

International Livestock Research Institute

Health and antibiotics in the Vietnamese pig production

Report on training of enumerators on the use of Open Data Kit for data collection

15 August 2018



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Compiled by Chi Nguyen

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Contents

Acknowledgments	iii
Abbreviations and acronyms	iv
Background	1
Method	1
Results	1
Trainer	4
Workshop program.....	4
List of trainees	5

Acknowledgements

The *Health and antibiotics in Vietnamese pig production* project is funded by the Danish Ministry of Foreign Affairs and is a collaboration between the University of Copenhagen, the National Institute of Veterinary Research, the National Institute of Nutrition and the International Livestock Research Institute (ILRI).

Abbreviations and acronyms

ILRI	International Livestock Research Institute
ODK	Open Data Kit
VIDA-PIG	Health and antibiotics in Vietnamese pig production

Background

The *Health and antibiotics in Vietnamese pig production* project, known as VIDA-PIG, is a collaboration between the University of Copenhagen, the National Institute of Nutrition and the International Livestock Research Institute (ILRI). VIDA-PIG will assess veterinary drug use in Vietnamese pig farms. The project will carry out research to identify and evaluate factors affecting veterinary health and veterinary drug use with the aim of establishing antimicrobial usage practices that are based on a One Health approach across the smallholder sector.

VIDA-PIG project will use mobile based data collection which is more efficient and cheaper than paper based data collection for large data collection exercises. The project will use the Open Data Kit (ODK) suite of tools to collect VIDA-PIG project data.

ODK is a free and open source set of tools which help organizations author, field and manage mobile data collection solutions. ODK provides an out-of-box solution for users to; build, collect and aggregate (opendatakit.org).

Once you've collected data in the field with ODK Collect, you can upload and manage your data using ODK Aggregate. Aggregate is the intermediary server storage platform that accepts the data and can send it on external applications, if desired. ODK Aggregate also allows you to download datasets in aggregated formats such as CSV files ([Managing your Data with ODK Aggregate](#)).

Method

A one-day hands on training was organized for VIDA-PIG project enumerators. The objective of the training was to build the capacity of the enumerators to be able to use ODK Collect app on Android tablets to conduct interviews.

The training was facilitated via Skype on 15 August 2018 by Louis Okello (ILRI Consultant) based in Kampala, Uganda, East Africa. The training was conducted in English and interpreted by a local ILRI staff into Vietnamese.

Results

The training was attended by 10 (8 female, 2 male) participants from ILRI Vietnam, National Institute of Nutrition, Vietnam National University of Agriculture, the National Institute of Nutrition and Institute of Anthropology. More than half of the participants 55% (n=6) had no prior training in using mobile devices (smart phones and tablets) for field based data collection, while the same number of participants had never used mobile devices for field based data collection.

Mobile based data collection efficiency attitude

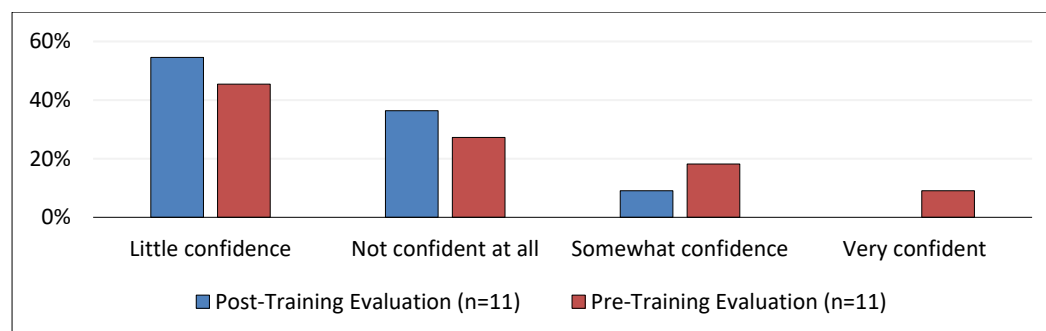
Prior to the training 99% (n=10) of the participants said data collection using mobile devices was cheaper and faster than paper based data collection, while all participants said data collection using mobile devices was cheaper and faster than paper based data collection after the training.



Participant self-reported confidence in using mobile based data collection app

Participant reported self-confidence did not improve after the training (Figure 1). This may be attributed to the fact that after introducing participants to the theory of mobile based data collection, it was not followed up with sufficient practice that would have enabled enumerators to become familiar with the data collection app.

