

International Livestock Research Institute



mPig inception meeting

15-16 January 2015

Yellow Haven, Kampala, Uganda



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Written by Kristina Roesel and Florence Mutua

Edited and formatted by Kristina Roesel

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Author's note: The report summarizes key messages and discussion notes from the meeting. Presentations can be downloaded from the project wiki: <http://mpig.wikispaces.com/>

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Summary

ILRI identified the pig sector in Uganda as one of nine livestock systems worldwide where research investments are most likely to make a major difference to the livelihoods and diets of poor people. Since 2012 CGIAR Research Programs (CRP) Livestock and Fish (L&F) and Agriculture for Nutrition and Health (A4NH) have conducted research on the pig value chain performance, challenges and opportunities, for enhancing the pork sector. The new m-Pig project supports CRPS 1) L&F by piloting innovative methods to disseminate demanded information to pig value chain actors, to increase pig growth and reproductive performance on farm, improve market access for poor value chain actors, and ultimately improve food security through increased pork production; and 2) A4NH through applications on pig zoonoses, production of safe pork, and improved human nutrition. It directly builds on research work by CRP L&F and A4NH, being funded by the Australian Centre for International Agricultural Research, the International Fund for Agricultural Development, Irish Aid, and BMZ (through the Safe Food Fair Food project). The project targets pro-poor smallholder pig value chains in Uganda. The collaborations greatly enhance the probability of success and ultimate development impact of the project. The m-Pig project links farmers, traders, butchers and consumers to the information platform. This ILRI-led project is funded by BMZ and has Vétérinaires sans Frontières Germany (VSF-Germany) and Freie Universität Berlin (FUB) as partners.

An inception workshop was conducted on 15-16 January 2015 in Kampala, Uganda to launch project activities, discuss approach to be followed and jointly, with partners, develop a work plan for the activities.

Objectives of the meeting

Project PI Kristina Roesel briefly introduced the objectives and expected outputs of the meeting:

- present and discuss the proposal, objectives and activities
- lessons learned from other m-projects, i.e. Community Animal Health Network (CAHNET)
- identify target audience for project
- identify delivery mode for mPig
- identify target intervention area(s)
- present and discuss the work plan and timeline of activities (including budget implications)
- discuss partner's roles and responsibilities

The agenda and list of participants are found in Annex 1 and Annex 2 of the report.

Session 1: Discussion points on the overall proposal, objectives and activities

Florence Mutua outlined the activities proposed and approved by BMZ. The presentation was followed by an extensive discussion – application approach and opportunities:

- Opportunities to apply for a bigger BMZ grant after successful completion of the mPig project (up to 1.2m Euro for 3 years)
- The push (where mPig system sends out alerts) versus pull (where end users request for information) mechanism
- Individual versus group mechanism: The CAHNET project was designed to allow for group subscription. Each group had a chairman who communicated messages to the group members during physical meetings sessions. CAHNET experiences were that, after some time, individuals in the group started subscribing to the system on their own, partly because their chairmen started keeping received messages to themselves, instead of sharing it with members of the group, as would be expected. Kamuli was one of the sites covered by CAHNET.
- Research needs: which method works best, message delivered through agrovet, or extension workers or to farmers directly; evaluation- does it work (i.e. do farmers gain financially from alerts) and what does it cost, and the need to include biosecurity (KAP), willingness-to-pay studies in the project, etc.
- Question on whether the value chain actors' needs are already known and if solutions to these have been identified. *Yes, that is the data generated during the extensive ILRI led value chain assessments. Lack of knowledge has been identified as a major constraint by all value chain actors (general knowledge like husbandry practices and specific knowledge like silage preparation for pigs) – mainly because pigs are a livestock species, relatively new to Uganda. There is vast material, i.e. the 8 training modules for farmers developed by CRP L&F that can be the source of information for mobile messaging.*
- Farmers usually have multiple enterprises; those without pigs may ask why they are not included in the study. *This is a pilot study with an initial focus on pig value chain actors only.*
- Frequency of sending messages?
- Bulk messages through MTN partnership (CSR)? Better not to involve local mobile providers (experience Edwin, Henry and Oliver) because they sometimes don't live up to the agreements and abuse the system for spam messaging
- Content development will need quality control (e.g. if students are assigned to review the material they may just use Google)
- Need to check for maximum length of messages (i.e. recommended is 160 characters), otherwise cost implications
- Voice message versus text messages for illiterate end users: possible but increased costs
- Which language to use: administrative language (English) or local language (Luganda, Lusoga); problem: end users may only know how to speak their local language but can neither read nor write it.

