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Learning to write fact sheets and video scripts for farmers in Uganda



*Caritas, NAADS, Africa 2000 Network, Environmental Alert,
PELUM, NOGAMU, Sulma Foods, and URDT*

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Acronyms

NAADS	National Agricultural Advisory Services
NOGAMU	National Organic Agricultural Movement of Uganda
PELUM	Participatory Ecological Land Use Management
SDC	Swiss Agency for Development and Cooperation
URDT	Uganda Rural Development and Training Institute

Summary

The 12 participants from Caritas, NAADS, Africa 2000 Network, Environmental Alert, PELUM, NOGAMU, Sulma Foods, and URDT met for five days. They wrote four fact sheets: on banana weevils, managing a pig house, solar drying of pineapple and preserving leafy vegetables.

The participants wrote video scripts on the same topics.

Three field exercises: 1) validating the fact sheets, 2) photographing local innovations and farming systems, and 3) interviewing farmers about the topics for video scripts—helped ensure that the farmers’ point of view was blended into the final products.

Introduction

We gave an earlier version of this course in English in Bangladesh in January, 2013, and in French in Benin in May 2013 and in Mali in November 2013.

This illustrated report describes the presentations and the exercises (in the classroom and in the field), and selected results.

Photo credits

All photos are by Paul Van Mele and Jeff Bentley, unless indicated otherwise.

Cover photo: Entebbe is alive with small businesses

1. Fact sheet short course

First day

Classroom exercise-1 Personal profile

The participants filled out the personal profile, to help Augustin Kouévi (Access Agriculture/ Cotonou) with the monitoring.

Presentation-1 Introduction

What to expect from the course: each participant will co-author a fact sheet and a first draft of a video script. The teams will film the four videos later, in case the topics are retained (see more on this later).

Presentation-2 The mothers, fathers and midwives of invention

If necessity is the mother of invention, the father is a new idea. And extensionists or other facilitators are the midwives.

Classroom exercise -2 Local innovations

The participants wrote a letter to their aunt about a farmer innovation, which they then shared with the group.

Stories from participants on local innovations

The mother (need)	The father (new idea)	The baby (the innovation)
Post harvest handling of maize. Had no place to keep her maize. When it was stored, the maize was exposed to maize weevils. (Francis)	Maize can be stored in a basket. It should be air and water tight. Dung mixed with water can form a tight seal.	Bird cage storage method. Mix cow dung with water, smear it on the basket to seal the holes. Leave it to dry in the air. The basket is air tight and can store maize
Preventing fruit flies in mangoes without spraying chemicals (Juliane)	Fruit flies lay eggs in the morning and in the evening. Fruit flies do not like smoke	After weeding the mango trees, collect the dry leaves of mango. Bring cow dung. Make a fire near the base of the tree and burn the dried dung and dry mango leaves. Smoke the trees in the morning and in the evenings
Preservation of local vegetables. People grow land on a small piece of land. They grow vegetables only in the wet season and need to dry them for the dry season (Noel)	Vegetables that are dried in the sun can be conserved for a few months	Remove diseased ones, clean with water. Dry in the sun until the leaves are friable with less moisture. Place the dry vegetables in air tight pots on tables. It feels very nice to have vegetables in a time when they are not being produced.



Classroom exercise-3 Choosing an extension topic

We organized the participants into four groups according to their expertise and interests. The groups worked on the following four topics.

1) Drying pineapple in the sun

Jane, Godfrey, Juliane

2) Clean seed, traps, and removing fallen plant material to manage the banana weevil

Francis, Vincent, Margaret

3) Preserving local vegetables

Noel, James, Doreen

4) Building a pig house

Apollo, Emmanuel, Lawrence

Handout-1 Snowman outline

Head: This is the first part of the message. It is usually the shortest part. It introduces the problem.

Middle: The second part of the message is usually a little longer. It explains the biology and ecology of the problem, the background information that helps the audience understand the technology.

Main part: This is the last part of the message, and usually it is the longest part, about half of the whole message. It explains how to use the technology, step by step, like a recipe in a cook book.

Presentation-4 Outline a practical message

A short talk, outlining some common household technologies in three parts (snowman).

Classroom exercise-4 Outline an practical message

The groups outlined a common technology topic as a snowman (in three parts).

Gum boots

Head: Damage to the feet
Middle: Gum boots protect the feet from thorns, dust, broken glass and so on. The stocks prevent stinky feet and protect the feet from the gumboots and keep the boots clean
Main part: Put on the socks and then the gumboots

Thermos flask

Head: Need a way to keep hot water hot.
Middle: The flask has a section that prevents loss of heat and keeps the temperature as needed. It has a seal that prevents heat loss. The outer plastic case prevents damage of the vacuum and facilitates proper handling
Main part: Keep the flask clean. Boil water to desired temperature. Fill up the flask with water. Replace the lid and fix it tightly. Keep it in a safe place far away from children, to avoid damage

Using a device to open the gourd passion fruit

Head: The gourd passion fruit has a hard rind and is hard to open.
Middle: When you crack the fruit with your teeth you can crack your teeth. When you hit it with a stone all the juice goes out and you risk contaminating the fruit. If you crush the fruit between an object with the same shape and size you exert force around all sides equally and break it evenly
Main part: It is possible to open the fruit with a simple wooden crusher. It breaks up the hard rind and enables to consumer to eat it. It has two equal wooden pieces connected with a hinge. A depression the size of the passion fruit is made on the inside of each piece. It should be in the upper third part of the wooden pieces. Place the fruit in the depression and squeeze the pieces together. Clean the device after use.

