



PADEE LEARNING BRIEF: QUALITATIVE REVIEW OF APPLIED TRAINING



A. INTRODUCTION

This learning brief focuses on the Qualitative Review of Applied Training in PADEE (Project for Agricultural Development and Economic Empowerment). Funded by IFAD, the project runs from 2012 to 2018.

The purpose is to look back at what happened during the review, the activities we did and the decisions we made; and to review if we could have done things differently to have a better effect. The aim is to use the lessons learned in future similar assignments, and to share them PADEE partners.

B. BACKGROUND: QUALITATIVE REVIEW IN PADEE

It is crucial to learn from what we do: to consolidate and spread what works; and to revise and improve on what does not. That is why it is important to find out if the trainings have had the right effect: are farmers' agricultural approaches improving due to the trainings provided?

We want to see what we can do differently to achieve adoption and stimulate increased production and income levels. We will use the results to update the training packages and align them more to farmer's needs.

In PADEE, farmers are trained in numerous ways.

- GDA organizes Farmer Field School (FFS) sessions whereby farmers learn by doing;
- iDE organizes demonstration plots where farmers can observe, participate and learn.

In June and July 2014, SNV in cooperation with GDA and iDE performed a 'Qualitative Review of the Applied Training' whereby we reviewed adoption levels of the recommended rice, fish and chicken techniques. We aimed at collecting quantitative and qualitative information on the effectiveness of the trainings. The review shows the application level of agricultural practices and the reasons behind them.

C. OBSERVATIONS AND LEARNING POINTS

1. Sampling process

A sampling framework was chosen in the five PADEE target provinces. A definite population (Cochran 1963; see <http://www.raosoft.com/samplesize.html>) was used to calculate sample size with a 5% error margin and 95% confidence level.

Main lesson learned:

Selecting interviewees through an acknowledged sampling tool is the only way to end up with credible, non-biased information.

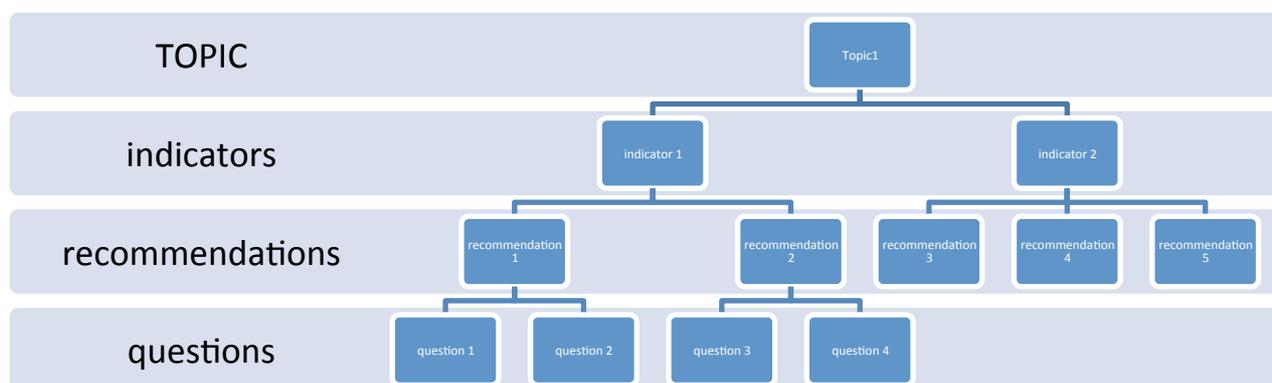
There was only one implicit stratum, which was the number of Improved Group Revolving Funds (IGRFs) who received FFS training in the early rainy season of 2013. There were 225 IGRFs with 11,250 farmers in total. We hoped to interview 373 farmers. The simple random sample was used based on MS Excel application random formulae.

iDE gave a list of end users in each province. Again with random sampling, we selected the villages, groups and farmers to interview, both from FFS and from iDE. We used the PADEE web

report and their member lists to start sampling. That gave us the final number (identity) and location of farmers to be interviewed.