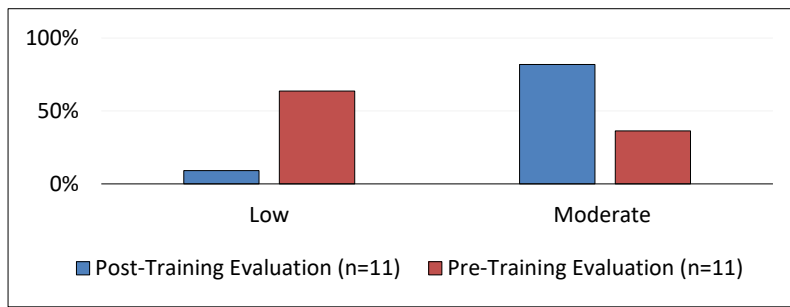
Figure 1: Rate your level of confidence in using mobile devices for data collection



Participant self-reported knowledge of Open Data Kit (ODK) app

There was improvement in participant knowledge of the ODK app. Participant reporting low knowledge of ODK app fell by 55% after the training, while participants reported a 46% improvement in moderate level of knowledge of the ODK app (Figure 2). Conversely participants correctly answered 75% of the single choice knowledge questions about the ODK app.

Figure 2: Rank your level of knowledge of ODK app



Post training feed back

Appropriateness of training content to participant's learning need

Most of the participants 99% (n=10) agreed that the training content was appropriate to their learning needs.

Participants said the training content was enough to enable them use the app to collect interview data *"enough for me to use the app in field work"*, *"I know how to use ODK in field for interview"*.



Satisfaction with training method used

Most of the participants 99% (n=10) reported being satisfied with the training method used. Participants appreciated the hands on approach of the training, *"I used ODK in the tablet, it is very interesting"*, being able to participate by asking questions *"I can ask my question"*, and the simplistic approach of the training *"They used a simple way to teaching"*, *"I can use tablet easier than before"*.

Challenge faced

1. Inadequate time for enumerators to practice using ODK app. A one-day training was not enough to introduce theory of ODK app, review VIDA questionnaire, and practice using the VIDA questionnaire on ODK app.
2. Lack of a finalized/pre-tested study tool/questionnaire. By the time of the training, the questionnaire had not yet been finalized *"because of the status of questionnaire is not compatible to app, so it takes more time"*. Subsequently a considerable amount of time was spent during the training to discuss the VIDA pig project questionnaire. *"We take too long time to review the questionnaire"*

Suggestions/recommendations to improve future trainings

1. Organize comprehensive enumerator training *“More time”*. More time should be afforded to future trainings to cover interviewing ethics, research/study protocol, reviewing study tool/questionnaire *“The participants should have time to be familiar with the questionnaire before taking part the training”*, practicing using ODK collect app.
2. Finalize the questionnaire during the training.
3. Where possible, an advanced face-face hands on training in ODK programming and setting up an ODK system should be conducted. *“I want to learn more about ODK, for example: build ODK”, “More time and more advanced content”. “Face to face is easier to understand”*

Trainer

Louis Okello was working as a consultant with ILRI from 2016 to 2018. In this role, he supported with developing ODK AMUSE tool, programming data collection for use in ODK application. He provided training enumerators in mobile based data collection, cleaning and preparing data for data analysis, data analysis and pre-testing data collection tools. Email: Louisomoya@gmail.com

Workshop program

Time	Activity	Person in charge
9:00 – 9:30	Arrival, registration, Pre - training Evaluation	Hanh Le, ILRI
9:30 – 9:45	Workshop opening and administrative details	Hanh Le, ILRI
9:45 – 11:15	Review of VIDA-PIG Project paper questionnaire	Nguyen Van Phuong, VNUA
11:15 – 11:30	Q&A	Louis Okello, ILRI
11:30 – 12:15	Introduction to ODK	Louis Okello, ILRI
12:15 – 13:15	Break - Lunch	
13:15 – 13:30	Q&A	Louis Okello, ILRI
13:30 – 14:45	Review of VIDA-PIG Project ODK form on the tablet	Louis Okello, ILRI
14:45 – 15:00	Break - Coffee	
15:00 – 15:15	Q&A	Louis Okello, ILRI
15:15 – 16:15	VIDA-PIG Mock Interview	Louis Okello, ILRI
16:15 – 16:30	Q&A	Louis Okello, ILRI
16:30 – 16:45	Post training Evaluation	Hanh Le, ILRI
16:45	Departure	

List of trainees

Name	Sex	Title/ Position	Organization
Tran Minh Hang	F	Researcher	Institute of Anthropology
Ly Cam Tu	F	Researcher	Institute of Anthropology
Tran Thi Nhat	F	Researcher	National Institute of Veterinary Research
Truong Thi Quy Duong	F	Researcher	National Institute of Veterinary Research
Nguyen Van Phuong	M	Lecturer	Vietnam National Institute of Agriculture
Vu Thi Lan	F	Intern	National Institute of Nutrition
Bui Thi Thu Trang	F	Researcher	National Institute of Nutrition
Le Thi Cuc	F	Researcher	National Institute of Nutrition
Kieu Minh Duc	M	Researcher	National Institute of Nutrition
Mac Thi Cong Ly	F	Researcher	ILRI