Session 2: Lessons learned from other m-projects, i.e. CAHNET

- Challenges: how to access smallholder farmers where infrastructure is virtually not existent (no internet, none of the technical devices)
- Frontline SMS: open source software, key-word based app in php format
- Used entry-level phones
- Self-subscription system (consider legal implications: users have to have the choice to subscribe and unsubscribe)
- End users in different groups (segments) for targeted communication
- Central server was in Nairobi (online database): all project countries had access (Uganda, Kenya, Tanzania, Ethiopia)
- Used 2 languages: English and Swahili ; did not work well in Ethiopia where people are not very conversant with English
- Ability for scheduling (i.e. market days, phone charging days)
- Alerts from extension officers to farmer
- Text-based surveys (i.e. numbers of animals) – is it more reliable? is it anonymous (farmers tend to lie about numbers of animals in survey because they are afraid of being taxed or for cultural reasons); could this help in disease outbreak reporting
- System was able to facilitate marketing/auctions (send key words to group: “5 cows to sell”); quality control like at eBay: if a seller failed to provide what he offered, the word will spread in the forum
- End users could use the system for book keeping (check balances)
- Product advertisement by pharmaceutical companies (ethics)
- Potential for monetization (fee charged, sponsoring through agroveter suppliers etc.)
- Click-2-tel (Twilio): 1-2 Euro per SMS – expensive; deals through local providers
- Licences to operate own premium code (USSD) to deliver menu-based system) - meant vetting by CCK (Kenya): bought bundles at 20,000 KES (220 USD) per month; 10-15,000 KES per short call; revenue share agreements with providers (4 SMS per second required = huge traffic). Bundle charges, subscription and sharing of revenue with service providers was a hindrance to use own USSD codes. An option was to lease codes from those that had subscribed- was also a challenge.
- Easy-to-remember phone numbers was an option but attracts roaming fee (server and provider was in Nairobi, end users in Uganda), USSD- is now not free
- Lesson- livestock information is not easy to package, not like for crops.
- Capturing GPS coordinates of end users possible (would help verify location of the person sending the message).
- Possible to use photographs for diagnosis (only smart phones – possible for low resolution pictures)
- Collaborations with Kenya livestock marketing association (sourced pigs) or government during vaccination days (worked very well – vets went to homes and farmers were almost 100% at home – good response rate and easy to measure)
- The groups are still there (project did not form new groups but used existing groups)
- Need for a commercial partner to make it sustainable – CSR? may not be a long-term solution because eventually providers or Agribusinesses will want to make money

- Media houses who run agricultural shows could be partners: revenue sharing; these shows use platforms like this for backstopping etc., project was being approached to be a source of content for the shows.
- Short call programming for cost targeting: higher fee for traders could sustain lower fee for farmers
- In Uganda cost for subscriber were 220 UGX per SMS but that was ok; Used system successfully to trade manure, animals, also could be used as an opportunity to send alert messages when bonuses are released
- Quality control of outgoing messages to avoid spam, also block sensitive messages??
- Mobile Marketing Association (MMA, standards – Edwin)

Discussion on research: *key research area is to “assess the impact of mobile technology on smallholder pig value chains”*

- Randomized controlled trial (RCT) for stronger evidence
- Baseline and post-intervention: use tablets (observation) for data collection vs. questionnaires; indicators like trough present; animal tethered; higher prices, can take pictures of the indicators before and after the intervention.
- Have a control and a set of treatment groups
- Identify 5 simple key messages for RCT
- Consider additional exploratory work around more complex issues (disease alert, live weight estimation, reminders)
- Willingness-to-pay at the end of the study
- Research questions like: *which group most active?*
- Key informant meetings to pre-test if messages are clear and understandable
- Engage both rural (Kamuli), and urban (where population is high) communities

Session 3: Identify target audience, delivery mode and target intervention site for project

