

Transferring participatory research skills to stakeholders: Training extension staff on African swine fever data collection along the smallholder pig value chain in Uganda



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Background

African swine fever (ASF) is the most feared disease by smallholder pig by value chain actors in Uganda, because of its high mortality (Dione *et al.*, 2014). Though many farmers are threatened by the disease, low biosecurity is common along the pig value chain.

To explain the current bad practices, value chain actors often point out their lack of knowledge on best practices in pig management (Dione *et al.*, 2014; Ouma *et al.*, 2014). Also issues related to lack of capacities and incentives for value chain actors to adopt biosecurity measures for the control of ASF were observed in the field during value chain assessment carried out by the International Livestock Research Institute (ILRI) (Ouma *et al.*, 2014).

These factors might have contributed to the persistence and dissemination of the disease amongst the pig population shown by the numerous outbreaks observed in the country. Farmers who are the big losers during those outbreaks are often worried, and a lot of them exit from the business following ASF outbreaks. Currently, there are no effective actions that are being undertaken to control the disease locally, even less so at national level.

Part of the reasons for the weaknesses of the control strategies could be the lack of epidemiological information as well as the poor understanding of the pig value chain operation combined with little interest of decision makers in the pig value chain in the past. Therefore, more in-depth assessment of the pig value chain is needed to provide relevant information. For example, there is need to collect information on the level of risk of the disease along the pig value chain (starting with the input suppliers up to the consumers); assess the Knowledge Attitude, Practices, Capacities and Incentives (KAPCI) of value chain actors for adopting biosecurity measures, and as well collect actor's perception on constraints related to disease control at each node of the value chain in order to suggest entry points for effective disease control. It is also important to know the level of success or failure of initiatives that have been tried out in the past to control the disease. In order to achieve such goals, there is a need to collect opinions and perceptions of all value chain actors and stakeholders.

Given the nature of the value chain actors, who are a very heterogeneous group, participatory skills are required to gather such information. It is against this background that before studies were undertaken by the project's scientists, ground work was done to set up a team of local experts equipped with participatory skills and knowledge on how to tease out information on ASF from value chain actors and stakeholders using participatory tools. This report describes the process followed by the project to train field extension staff on how to collect data on KAPCI and other aspects related to ASF control; and how to facilitate group meetings with smallholder value chain actors and stakeholders for further project's activities.

Study sites and trainee selection

Trainings were conducted in Masaka and Lira districts which were selected by the project to host the testing of interventions on ASF control. In both districts, ASF is endemic and causes significant economic losses to farmers. Several outbreaks have been reported annually (Atuhaire *et al.*, 2013). Trainees were selected by the project's local partners in the respective districts. Selection criteria were being knowledgeable enough in the field of animal science or agriculture with at least a certificate in one of the two areas, individuals that play an important role in their localities through positions they hold in the local governments or other development bodies such as NGOs, possibly individuals who operate their private business within the district (ex. para-veterinarians) but are involved in local development activities. Twelve and eleven extension staffs were selected in Masaka and Lira districts respectively to be trained in participatory research tools, group facilitation, data collection, note taking and field reporting (Annex 1 and 2).

Assessment toolkits

Qualitative and quantitative toolkits were designed by the project team. The extension staffs were trained on those tools for further administration to the target population during the surveys (<http://livestock-fish.wikispaces.com/VCD+Uganda>). The qualitative tool includes sections on: knowledge of ASF disease; identification of hotspots of ASF along the value chain; identification of constraints faced by value chain actors in the prevention and control of ASF outbreaks and recommendation for biosecurity measures and for behavioural changes (Table 1). Participatory tools such as Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) were used. The quantitative tools cover topics related to KAPCI.

Focus Group Discussions (FGD)

FGD toolkits were designed for all value chain actors including pig producers, communal village boar keepers, traders, butchers, pork joint owners, village veterinarians, para-veterinarians, drug stockists and feed stockists, in the rural and peri-urban/urban areas. Each FGD was expected to consist of 10 participants. Men and women farmers were to be interviewed separately in rural and urban areas.