In every village, we also sampled three 'replacement' or 'back-up' farmers in case the selected ones could not be reached.

The final lists were sent to the provinces so people could start identifying the locations of the farmers selected.



2. Questionnaire development

Each questionnaire had a unique questionnaire ID, based on the provincial code, the number of the questionnaire, and the name of each enumerator. Thereby, it was quick to identify details when rechecking any question. For example, 20007M refers to questionnaire number 7 (007) in Svay Rieng province (20) and the enumerator named Srey Mom (M).

The development of the questionnaire was mainly based on the recommendations given by GDA and iDE, with their monitoring indicators as the first element. Each recommendation given by our partners was regrouped within the different indicators, and each was used to create questions to tell us whether a farmer was adopting practices or not.

Later, during the analysis stage, each question was scored to allow a quantitative analysis. Each indicator gave us a numeric representation of the level of adoption (0%= the farmer didn't adopt any of the recommendations; 100%=the farmers adopted all of them).

Another part of the review was to understand the reasons behind the level of adoption, and we had to introduce suitably qualitative questions in the questionnaire, which were not scored. Lastly, the questions were numbered to make clear the links between the questionnaire and the data analysis sheet.

Since the training content was often based on the real situation in the field, it was not easy to give 'one-size-fits-all' advice. This made it difficult to come up with clear questions. Taking this into account, we needed to be flexible.

Another challenge was that questionnaire design was not combined with design of the data analysis. The scoring was developed after the questionnaire was finalized, making it harder to do.

Main lessons learned:

- The scoring sheet should be developed at the same time as the questionnaire in order to have more logical scoring.
- Importance of having clear advice/manuals in the field as basis for questionnaires. GDA and SNV should work with each other to make advice as specific as possible to enable effective implementation and monitoring.

3. Data entry file development

The data entry folder was developed to facilitate the entry of the 400 questionnaires. We opted for ACCESS software since we could create different pages to enter data and it is more user friendly (using buttons, very easy to fill in forms).

We created a system whereby the data entered would be automatically added to a table. We were also able to make changes according to the changes in the questionnaire. Finally, we could export/import the data to/from an Excel file, the software used for the data analysis.

However, realisation of this folder required a lot of time and thought. Since the questionnaire was changed so often, we always had to adapt the data entry folder.

Main lessons learned:

- Only start creating the folder for data entry when the questionnaire is final
- Decide on all the specific details needed before designing the data entry folder

4. Enumerators, training and field testing

In order to lead the interviews in the field, SNV selected six enumerators; four of them having experience in conducting interviews while the other two were interns with no interviewing skills but with backgrounds in agriculture.

SNV conducted a one-day workshop to brief the enumerators about PADEE and the purpose of the review; and to go over the questions, one by one. Some of the questions were revised during that meeting.

SNV representatives and enumerators then went to the field for half a day to test the questionnaire.

The interviewing skills of enumerators were sometimes not enough to extract all the answers from the farmers. Not all enumerators filled out every questionnaire optimally due to lack of agricultural knowledge, or just a lack of concentration.

Challenges also rose since field testing happened only a few days before the review started and field testing data had not been analysed.

Main lessons learned:

- Check the interviewing skills of enumerators more in advance;
- Extend enumerator training to two days to achieve a better understanding of the questions, more commitment and better interviewing skills
- Foresee double field testing to allow enumerators to test the revised questionnaire after the first field test;
- Enter and analyse field testing data in the data analysis sheet to better understand the problems of the enumerators and to also test the analysis method;
- Take the first week of the review as a testing week whereby we limit the number of interviews per day, analyse all the data daily and organize daily feedback meetings.