Lorena stove

Head: Fuel wood is becoming scarce and expensive
Middle: Reducing energy loss, food cooks faster with less wood. Smaller pieces of wood can be used more efficiently than large pieces.
Main part: Collect pieces of wood, chop them into small pieces, and use two to three pieces. Fix them into the charcoal stove. Light them and cook whatever you want.

Classroom exercise-5 Outline an extension message

Each of the three groups outlined their extension topic as a snowman. The facilitators and the other participants made constructive criticism in writing on small cards.

Sun dried pineapple

Head: During peak season a lot of pineapple goes to waste. Then in the off season there is none available. So you need a way to store pineapple. Dried pineapple does not go to waste and sells for a higher price

Middle: Dry the pineapples when they are mature, so they will have the right flavour and colour when dried. If the slices are too thick they cannot dry. If they are too thin they get too hard. An airtight container avoids letting moisture in after drying. If they are cooled overnight they finish maturing evenly

Main part: Harvest mature ripe pineapple. Put them in the shed, sort and grade them, wash them with potable water and let the water drip off. Peel them with a sharp knife and remove all the eyes. And make slices. Slice them into pieces. Lay the slices on the tray. Place in the solar dryers. It will take 6 to ten hours to dry. Offload the trays, and put in an airtight container. Sort slices.

Drying cowpeas

Head: Vegetables can spoil if they are not dried. Vegetables are not available in the dry season. We need a constant supply of vegetables. Dried vegetables sold in the dry season are worth more

Middle: Direct sun will scorch the leaves when they are drying. They need to stay clean, so they are healthy and nice to eat.

Main part: Harvest dry leaves, sort them. Boil the leaves to soften them for easy drying. Pound the vegetables using a mortar and pestle to get powder which is sifted and packed in a tight container. Harvest mature leaves, clean and sort the leaves, boil them. Dry in the shade on a raised tarpaulin, for two to three days pound using a mortar and pestle. Pack in a dry container.

Build a pig house

Head: Decrease spread of swine fever, poor quality of pigs, contamination and stench from manure

Middle: Shelter protects from sun, especially for improved breeds,
A house helps provide: proper feeding, collecting manure, keeping them from getting stolen, keeping them free of disease

Main part: Different types, raised, surface pig house and organic pig management

Describe what the house looks like

Indigenous micro-organisms

Virus control

Cleaning the house every day

Spraying the house

Providing enough food, fencing, managing the manure

Banana weevil

Head: Small bunches, and few fruits, yellow and brown leaves, poor growth.

You can see tunnels in the pseudo stem; you can see larvae or eggs in the tunnels in the pseudo stem. You can see black beetles in the lower part of the pseudo stem.

Middle: Banana weevils live in the trash around the banana plant. They go to the plant to lay their eggs. They are only spread to other plantations through infested plant material. By starting with clean plant material in a clean place you exclude the pest

Main part: Use clean plant material. Such as tissue cultured plants, treated suckers treated with cold or hot water. Remove infected plants. Splitting the pseudo-stems after harvesting. Trapping pests with fresh pseudo stems. Checking the traps and destroying the collected pests.

Presentation-5 Going Public

We were a little behind schedule, so we skipped this presentation.

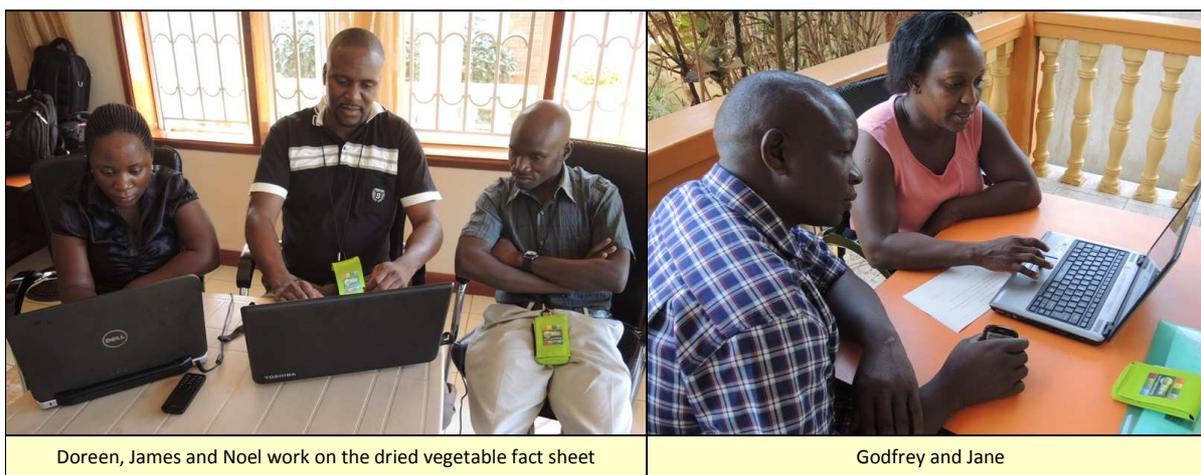
Classroom exercise-6 Write an extension message

The groups typed a first draft of their fact sheet.

