land	422	128	919	0	11	1,480
8	Southeast	2,604	522	2683	20	537	6,366
9	Mekong River Delta	1,029	499	636	3	4	2171

# Biogas Projects in Viet Nam

*Number of biogas projects applied for Livestock sector:*

- Livestock Waste management in East Asia
- Biogas Programme for the Animal Husbandry sector of Viet Nam
- Application of Biogas and Energy Efficiency Saving Stoves
- Biogas development for reducing green house effect
- Development of energy efficiency stoves and biogas stoves
- Develop renewable energy for North Central provinces
- Biogas programme in Quang Ngai



# Biogas in Viet Nam



## *In Industrial sector*

- Join-venture Dong Nam A beer company in Hanoi has constructed one biogas plant with UASB style for treatment of waste water from beer cooking technology. Waste water volume of the factory is 600 m<sup>3</sup> per day
- Alcohol factory of Lam son sugarcane company in Thanh Hoa province has constructed biogas plants with Indian technology with volume 16,000 m<sup>3</sup>, treating 900m<sup>3</sup> waste water per day
- Biogas plant with Thailand UASB style with volume of 5,000 m<sup>3</sup> has been installed at Quang Ngai Agriculture and Food Product Joint-stock company

# POTENTIALS OF BIOGAS DEVELOPMENT IN VIETNAM.

- With over **17,000** existing farms and fast livestock growth production, biogas potential in the sector is very high
- Industries in Vietnam which have got high organic including sugar industry, cassava processing factories, fruit, export canned food, beer and refreshment industries, domestic and urban solid waste landfills are suitable industries to apply anaerobic treatment processing and biogas production.

# Challenges for development of biogas in Viet Nam

- Biogas plant is still in small scale and there is still lack of large scale biogas since the technology for large scale biogas require high cost.
- Technical barriers in operation and maintenance of biogas plant
- Market for biogas has not been developed
- Lack of strategy and policies for biogas development.

# Next Steps

- Development of Country Action Plan
- Capacity building (biogas construction, operation, maintenance, etc.)
- Network of experts
- Biogas development for agro-agricultural sectors (i.e sugar cane, cassava starch, rubber, etc.)
- Market for biogas (CDM in agro-agricultural sectors: sugarcane, cassava and rubber)



Thank you for your  
attention