The Manure Management Kiosk

Proposal for set up

June 27, 2013, Theun Vellinga

Manure Management

- The whole chain:
  - Housing
  - Anaerobic Digestion)
  - Storage
  - Treatment
  - Transport
  - Application in field/other use/discard

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Uitgelicht

Amerikaanse vreetvelden **Uitgelicht**

De Brit Mishka Henner is een fotograaf zonder camera. Voor zijn nieuwste project maakt hij 'luchtfoto's' door een reeks screenprints van Google Earth Pro, de betaalde versie van het populaire programma, naast elkaar te leggen. Bovenstaande opname is van een 'feedlot' in Texas, een grote farm waar duizenden koeien worden voorbereid op de slacht. De koeien hebben het grootste deel van hun leven op de prairie gegraasd. Vlak voor de slacht worden ze bijeengedreven in de feedlot, waar ze een speciaal dieet krijgen, dat vooral uit graan bestaat. In drie tot vier maanden worden ze zo'n 180 kilo zwaarder. De Google Earth-opnamen zijn veel scherper dan gewone luchtfoto's.

Elke afzonderlijke koe is zichtbaar. Daardoor wordt het mogelijk een werkelijkheid weer te geven die 'bijna niet te bevatten is', zegt Henner. Zoals de vleesindustrie: 'In deze feedlots worden soms 120 duizend koeien samengedreven die zo veel mogelijk voer krijgen om de vleesopbrengst zo hoog mogelijk te maken. Ze laten zien hoe de vleesindustrie wordt gedreven door de schaal waarop we produceren en consumeren, en hoe het dierlijk leven is gereduceerd tot een kostbare grondstof', aldus Henner. Tot 5 mei is Henners werk te zien in Manchester (misha.lockandhenner.com/blog).

Foto Mishka Henner

Manure problems

- Concentration of livestock: local nutrient overload
    - Occurs in pig and poultry
    - Also with dairy and beef

- Handling manure:
    - Liquids (urine and slurries) not easy to handle
    - Nitrogen is volatile
    - Anaerobic digestion can have trade-offs: more discharge, liquid rest product

Manure problems

- Technical solutions available, tailoring required

- In many developing countries, knowledge, infrastructure and investments limiting factors, especially smallholders

- Easiness of synthetic fertilizer, sometimes subsidised

- Private economics: manure is more expensive than synthetic fertilizer
  National economics: manure is cheaper

- *Many groups active on MM, but hardly connected, or fragmented around AD (GMI, CCAC), GHG (GRA)*

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What do we need

Ultimately:

- Good MM at al livestock farms, nutrient cycling to maximize utilization of nutrients, capturing methane

- This holds at farm level and regional/(inter)national level *(feed is traded between countries and continents and with it its nutrients.)*

This requires:

- Increased awareness

- Knowledge to develop tools, systems, infrastructure

- Willingness to realise change

- At level of farmers, extension, chain stakeholders (e.g. feed industry), regional and national governments

- ➔ Action on the ground

Action on the ground

Ground = multilevel/stakeholder approach

- Farmers organisations (not individuals)
- Extension *(in fact not a stakeholder, but a "tool")*
- Chain stakeholders *(e.g. feed industry)*
- Policy *(solutions are not only technique, also infrastructure, policy)*

Action =

- All kinds of activities that helps stakeholders to become aware, start activities, run projects, evaluate actions: workshops, trainings, presentations at (high level) meetings

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A matrix of actions?

- Three actions of the Network:
  - Address at policy levels, awareness
  - Support current activities (to show what we can and learn), initiative from others
  - Initiate activities to catalyse, stimulate and support projects on manure management. No own pilot projects

- Two goals:
  - Awareness,
  - Stimulation and support of MM improvement on the ground (technical, infrastructure, policy, capacity building), can be at various levels

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The Kiosk construction I

- Central and three regional support hubs

  - Central: coordination, networking globally, information management, "acquisition" and networking (CCAC, GMI, GRA, others), assisting in programs (to stay in contact with reality)

  - Regional: coordinating networks and activities in the field, collecting information, experiences, "acquisition"

The Kiosk construction II

- Technical:

  - iKiosk: the digital store of all documented experiences and information

  - Roster: all experts that can be called upon i the activities

  - Marketplace: part of the iKiosk where supply and demand can meet, also calendar of activities

Deliverables of the Kiosk

- Activities for target groups: increasing awareness, supporting and stimulating

- Number of projects initiated/supported

- The iKiosk, Roster and Marketplace

- Results/outcome: Change in:
  - MM on the ground
  - knowledge about MM
  - Infrastructure to support MM
  - MM policy

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What does this mean for the Kiosk? I

- Change name to Network ?

- Connect people, organisations, activities: the Roster is the core of the Network.

- The Roster is not a group of "employees" of the network,
  - *they can be called upon when needed. Funding of their work by MM Network and hopefully also others.*

- Use existing networks, knowledge etc.

- Network members can learn from each other, can "hire" missing knowledge. Network should stimulate Communities of Practice (CoP's)

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What does this mean for the Kiosk? II

- The iKiosk is in service of the Roster,
  - a deposition of what happens in the networks
  - A collection of knowledge from the networks
  - New knowledge as state of the art of MM
  - New tools, manuals, messages, training material
- Central location will coordinate the network and regional locations, steer activities,
- regional locations will manage regional networks. In cooperation with the central location.
- Management of the iKiosk is done by the central location

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What does this mean for the Kiosk III

- Minimal staffing of the central and regional locations, all specialists of the Roster are "standby"

- The MM network will get access to useful meetings, organisations etc., ask the Roster members in the field to do the work.

- Roster maintenance!

- Create open atmosphere, to make people willing to share their knowledge and make it available via the Kiosk

- Data collection: use existing information as much as possible, tailor information for specific targets and activities

Implementation I

- Identification of tasks and responsibilities in detail (central, regional)

- Develop the network: find partners, define how to work

- Collect knowledge from partners,

- Develop missing parts or missing links

- Develop strong, clear and customised message and address this at many places,

  - Make clear what the different stakeholders should do

  - It is not politics!

- Use existing multi governmental organisations to get access to governments, stakeholders etc. like CCAC, GMI, GRA, UNEP

- First large action is to address the message at many places, stakeholders (not only with "friends"), *after 9 months.* Should continue during the time of the project.

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Implementation II

- Action 2: Parallel to first action, search for simple on the ground actions at farm level, we need demonstrations of outreach to show what we can do to support local/regional activities and how "our" networks performs. Pilot itself is local responsibility, not the Network's.

- Action 3: Develop strategy for the most effective way to catalyse, stimulate and support actions on the ground, based on the harvest of action 1, and work on the basis of this strategy.

- Strong interaction required between Advisory Board and project team for all actions

- Knowledge is to support activities, but also to give overview on "state of the art" on MM

Implementation III

- Define stakeholders/target groups and develop customised messages

- Stakeholders/target groups:

  - Farmers, extension workers

  - Industry: suppliers as feed, machines, housing,

  - Governments: local, regional, national

  - Multi govn org: CCAC, GMI, UNEP, UNFCCC, EC, OAS, ASEAN

  - NGO's

  - Devp banks: World Bank, East Asian Devp Bank, Fontagro

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