Key informant interview (KII)

A KII toolkit was designed in the form of a half day workshop with 20 targeted participant's per district. Participants comprised of community and expert opinion leaders who have responsibilities in relation to disease control in their communities and are expected to have knowledge about the disease. These included deputy speakers, local council members, area veterinary officers, pig farmer cooperative leaders, district women leaders, district commercial officers, police officers, district veterinary officers, community youth leaders, district production secretaries, butcher and trader leaders and sub-county police officers.

Face-to-face interview (FFI)

Data collected from the above tools was complemented by FFIs to obtain quantitative data. The FFIs were undertaken with the following value chain actors: producers and communal village boar keepers; traders; butchers and input suppliers (village veterinarians, para-veterinarians, drug stockists, feed stockists, veterinary officers, meat inspectors, and police and public health officers) using questionnaire-type surveys. Although they were designed in English, translation in local languages was considered whenever necessary. Questionnaire's content captured all KAPCI aspects, as well as gender dimensions issues in relation to the disease and its control measures. Table 2 show the different aspects captured by the FFIs tools.

Table 1: List of activities and tools used for data collection

Activity	FGD	KII	FFI
KAP of value chain actors about ASF	X	X	
Identification of hotspots of ASF along the value chain	X	X	
Constraints faced by value chain actors in controlling ASF	X	X	
Recommendation on biosecurity measures	X	X	
KAPCI			X

Table 2: Aspects included in the FFI questionnaire

KAPCI	ASF disease	Biosecurity	Reporting	Movement control	Support services to movement control and reporting
Knowledge	X	X	X	X	X
Attitude		X	X	X	X
Practices		X	X	X	X
Capacities		X	X	X	X
Incentives		X	X	X	X

Training schedule

The training was given by a team of scientists and communication specialists from ILRI. Trainers travelled to the districts and undertook the training in the field with the organizational support of the District Veterinary Officers and local ILRI staff. Field testing was organized to evaluate the training and to capture the duration of each exercise for further scheduling of the real data capture exercise. All tools were tested by trainees with all value chain actors who attended the discussions. The schedule of the training was as follow:

Day 1: The research team travelled to the districts and met with contact staffs from the hosting organization at the district local government in both districts. A short meeting was held to discuss the logistics such as car hiring, participant's booking letters, team constitution and other generally related issues.

Day 2: The full day training consisted of theory and group interactions. All sections of the tools were discussed with trainees in detail and intensive exchange around the content among the team was allowed. Terminologies in local languages were agreed on between trainees in both districts. Illustrations such as value chain maps, tables for data captures and tool's translations in local languages were produced by trainees.



Trainees producing study material (data capture tables and translation of content in local languages) prior the field testing in Lira district

Day 3: KII exercise was organized with participants in hired halls of local hotels is a form of a half day workshop.



Male trainee facilitating discussions of constraints using a problem opportunity matrix exercise with key informants in Lira district

Day 4 – Day 5: FGDs were organized in such a way that all value chain actors were represented. Whenever gender segregated data was required, males and females were interviewed in separate groups, with female enumerators handling female's groups and male enumerators handling men's groups. At the end of all group sessions, a plenary was organised to discuss general issues with all value chain actors together.



Female trainee facilitating a FGD with women farmers who are undertaking a proportional piling exercise during the field testing in Lira district



Male trainee facilitating a FGD with men farmers who are undertaking a proportional piling exercise during the field testing in Lira district



Male trainee facilitating discussions in plenary with value chain actors during the field testing in Lira district

Day 6: Each trainee was allocated two value chain actors (1 male and 1 female) to administer the FFI questionnaire with preferably female enumerators handling women and male enumerators handling men whenever possible.



Trainees undertaking FFI in Masaka district

At the end of each day of field testing, trainees were gathered in a meeting to discuss challenges encountered during the exercises. Timing was also critical because if the sessions were to be too long, interviewees would get bored and quality of the data would be compromised. Based on field feed-back, tools were adjusted and updated to be used for the real surveys.

