Making Livestock Smart and Sustainable
How?

ICTs and Open data
My Role

- Local Farmer
- Middle man
- Innovator
- Barrier / Challenge
- Potential Consumer
Trend of livestock production in Uganda (1965-2010)
Global situation in Livestock keeping………

• FERTILITY RATES DECREASING

• WORLD POPULATION INCREASING
Can open data and ICT be the solution??

Will this make it sustainable and smart??
Smart and Sustainable

Applications
- Web 2.0 Tools
- Android Apps
- USSD
- Story Telling (Adobe Sparks)

Computers
- Mobile Technologies
- PC/PDA
- Milking Systems
- Spraying Systems

Open Data

Local Farmer

Potential Consumer

Future Technology

Sensor Technology

Other Livestock

Disease Control Management
- Milking
- Environment
- Staff
- Market
- Climate
- Bleeding
- Housing

Disease Control Management
- Feeding
- Market
- Climate
- Growth Monitoring
- Bleeding
- Egg Collection
- Housing
Applications with Computing systems

- Web 2.0 tools for home of kuroilers.....
- Apps4ag.org
- USSD Messages
Current Technology in Cattle Keeping

Things to monitor:
- Feed intake
- Methane Emissions
- Respiration
- Chewing Activity
- Animal position/location
- Lying/standing behavior
- Temperature
- Fatness/Thinness
- Rumination/pH
- Heart Rate
- Mobility
- Mastitis
- Hoof Health
- Milk/Milking Characteristics
Feed & Water......
• Disease/ Illness have a negative impact on milk production and quality. Most critical period is transition period importance dry cow & fresh cow management & feeding to prevent metabolic disorders lameness & mastitis after calving
Access Your Data Anywhere Anytime
Contactless Data Entry

- Simply swipe your phone over a tag to read the information contained within. This is the same technology used in contactless credit card payments.
Sensor Technology

GET BEHAVIOUR ALERTS

Identify changes in the normal behaviour
Turning Cow poo to Power one million homes

- According to the Environmental Protection Agency estimates that more than three million tons of greenhouse gas emissions were eliminated last year by Homestead and the 246 other US livestock farms which have installed biogas recovery systems.

- That's equivalent to taking more than 630,000 cars off the road

At yitedev-Uganda, we are designing biogas models to fit in the local context. We are using data sets from MIAAF and other sources to compute for the methane gas from certain quantities of cow dung.
ADM for accessing the potential of green energy
Challenges

- Complexity/Abstract data
- Remote Data
- Data Accuracy
- Data privacy
What should be done

- Capacity Development
- More story telling especially in customized languages
- Communicate Science to Local Farmers
- Free information flow
- Webinars
Thank You

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