Second day

Classroom exercise-7 First editing of the fact sheets

After the last session on the first day, the facilitators edited the fact sheets, writing in red letters where information was missing. Each group edited the fact sheets.



Doreen, James and Noel work on the dried vegetable fact sheet

Godfrey and Jane

Demo

We showed the group how to lay out a fact sheet in a Word template.

Classroom exercise-8 Laying out fact sheets

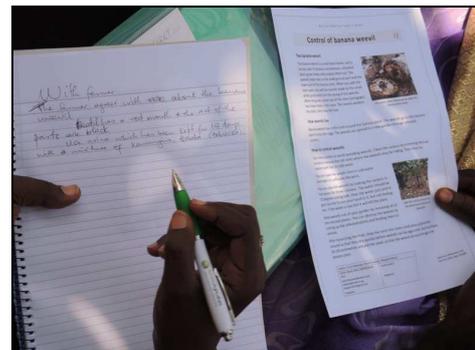
Each group did their own layout, based on the snowman method.

Presentation-6 How to validate fact sheets

Instructions on how to validate the fact sheet in the field. We call it a “farmer peer review.” The participants take the printed fact sheets to nearby villagers, who read it and critique the technology and the prose.

Field exercise-1 Validate fact sheets

We allotted most of the afternoon for this. Each participant invited at least three farmers to read and comment on the fact sheet made by their group. They paid careful attention to words or phrases the readers did not understand. If the farmers couldn't read, the fact sheet was read out-loud to them. If the farmers did not understand English well, the participants translated the fact sheet out-loud to Luganda.



Validating fact sheets. A farmer reads them, and the author takes notes on improvements to make in the text

Validating fact sheets in Mpala



Finding banana weevils



Caroline Nasamba tells Doreen how to dry amaranth leaves

Each person was to read their fact sheet with three people. To make sure that everyone did that, James reorganized three of the groups so that there was one person each from weevils, pigs and vegetables in

each group. Each of these new groups then met three people who read each one of the three fact sheets.

During the review the participants were good listeners, and learned a lot from the farmers. For example, the cowpea fact sheet suggested that people dry mature leaves. But the farmer peer reviewers told Doreen that they dry tender leaves, not mature ones, because they have more nutrients. They said only pick the five youngest leaves on a plant, and do not take leaves from a plant that has already flowered. People said that they don't like to boil the leaves before drying them, because when they look in the pot and see that the water has turned green, they realize that many of the nutrients have gone into the water. So the readers said they steam some of the leafy vegetables, but never boil them.



Mrs. Nasamba tells Emmanuel about pigs

One of our reviewers, Caroline Nasamba, told Emmanuel that she was going to adopt the organic pig house, where the pig lives in a pit and gets occasional sprays of indigenous micro organisms (IMO) that keep the pig and the pit so clean that the animals look like they just stepped out of the shower. Earlier in the day Jeff and Paul had talked Emmanuel out of writing on the IMOs (too experimental) in favor of writing about more conventional, village pig houses. The woman knew a man who lives in Entebbe who is raising pigs this way.

Third day

Classroom exercise-9 Things the groups learned while validating the fact sheets:

Each group discussed what they learned in the field, especially ideas that could be used in making a video on the subject. They had learned a lot of information, as shown in the following boxes.

Pig house

Pigs break the concrete floor to dig. Farmers prefer to raise houses on 4 legs or more. In case the concrete mix wasn't so go. Pigs are meant to dig. With time they break the concrete

Human or cow urine prevents swine fever. Some farmers give the pigs the urine, mixed with food. They collect urine every morning and the pigs drink it fresh in the water, especially in the morning.

Some bathe the pigs in the dry season.

Clean the pig house. The people say no pig can ever eat its droppings. They separate the droppings. They drop in one corner and sleep in another.

The manure is used to grow dodo, amaranth, which they feed to the pigs in the dry season when there is not much else to eat.

The idea of using coffee husks does not work. Coffee attracts many diseases and makes the house difficult to clean.

Use a mix of soap and water to disinfect the feed and water troughs

Cowpea leaves

Mention that other vegetables can be dried like bitter berry, sukuma wiki.

Drying should be in the house and keep on checking for quick drying. This takes 3 or four days. This prevents the loss of nutrients and colour. Dry in direct sunlight on the fifth day in the morning.

Every meal needs vegetables.

Flowered vegetables are too mature. They have already lost their nutrients.

Count leaves five from the tip and use these tender ones, not the mature ones.

They said most farmers don't have a tarp so they should use a mat or a sack. Protect the edges with stones so it does not flap.

We said to boil the leaves, but they said no, because when you boil you lose the nutrients. It is better to steam.

We said to store in a closed container. They said you can also tie the dried powder in the banana fibres and put it by the fireplace which gives it a better aroma and it lasts for long.

They said to label each one because they are all green so you know which one is which.

Weevils

The farmers apply concoctions to replace the nutrients and they are pesticides.