Decision on target audience:

- For pilot narrow in on farmers as producers and consumers – from there reach out to traders/butchers, service providers
 - Hubs within CRP L&F being created, should also be included
- ⇒ Decided on 3 target groups: farmers (=consumers), traders (and butchers), extension (government/private)

Discussion on delivery mode:

- Group-based and individual
- Text messages
- Entry-level phones, not smart phones at this point

Discussion on target intervention area:

- Need to integrate in L&F sites: Masaka, Mukono, Kamuli, Hoima Lira (L&F interventions ongoing in Masaka, Mukono, and Hoima?)
- Narrowed in on Kamuli but will consult with CRP L&F team during meeting until end of February

Session 4: Present and discuss the work plan and timeline of activities

Proposed project activities – year 1 (in accordance with BMZ proposal)

WHAT?	WHEN?	WHO?
1. Initial activities: Review literature from CRP L&F and CRP A4NH research outputs		
<ul style="list-style-type: none"> • Develop one set of key messages for randomized-controlled-trial • Develop one set of FAQs for exploratory research • Pre-test messages with local partners/ key informants 	By June 2015	ILRI <ul style="list-style-type: none"> • CRP L&F: Michel Dione • CRP A4NH: Florence Mutua, Silvia Alonso • CapDev: Edwin Kang'ethe VSF-Germany: Nicoletta Buono FUB: Kristina Roesel
2. Develop applications and messages addressing the identified information needs		
<ul style="list-style-type: none"> • Exploration of software and service providers and costing • Programming of mobile phone application 	<ul style="list-style-type: none"> • By June 2015 • By December 2015 	Consultant: Oliver von Braun-Dams
3. Collaborate with GSMA/ m-Nutrition project (and others?) to develop an SMS-information sharing system		
<ul style="list-style-type: none"> • Especially content development 	Throughout	ILRI CapDev: Edwin Kang'ethe
4. Field research activities to assess and document system's performance		
Randomized controlled trial <ul style="list-style-type: none"> • Develop 5 simple messages (productivity-oriented and/or market-oriented); push mechanism • Study design and mobilization of pilot end users • Collection baseline data Exploratory work around more complex issues <ul style="list-style-type: none"> • Menu-based FAQs (to test response rate) • Live weight estimation • Disease outbreak alerts 	Study design and planning in 2015, implementation in 2016	ILRI FSZ: Florence, Silvia, Kristina, (Delia) Mobilization: ILRI, VSF-Germany and local partners
Develop M&E strategy for impact assessment	Planning in 2015, implementation in 2016	ILRI CRP L&F: Keith Child and Michael Kidoido?
Sustainability <ul style="list-style-type: none"> • Willingness-to-pay study 	Planning in 2015, implementation in 2016	ILRI FSZ: Nadhem Mtimet?

Details on activities from content development group

1. Coordination of content development

- Michel reported on which reports are ready and in progress; most crucial: value chain assessment report, in-depth assessment, papers on value chain assessment and husbandry practices.
- Training manuals/modules
- Interventions: Biosecurity for ASF, deworming (in Kamuli), feed (silage) and hub concept
- A4NH: Safe food, Fair food reports and papers/ Mahider links from Kristina
- Web links:
 - CRP L&F: <http://livestockfish.cgiar.org/focus/uganda/> (website) and <http://livestockfish.wikispaces.com/VCD+Uganda> (wiki) and <https://cgspace.cgiar.org/handle/10568/16617/browse> (ILRI repository Mahider)
 - A4NH: <https://aghealth.wordpress.com/> (website) and <https://cgspace.cgiar.org/handle/10568/231> (ILRI repository Mahider)
 - Safe Food, Fair Food project: <http://safefoodfairfood.ilri.org/> (website) and <http://safefoodfairfood.wikispaces.com/> (wiki, restricted) and <https://cgspace.cgiar.org/handle/10568/602/browse> (ILRI repository Mahider)