4. Field work

Logistics were very well organized thanks to good cooperation with the Commune Extension Workers (CEWs) and the Provincial Departments of Agriculture (PDAs), who were very willing to provide staff (mostly CEWs) who could guide the enumerators to the selected farmers. We organized motorbikes when the road was not accessible with a car.

Every enumerator was always accompanied by a SNV representative to help out if needed with unexpected situations. This continuous feedback also aimed at improving the work quality of the enumerators.

In the beginning of the review, we had daily reflection meetings at the end of each day to share experiences, report unexpected or 'new' situations, and agree on the actions to take. In the meetings we also sometimes adapted the questionnaire.

Most CEWs had a list of PADEE farmers, but no contact numbers. There were also some spelling mistakes in the names of farmers. Some farmers' houses were difficult to access during the rainy season.

Sometimes we could not interview the selected farmers because:

- (1) They had moved house;
- (2) They were busy with external work;
- (3) They were no longer IGRF members;
- (4) They had not regularly attended the FFS.

Challenges to farmers preventing adoption of the techniques included:

- (1) Mortgaging of rice field;
- (2) Old age;
- (3) No land for a fish pond;
- (4) Insufficient family labour

5. Data compilation

The data was entered by external interns, non-Cambodians who did not know the Khmer language). They are not enumerators but were involved in the field work. The data entry team worked efficiently and accurately to ensure most data was entered by the end of the review.

The answers in the questionnaire were not always consistent, creating difficulties during data entry. It was also difficult for the enumerators to translate their answers into English for the expat data entry team.

Main lessons learned:

- It is better to sample more than three 'back-up' farmers in each village since selected interviewees were regularly unreachable for a number of reasons.
- To reach sampled farmers, we could ask the sub-national level to check the sampled list in advance. By doing this, they can also prepare contact details (phone numbers) of the selected farmers.
- Besides a car, it is good to provide motorbikes when roads are less accessible
- The daily reflection meetings should continue throughout the whole review to stay updated on field experiences.
- It is more effective to enter the questionnaires regularly into the computer so problems can be tackled in a timely manner.

Main lessons learned:

- Enter data regularly to enable timely revisions.
- Select a Cambodian data entry team with a high level of accuracy.
- Questionnaires should be checked daily to avoid inconsistency and lack of answers when it comes to data entry.

6. Data cleaning

After exporting data from MS Access, it was cleaned in MS Excel to find missing and inaccurate data. FFS and iDE data were used in two different files.

All skipped questions in MS Access were automatically filled after exporting to MS Excel, which required time to clean and filter. Most of the time spent in cleaning data went to rice yield data, as this was less accurate.

Main lessons learned:

- Entering through MS Access was quick and easy, although it required time to check.
- The unique questionnaire ID was easy to find and helped correction of missing and incorrect answers.
- To have more accurate data, enumerators need to calculate rice yield during the interview,
- Ensure a clear indication of 'difficult questionnaires' so the data cleaner can easily find the questionnaires to check and correct.

7. Scoring

We based the scores on the indicators regarding each technique, and their importance towards achieving a higher yield or production level. We decided on the scoring technique when the fieldwork was over.

It took time to agree with GDA and iDE on the scoring levels, and we later noticed how some questions could have been different or even deleted.

Main lessons learned:

- Develop the scoring levels at the same time as the questionnaire.
- Be clear in the concept note about the scoring, and agree in advance with the other partners

8. Data Analysis

Data analysis was conducted after the cleaning. We prepared in advance what we needed to focus on in the final report. This made it easier to analyse only what was needed.

Main lesson learned:

- The list of required data that we wanted to use for reporting is important as it helps to speed up the analysis

9. Consolidation and report writing

Before the consolidation, we listed what we wanted to learn from the data. This enabled us to focus only on the information that was really useful to our conclusion.

The person who analysed the data made a first draft report, which was then finalized by another SNV team member. There was good communication between the two SNV staff.

We will share the report with GDA and iDE first before sharing with other PADEE partners to see if all agree with the findings.