Urine, kept for 10 days

Ash, rich in potassium

Marigold kawunyira

Luwoko (phytolaca, African soap berry)

Tithonia (Ekimyuula)

They use traps, made from fresh banana leaves, and split pseudo stems. They really go for this. They put these down where they harvest. When they attract the beetles then they use ash to suffocate them the next morning.

Some banana varieties, like the beer and desert varieties are more resistant than the food varieties.

Banana weevils affect the normal development of the leaves. An infested banana plant, the leaves look more squeezed. They are more clustered, closer together. Normal leaves are well spaced, not all squeezed together in one place.

Pineapple

Provide information on how to select pineapples for drying. They said to be more specific on the size and ripeness. In the fact sheet we said half ripe.

Post harvest handling should be emphasized. E.g. use of harvest crates, mode of transport, how to store them. They said the farmer has to wash three times with a brush.

Include general food safety and hygiene, such as not coughing. If someone has the flu they should not work. Keeping fingernails clean.

Indicate measurement for thickness and thinness. Be more specific.

No stainless steel trays are used in the box drier. They are only used in the Austrian one. In the box drier they only use wooden frames fitted with a food grade net.

Include info on how to build the box drier, e.g. the measurements and the materials.

The drier has to be tight so insects do not enter.

In a box drier the fruits take two days to dry, not 16 hours as said in the draft version of the fact sheet.

Weigh and pack based on the required weight. Not based on size, because size may mean the size of the slices.

Classroom exercise-10 Planning

Some of the participants from the area did the planning for the field trip later that afternoon.

Presentation-7 Popular technical writing

A talk about tips for good writing. (Write like you talk, write like you would write to your mother, and use short words and few words).

Classroom exercise-11 Second editing of the fact sheets

All of the fact sheets added technical content as a result of the farmers peer review.

For example the pig house group deleted “coffee husks” because farmers told them it did not work as bedding for pigs. The final fact sheet advises farmers to disinfect the pig house with simple soap and water, not with bleach or chemicals, as it said at first.

The cowpea fact sheet changed its focus to all leafy vegetables, not just cowpea leaves. The fact sheet now says that leafy vegetables should be dried in the house, not outside, and that people should only take the leaves outside on the last day to crisp the leaves in the sun for two hours. The authors added the part about storing the dried leaves in banana fiber (skin of the banana stem), over the fire, and that if the householder dried several kinds of greens; she could label them to tell them apart.

The banana weevil authors added the farmers’ suggestion about homemade pesticide (the “concoction”) to control weevils, and added a description of a weevil trap, based on the farmers’ account.

The pineapple group defined the thickness of the slices, and improved their instructions about how to judge the ripeness of the pineapple. They told the readers about handling the fruit with clean hands and nails and keeping sick people away from the pineapple during processing.

Handout-2 Stages of video script writing

The importance of incorporating the farmers' point of view is also important at different steps when producing farmer training videos.

- Writing the script
- Having group discussions
- Filming
- Transcribing interviews
- Editing the script again.

Presentation-8 The first click

Eric Boa's photography tips for beginners and one key idea for even advanced photographers: label all your photos. Digital photos are just computer files. If you label them you can search them electronically and you will never have to scratch your head and say "now where did I put that cool picture of that tool for mixing oil and gasoline?"

Demo

How to edit photographs (cropping and changing file size) and labeling them.

Field exercise 2 Photography

Everyone went to the field and took photographs on ten assigned subjects. They organized them and gave the photos file names. We designed the exercise to stress local knowledge and farmer innovation, and to encourage participants to talk to farmers, and put them in the center of the picture.

Each person took 10 photos and labelled them, on the following subjects:

1. People talking
2. A person or people working
3. Local knowledge
4. A farmer innovation
5. A tool
6. A close up of a plant or an insect.
7. A vegetable cropping system
8. A fruit cropping system
9. A small animal (not a cow)
10. Fish (or aquatic animal) management



1 People talking
Photo by Francis



2 A person working
Photo by Vincent



3 Local knowledge
Photo by Margaret



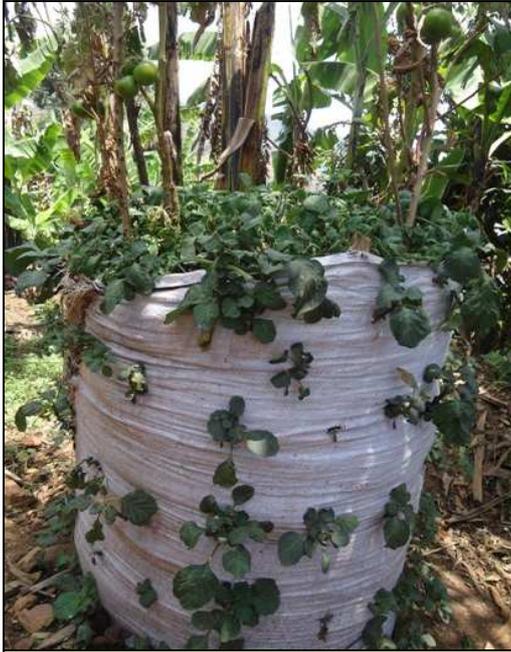
4 Farmer innovation
Photo by Juliane



5 A tool
Photo by Lawrence



6 Close up
Photo by Apollo



7 Vegetable system: in a sack
Photo by Doreen



8 Fruit system: papaya intercropped with banana
Photo by James



9 Small animal
Photo by Jane



10 Large animal: stall fed cattle
Photo by Doreen

2. Video script writing

Day Four

Demo

We showed the photos from the day before. Conclusion: you can take good photos, but you need to discard the bad ones and label them.