2. Develop quality assurance protocol: Edwin and Florence

- Knowing the source and come up with fact sheets as a reference to the science we did
- From the factsheet to synthesize the information into key messages
- Review led by Florence (maybe research assistant subsidized from mNutrition)
- One person to go through quality assurance checklist (Fred Unger or Ram Deka or Cate Dewey?) to “sign off” the process
- Scientific key message converted into end user language (VSF-Germany), reviewed by stakeholders, if ok, passed to the system development team.
- Edwin free in Feb, by end of Feb contacting VSF for synthesis
- Kristina to organize meeting with L&F team to discuss intervention site until end of Feb (L&F intervention in Masaka, Mukono, Kamuli on-going)

Other:

- Discussions on ethics and cost implications with intervention audience (and that they cannot use the system to make phone calls)
- Decision on frequency of messaging and delivery rate (should be >90%), system that works with all networks, cost implications?

Details on activities from IT system development group:

Proposed activities – year 2

- Launch intervention (by February 2016)
- Field work 6-9 months (by October 2016)
- Data analysis and write-up (by December 2016)
- Develop follow on proposal (by December 2016)

Session 5: Any other business/ Action points

Administration

- Collaboration between VSF and ILRI should be institutionalized – Florence to draft CRA, Nicoletta to share VSF-G staff contact for follow up agreement discussions
- Support through Oliver should be institutionalized – Kristina to draft consultancy request
- Follow on proposal development based on evidence during field work in 2016 (BMZ submission deadline 31 July each year)
- Florence focal contact as coordinator; to send monthly updates
- Kristina to organize website (Tezira) and project wiki (Tsehay)
- Next meeting during ILRI APM in Nairobi 12-14 May 2015?

Technical support from ILRI experts:

- Identify quality controllers: Cate Dewey, Fred Unger, Ram Dekha???- to be confirmed
- Check with Keith Child, Michael Kidoido and Nadhem Mtimet for availability to support research activities

Annex 1: Agenda

Thursday 15 January 2015		
9:00	Opening, introduction and objectives of the meeting	Kristina Roesel
9:30	present the project proposal and discussion	Florence Mutua
10:30	Coffee break	
11:00	lessons learnt from other m-projects, i.e. CAHNET (Henry Kimathi and Gideon Nadiope)	
13:00	Lunch break	
14:15	discussions on potential target group, delivery mode and pilot intervention area(s)	Kristina Roesel
15:30	Coffee break	
15:45	present the proposal work plan and timeline of activities/ discussion	Kristina Roesel
17:00	Closing first day, boat trip and BBQ	
Friday 16 January 2015		
9:00	Recap	Kristina Roesel
9:10	Develop detailed work plan and timeline of activities in 2 groups	Florence Mutua: coordination content development Kristina Roesel: coordination system development
11:00	Report back and discussion, AOB	
12:00	Closing of the meeting	
12:30	Lunch break and home travel	

Annex 2: List of participants

No.	Name	Email contact	Sex (M/F)	Country of origin	Affiliation	Role in project
1	Delia Grace	d.grace@cgiar.org	F	Ireland	ILRI-FSZ	program leader FSZ, adviser to project and link to other m-projects at ILRI
2	Florence Mutua	f.mutua@cgiar.org	F	Kenya	ILRI-FSZ	Project coordinator and budget holder
3	Kristina Roesel	k.roesel@cgiar.org	F	Germany	ILRI/Freie Universitaet Berlin	Project PI
4	Edwin Kang'ethe	e.kangethe@cgiar.org	M	Kenya	ILRI-CapDev	mNutrition coordinator
5	Nicoletta Buono	buono@vsfg.org	F	Italy	Vétérinaires sans Frontières Germany, Nairobi office	Regional Programmes Coordinator
6	Oliver von Braun-Dams	oliver.vonbraun@gmail.com	M	Germany		Free-lance IT expert based in Kampala
7	Michel Dione	m.dione@cgiar.org	M	Senegal	ILRI-ASPP	Focal point at CRP L&F
8	Henry Kimathi	henry@esolutionsafrica.com ; henry@enchanted-landscapes.com	M	Kenya	CEO E-Solutions Africa	Invited expert to report on experience in CAHNET/Farm Africa
9	Gideon Nadiope	nadiopegideon@gmail.com	M	Uganda	University of Iwona, Uganda office	Invited to report on experience with m-technology in Kamuli district as an end user (previously VEDCO-Kamuli, CRP L&F partners)