Follow up activities

Data collection was scheduled immediately after the training while the trainee's memory of tools' content was still fresh. From January to April 2015, 740 and 682 value chain actors were reached through FGDs and individual interviews in Masaka and Lira districts respectively. Results from the analysis is expected to: (1) generate information on hotspots of ASF along the value chain and constraints faced by value chain actors in controlling ASF; (2) gather recommendations for improved control strategies; (3) serve as a baseline results prior the implementation of the scheduled Randomized Controlled Trial (RCT) which is planned to assess the effect of a participatory training of pig producers on biosecurity measures on their knowledge and practices.

Conclusions

The training of extension staff on participatory skills constituted an important step for upcoming activities for the project. Involvement of local partners and stakeholders in the implementation of activities is critical for the success of interventions. It is also a mandate of the project to build capacities of local stakeholders and partners in order to ensure sustainability. We expect that these trainees would use the skills transferred to them beyond the project, in their own development programmes in order to reach the target population effectively.

References

- Atuhaire, D. K., S. Ochwo, M. Afayoa, F. N. Mwiine, I. Kokas, E. Arinaitwe, R. A. Ademun-Okurut, J. B. Okuni, A. Nanteza, C. Ayebazibwe, L. Okedi, W. Olaho-Mukani and L. Ojok, 2013: Epidemiological Overview of African Swine Fever in Uganda (2001-2012). *Journal of Veterinary Medicine*, Article ID 949638, 9 pages
- Dione, M. M., E. A. Ouma, K. Roesel, J. Kungu, P. Lule and D. Pezo, 2014b: Participatory assessment of animal health and husbandry practices in smallholder pig production systems in three high poverty districts in Uganda. *Preventive veterinary medicine*, 117, 565-576.
- Ouma, E., M. Dione, P. Lule, D. Pezo, K. Marshall, K. Roesel, L. Mayega, D. Kiryabwire, G. Nadiope and J. Jagwe, 2014: Smallholder pig value chain assessment in Uganda: results from producer focus group discussions and key informant interview. . *ILRI Research Report. Nairobi, Kenya, 150p.*
- Muhanguzi, D., V. Lutwama and F. N. Mwiine, 2012: Factors that influence pig production in Central Uganda - Case study of Nangabo Sub-County, Wakiso district. *Vet. World* 5.

Annex 1: List of trainees in Masaka district

Name	Grade	Gender	Activity trained on
Lawrence Mayega	BSc Veterinary Medicine	Male	FGD, KII, FFI
Sserwadda Joseph	Diploma Animal Husbandry	Male	FFI
Mayanja Lawrence	Diploma Animal Husbandry	Male	FFI
Sserwanyiri Henry	Diploma Animal Husbandry	Male	FFI
Ssenabulya Simon Peter	Diploma Animal Husbandry	Male	FFI
Balikuddembe Joseph	Diploma Animal Husbandry	Male	FFI
Kakembo Ivan	Diploma Animal Husbandry	Male	FFI
Katumba Joseph	Diploma Animal Husbandry	Male	FFI
Patricia Nakatudde	Diploma Animal Husbandry	Female	FFI
Namayanja Sarah	Diploma Animal Husbandry	Female	FFI
Pauline Nambalirwa	Certificate Vet Science	Female	FFI
Eve Luvumu	BSc Animal Nutrition	Female	FGD, KII

Annex 2: List of trainees in Lira district

Name	Grade	Gender	Activity trained on
Podpodo Cecil	BSc in Veterinary Medicine	Male	FGD, KII, FFI
Okello Benard	Diploma in Animal Production	male	FGD, KII, FFI
Amuge Felicity	BSc Animal Science	Female	FGD, KII
Ogwal Vincent	Diploma Animal Production	Male	FFI
Omongo Innocent	Diploma Animal Production	Male	FGD, KII, FFI
Ayoo Daniel	Diploma Animal Production	Male	FGD, KII, FFI
Okech Francis Louis	Diploma Animal Production	Male	FFI
Okuta abrose	Diploma Animal Production	Male	FGD, KII, FFI
Twaha swaibu	Diploma Animal Production	Male	FGD, KII, FFI
Okori Job	Diploma Animal Production	Male	FGD, KII, FFI
Okello Betty	Diploma Animal Production	Male	FGD, KII