Presentation-9 Zooming-in, Zooming out (ZIZO)

Video-making is 60% research and writing, and only 40% filming and editing.

Handout-3 Zooming-in, Zooming out (ZIZO)

Thinking globally, filming locally.

Handout-4 First draft of a video script

The first draft of the video script on beetles in stored cowpea seed.

Classroom exercise-12 First draft of a video script

Participants read the script of the 2011 video *Storing Cowpea Seed* and outlined its contents, as a snowman.

Head

- Cowpea beetle

Middle

- Life cycle
- The beetle lays its eggs in the cowpea seeds.
- The pregnant female beetle can reproduce herself.

Main part

- Suffocation by airtight containers, by triple bag technique, mixing seed with sand or ash to trap beetles in the seed.
- Solarisation.
- Botanical insecticide to repel or kill the beetles.

Video

Participants watched the finished video on storing cowpea seed.

Handout-5 First draft of a video script

The final draft of the video script on beetles in stored cowpea seed.

Classroom exercise-13 Final draft of a video script

Participants read the final script and compared its contents to the first one, noting how much had changed as a result of working in the communities.

Comments from participants:

Structure (snowman ...)

Snowman is still there, but different. Two problems are identified (in the head): the loss of viability of seed and storage pest. (Because in the field, the farmers did not mention the beetle, only the loss of viability).

The middle part has been merged with the main part. (Paul: for each technology, we mention the “why”).

Interviews have been incorporated into the final version.

It takes a bit of time to come up with the final draft (first draft in April, final in June). 10 drafts.

It has changed from paragraph form to kind of bullet points that are easier to follow.

Both men and women are involved in it.

At the end it summarizes the learning. The key points.

The people themselves are telling a story.

The head: besides stating the problem, we look at the benefits of cowpea in the introduction, to motivate the audience. Then we discuss the key problems.

Format (layout)

It is now in table form. (Paul: in the final version you also have a column with a description of all the images).

It starts with a title, which is no longer “Cowpea storage”. It is “Storing cowpea seed”, a verb

We put the version number, because many people have contributed. This way when you send out versions and keep working on it, when people send back comments, you know which version they have commented on.

Why do we put number of words? Because each 100 words is about 1 minute of video.

Language (choice of words)

The language used is simpler and easier to understand. On line 15 it explains how the beetle reproduces. The life cycle is easier to understand.

Some words have been substituted and are richer. When you mention “cash” instead of income. That is more specific. Except for a few complicated words, like in line 49, you still find some difficult terms like “pungent” smell.

The language is participatory and encouraging. We listen to the farmer.

As in “So let’s remind ourselves” we invite people to take part in it. (We don’t talk at the farmers. We talk to them).

People tell experiences, give first hand information.

The language uses words with which the farmers are more familiar. And uses local examples.

Local innovations

They improvise. One farmer used a fertilizer bag for seed. (Using locally available resources).

The chilli powder and dry parts of plants. When storing the seed, is an innovation. (There was no chilli in the first literature review).

Sand to suffocate the beetles, and ash.

Shea butter, the cake. After extracting the butter she mixes in the cake to give a repellent smell.

The gourd as an airtight container. It is cheap for them. They can grow it. (A socially inclusive technology).

The bottle.

The plastic drum.

What was taken out of the script?

In the first script it said “let us listen to a group of women” but in the final version we see the participation of men and women. (There were no groups of women producing seed in the area where we worked, but there was a young entrepreneurial man producing seed, and women adopting innovations. When you go out you find out what is there).

We did not see the black plastic bag on the ground covered by a translucent sheet. The biggest paragraph in version 1 (on solarisation of cowpea seed) is completely gone in the final version.

The bit about temperatures over 57 degrees, has been removed. (That came from a university that had worked on the idea for years, and nobody uses it.)

Cowpea as a way of controlling striga is a new element in the final video. (The cowpea has been brought into a wider context, to make cowpea more appealing as a crop).

The why makes all the difference, to stimulate innovation.

Presentation-10 Do's and Don'ts for scriptwriting

Do's ☺	Don'ts ☹
<ul style="list-style-type: none">• Start by presenting the broader context	<ul style="list-style-type: none">• Use difficult words
<ul style="list-style-type: none">• Move quickly into the key subject	<ul style="list-style-type: none">• Use lots of numbers or calculations
<ul style="list-style-type: none">• Use short phrases	<ul style="list-style-type: none">• Use acronyms
<ul style="list-style-type: none">• Use the shortest words possible	<ul style="list-style-type: none">• Use names of organisations or projects
<ul style="list-style-type: none">• Engage the farmer	<ul style="list-style-type: none">• Talk down on the farmer, like an expert
<ul style="list-style-type: none">• Write for the spoken word, like you talk	<ul style="list-style-type: none">• Write in the third person
<ul style="list-style-type: none">• Keep the subject interesting	<ul style="list-style-type: none">• Use long lists
<ul style="list-style-type: none">• Follow a logic sequence	<ul style="list-style-type: none">• Introduce examples that are not feasible or do not inspire
<ul style="list-style-type: none">• Visit the target group to test the ideas presented and revise script	<ul style="list-style-type: none">• Present irrelevant ideas
<ul style="list-style-type: none">• Finalise the audio before the video column	<ul style="list-style-type: none">• Put words between brackets

Handout-6 Do's and Don'ts for scriptwriting

See above.

