Focus Area 3: Towards zero discharge

Recap and progress update
OUTLINE

- Focus area objectives
- Problem statement
- Issues and options
- Current status
- The focus area in practice - activities
  - Consult & network
  - Analyze & inform
  - Guide & pilot
FOCUS AREA OBJECTIVES

- Reduce the environmental impacts
  - from intensive, confined livestock production operations;
  - through improved manure management;
  - maintaining viability and contribution to food security.

- Recovering nutrients and energy in manure:
  - stop pollution, improve public health;
  - improve soil fertility, substitute for mineral fertilizer;
  - reduce GHG emissions and substitute fossil fuel.
PROBLEM STATEMENT

- **Nutrients in manure >> synthetic N, P and K annually**

- **Spatial clustering:**
  - limited opportunities for application to crops
  - direct discharge emits GHG, causes pollution, contributes to public health risks, biodiversity losses and economic losses;

- **Impacts will grow:**
  - Rapid expansion of confined livestock production
  - Concentration in geographically limited areas.
○ Technologies are widely known
○ Wide variation regarding the economics of their adoption
  - among production systems, country, and policy environment;

○ Strict regulation and incentive schemes successful in some countries, ineffective in many others

○ Better understanding of:
  - reasons for industry agglomeration,
  - policy tools to balance and promote geographical distribution
ISSUES AND OPTIONS (2)

- Determination of consequences of environmental policies across different areas and farm structures;
- Develop effective policies for adoption new farm practices/technologies
  - without disruptive shocks in financial and technical management
- Balance livestock densities and the absorptive capacity of available land:
  - lowering adoption costs;
- Prevent ‘leakage’ “pollution havens”
CURRENT STATUS

- Seoul FA3 stakeholder consultation (April 2012) proposed initial set of actions for the FA programme, implemented through broad partnership activities:
  - Consult and Network;
  - Analyze and inform; and
  - Guide and pilot
THE FOCUS AREA IN PRACTICE - ACTIVITIES

CONSULT AND NETWORK
- Further consensus building through networking and information sharing activities;
- Collect and collate existing information;
- Knowledge Management
  - ‘Gridded-manure’ maps of the world - current and projected
  - Data; searchable repositories; projects info; experiences; marketplace
  - The Manure Management kiosk
THE FOCUS AREA IN PRACTICE - ACTIVITIES

ANALYZE AND INFORM

- Global inventory:
  - production of NPK in manures,
  - current manure management,
  - actual use as fertilizer and associated nutrient balances;

- Model:
  - potential agronomic and environmental impacts of better use of manures as fertilizer and for energy;
  - subsequent targeting and prioritization of further analyses: socio-economics of spatial clustering, distribution of livestock in different priority regions impacts of different policy and institutional frameworks;

- Crowd-sourcing:
  - potential and opportunities of data collection and validation (a livestock wiki).
THE FOCUS AREA IN PRACTICE - ACTIVITIES

GUIDE AND PILOT

- Catalyze pilot projects:
  - provide practical experiences

- Identification of pilots:
  - Participatory approach:
    involve all relevant actors: government, private
  - definition of problems and opportunities;
  - development of a plan of action;
  - identification of funding and implementation strategies;
  - sourcing of knowledge bases; experiences; services; technologies (the Manure Kiosk)
THE FOCUS AREA IN PRACTICE