Handout-7 The three sections of a script

1. **Introduction:** describe the context. Farmers in the humid tropical lowlands (for example) face similar problems whether they are in Bangladesh or Africa. Farmers in the audience will “read the landscape” in your video, to decide if the information is useful to them.

Define the problem (the head of the snowman).

Tell people briefly the key elements that the video will present. Keep the introduction to around 100 words.

2. **Main body:** Move quickly to the main subject. Don't spend too long on the introduction. Describe the background of the problem, the biology, ecology, underlying principles of the technology and pave the way to make a counter-intuitive technology seem like a nifty idea (the middle of the snowman, why the technology will work).

Describe the technology in local steps (the main part of the snowman).

3. **Conclusion** and summary (tell them what you told them).

Classroom exercise-14 Script writing

Participants begin re-writing their fact sheets as video scripts.

Classroom exercise-15 Designing interview questions

Participants write a maximum of 7 interview questions for the following field exercise.

Field exercise-3 Group discussions with farmers about the script

Working on sunshine in Entebbe

The pineapple group met with Richard Tebajjangokwo, an entrepreneurial farmer with a couple of acres of land. He has tried raising medicinal plants, organic vegetables and he has worked as a photographer, where he met Henry Kabali, a builder, who also joined the discussion. Henry had gone into the vegetable drying business, and told Richard about it, who soon joined him. A private company called Rusba (Rural United Business Association) trains them, for a fee, and then buys their dried potatoes. The company uses the dried potatoes to make instant porridge for two supermarkets, and the firm cannot keep up with demand.

As we talked to them for over an hour, Richard sat, methodically peeling the “Irish” and explaining the prices



Richard Tebajjangokwo likes drying vegetables because he can work at home

and product. Richard likes the work because he finds it relaxing and he can stay home with his wife and kids.

Richard buys 100 kg of potatoes for 100,000 shillings. It takes five kg of fresh potatoes to make one kg of dried ones. He can make three kg a day:

Cost of 15 kg of potatoes: 15,000

Cut and dried makes 3 kg worth: 24,000

Net profit per day: 9,000 (about \$3.50)

Richard and Henry can sell all the potatoes they can dry, and since the markets are often smallholder's missing link, this business is appealing because the buyer says "bring all you can."

Now Richard's only worry is getting enough produce to cut up. So he plans on growing more bananas himself, so he'll always have something to dry, and he wants to build five more driers, although getting the money to do that is the problem. But with six driers, Richard could keep busy all day, cutting produce, loading trays and packing the dried food in plastic pouches, provided by Rusba as one of the benefits of paying a registration fee.



Richard peels, washes, drains and slices the potatoes, loads the trays, puts them in the drier and waits for "the grace of God to send sunshine"

Classroom exercise-16 Analysis of semi-structured interviews

Participants and facilitators spent 15 minutes silently writing their field notes on the interviews. Then each person mentioned some ideas they had learned the day before:

Focus group discussions

Pig house

People collect grease from the pigs and use it to cook. It is safer than other cooking oils. It does not cause diseases. It is cholesterol-free.

Pigs have a ready market as opposed to other livestock. One benefit of pigs is to get money very fast, compared to the cow. If you have your pigs it is easy to sell but it is difficult to sell a cow because it is big. And pigs have more offspring.

Sometimes the pigs get stunted growth, when she keeps them in the house. (She didn't say why, if they don't feed them enough, or if they were inbred).

As pigs increase in number given the little land available some are left to wander around yet others are confined. And the loose ones bring diseases. If one pig gets sick the whole village gets affected. (Swine fever).

Tethering the pig around a tree with rope affects the animal. The rope affects the body. It also gets attacked from other animals. Housed pigs grow faster than tethered animals, that lose the meat around where the rope is. Mother pigs need a lot of care. Sometimes they kill the young ones or even eat them.

There is a thatched grass house which is very cool. Part of the house is exposed to sunshine, so the pig can go in the sun if it wants to, but the other part is cool and thatched.

The compost that comes out of the pig manure is better. If you apply it to crops you get higher yields.

Banana weevil

The banana weevil is more attracted to the cooking variety than to others. (cooking varieties are juicier and tastier. The brewing types have a sap unattractive to the pest). Mbwazirume and some of the other cooking types are more attractive than others to the pest. One cooking variety is very resistant to the weevil: Nakitembe

The weevil prefers dark places. Where there is light it will not appear. They like dark, moist places. Traps are made of places that are dark and moist. The chops of the banana stem are better traps than the leaves because they stay moist.

The concoctions that they make. Each ingredient serves a specific purpose. The phytolaca serves as a poison which works on the skin of the pest.

They can mix the concoction with urine and then soak the plants and soak the sucker before planting, and use the concoction on the growing plant to flush out the pest. Some of the items they use in the concoction have different insecticidal effects and most of them have nutrients. The marigold is just a repellent. Sometimes they add ash in the concoction to sort of wear out the pest, and weaken it. They can add ash directly to suffocate the eggs, the larvae and the pests.

After harvesting remove the stump and dig a hole and pour very hot water in the stump. It kills the eggs, the larvae and the beetles. Even the concoction can be poured into the stump.

In treating the planting material, even when not used in combination, the urine is good enough alone to treat the weevils. They soak the planting material in the urine overnight.

The concoction helps to treat malaria in human beings. To the beetle it is bitter and poisonous. (Tithonia—wild sunflower).

Cold water alone is enough to kill the weevil when soaking the sucker. But farmers make the concoction of ash and urine etc. because it builds the immunity of the plant.

The leaves will appear pale yellow green and crowded, if the plant has banana weevil. And the bunch will get small and not be tasty.

Drying vegetables

The vegetables are good in fighting human diseases and they boost the immune system. But farmers don't know how vegetables do that.

Steaming is not done for every vegetable. Another method to boost shelf life: chop the plant, then wash it with clean water. Put clean water in a container. Place the plants with the stalks in the water, then place the container in a cool place. So you keep changing the water every day, and it will boost the shelf life of leafy vegetables for 3 or 4 days.

After washing the vegetables put them on a rack to let the water drain off before putting them on a mat. The powder can last for over a year if kept well.

Vegetables that can be dried:

- Nakati
- Amaranthus

- Cowpea
- Okra
- Spider flower
- Kale

When you make powder from diseased leaves it will be sticky. Powder from over mature leaves has a lot of fibre which helps in the digestion.

When you have got the powder you pack it in small packages that can be easily consumed in four to five days. If you put it in a big package and you open it the powder easily goes bad. Some vegetables are not steamed like amaranthus because when you do they lose all their nutrients. So you just sun dry them.

Most of them store in polythene bags if they do not use banana fibre.

When you use leaves from the tip they are still very young and they do not preserve very well, so you should avoid them. Pick only the top 3 to 5 fully developed leaves.

Drying pineapple

The major steps in drying, peeling, washing the Irish potatoes, draining, slicing, laying on the tray and waiting till the next day when they dry, putting the produce in an airtight plastic bag.

During part of the year there are no Irish potatoes to dry, so he looks for another product to dry.

During the rainy season it is hard to dry products, when there is no sun. (He wants to get a dryer that uses fuel wood).

Solar driers should be placed in areas with maximum exposure to the sun for the longest period of time so they can get heated for as long as the sun is up to maximize the drying.

Consider the market that you are going to supply. The hygiene of the place is important. Put the drier where there is some grass, so it is not so dusty.

The major constraint is access to capital for building the solar dryer.

Classroom exercise-17 Editing scripts to take interviews on board

Each group edited their script, improving them in light of what they had learned and adding the questions they might ask farmers in the on-camera interviews. Based on the interviews from Day Four, they added the sorts of answers they expect to get from farmers when they go filming in the field in the coming months.

Classroom exercise-18 Radio Uganda

Each group read the first draft of their scripts, as if reading them on the radio. Then they commented on each other's work. This was the first time that they had heard each others' video scripts. After listening to their colleagues read the scripts, people wrote constructive criticisms, and then took turns reading them out. The facilitators typed up the notes and printed them so each group could edit their script (version 2 of the script).

Pineapple

The script had no summary at the end.

I felt that it was very long (because they read it so slowly).

Wearing gloves. Pineapple has acid that eats skin and can eat gloves, so the material in the gloves can be eaten by the juice. You cannot use gloves on pineapple.

The interview is not as easy to understand if you leave out the question.

Are gumboots needed for the drying? They protect the person from the equipment.

Paul explains that a list of challenges is not useful in a video. If there is a major challenge, you have to find out how farmers have dealt with it and overcome it in the past.

Pigs

You raise pigs for the meat, not as food.

Pigs may eat the wrong things, is too vague.

Some of the diseases cannot be cured. There was too much emphasis on disease.

Should we add a part about castrating pigs?

Do pigs have brothers and sisters?

Should they feed pigs leftovers? That is illegal in some places.

Paul. Take out the whole paragraph about tethering.

Dried leafy vegetables

The first sentence should read better than “leafy vegetables help us from getting sick.”

Rephrase the saying “let us avoid our precious vegetables from getting spoiled.”

We should know the difference between steaming some first, while others can be dried without steaming. (If the leaves are hard they can be steamed, but if the leaves are soft they can be dried directly).

We don't need to include the part about keeping the vegetables in water for three days, because that is not really preservation. The script should concentrate on drying.

When you put the vegetables in a big bag, you have to keep opening it, and it lets in air, so it can spoil.

Does the nakati have an English name? African spinach?

People don't have space to dry vegetables inside the house. They will have to find a shady space outside. This will need more field research to see how farmers manage with little space.

Banana weevils

Clean planting materials, how can a farmer know if planting material is clean? How will they clean them? If I don't have animals can you provide me with an alternative to feeding the stem to animals?

These words are too hard: plantain and botanicals.

“Dull yellow-green” can you say that?

Yesterday you talked about removing the stems, but the stump remains, and it should be removed all the way to the ground level. That needs to go into it.



Apollo (left) helps Lawrence review the comments to edit their script on managing pigs

You should split it so it dries faster. If you are going to feed it to animals you cut it up into slices.
Can't say concoction. Say "mixture".

Classroom exercise-19 Planning

Planning of the next stages of the video production, in small groups.

3. Evaluation

Classroom exercise-20 Evaluation

Each participant filled out a written evaluation. Paul will hand over the hard copies to Augustin for further M&E.

People commented on what they liked:

I have been particularly impressed by the good planning; the flow of the workshop content and the products the participants came up at each state of the workshop. ... Before this course, I used to think training videos and scripts were a preserve of media experts.

What I liked most about the course: We managed to develop a fact sheet, and develop draft 2 of the video script. The training materials were shared out. I improved my writing skills and naming of pictures.

I have learnt that one has got to be patient while developing a video script, since it has to be reviewed from time to time by different people such as farmers, extensionists and or researchers.

What I liked most about this course was the organization.

I can now make useful videos too for training farmers and I can also download from the website of Access Agriculture.

The highlight has been learning about the snowman approach, zooming in and out and then developing a 1-page fact sheet. ... (The) plenary sessions, group work, field visits, presentations, one-on-one sessions all made learning easy. Where I dreaded script writing before I met you, I now look forward to it.

The idea of developing a video script is really informative and I wish I could learn more from you. ... (I learned) what kind of pictures I must take, how and when.

(I liked) the way you manage time

And some suggestions for improving it:

Maybe the course could be shortened to three or four days. What I disliked most was the hotel services, the small rooms and refreshment logistics.

Distribute DVDs for participants.

Change the venue to a farther place where participants do not find it easy to disappear. Secondly I would like to see more information about the course sent to the participants before they report to the venue to help understand what to expect from the course.

You might want to consider looking for a very suitable and accommodating venue.

Several people said they wanted to learn about using the video camera. And one person said he wanted to learn how to edit videos. One person asked the facilitators if he could buy a t-shirt from Access Agriculture.

Analyses and recommendations

One person wrote that during the course she had learned much about the technical content of her script. We never really intended for that to be an outcome, but the course does teach people new skills for learning (e.g. accepting critical criticism, learning from farmers).

The suggestion to distribute DVDs to participants (from Noel) is excellent. We should bring DVDs to the course that we can share to people. They might use them to good effect.

We should also ask trainees in future workshops to visit the Access Agriculture website before they come to the course.

Annex 1

Participants of the Access Agriculture Video Script workshop March 2014

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Annex 2

Writing fact sheets and video scripts: PROGRAM

Uganda, 3 – 7 March 2014

Golden Pearl Hotel, located in Mpala, off Entebbe- Kampala Road

FACILITATORS:

JEFF BENTLEY AND PAUL VAN MELE

TIME	TITLE	
(approximate)	Day 1	
8:30 – 8:45 am	Personal profile	C-1
8:45 – 9:00 am	Intro talk	P-1
9:00 – 9:45 am	Local innovations	P-2
9:45 – 10:15 am	Local innovations, part 1	C-2
10:15 – 10:30 am	Local innovations, part 2	C
10:30 – 10:45 am	Tea break	-
10:45 – 11:15 am	Choose an extension topic	C-3
11:15 – 11:45 am	Snowman	P-3
	Snowman	H-1
11:45 – 12:00 am	Outline a practical message	P-4
12:00 – 12:30 am	Outline a practical message	C-4
12:30 – 1:30 pm	Lunch	-
1:30 – 2:30 pm	Outline an extension message	C-5
2:30 – 2:50 pm	Going Public	P-5
2:50 – 5:00 pm	Write an extension message	C-6
	Day 2	
8:30 – 11:00 am	First editing of the fact sheets	C-7
11:00 – 11:30 am	Layout of fact sheets	Demo
11:00 – 12:30 am	Laying out fact sheets	C-8
12:30 – 1:30 pm	Lunch	-
1:30 – 1:45 pm	How to validate fact sheets	P-6
1:45 pm –	Validate fact sheets	F-1
	Day 3	
8:30 – 9:30 am	Ideas for the video script	C-9

9:30 – 9:45 am	Planning	C-10
9:45 – 10:15 am	Popular technical writing	P-7
10:30 – 12:30 am	Edit the fact sheet	C-11
12:30 – 1:30 pm	Lunch	-
1:30 – 2:00 pm	First click	P-8
	Editing photos	Demo
2:00 pm –	Take photos	F-2
	Day 4	
8:30 – 9:00 am	Yesterday's photos	Demo
9:00 – 9:15 am	Zooming-in, zooming out	P-9
	ZiZo	H-2
9:15 – 9:30 am	The steps of script writing	H3
9:30 – 10:00 am	A first draft of a script	C-12 / H-6
10:00– 10:10 am	Watch video	V
10:10– 10:45 am	Final script (structure, format, language, innovations)	C-13 / H-7
	Scripting	
10:45 – 11:00 am	Tea break	-
11:00 – 11:15 am	Do's and don'ts of script writing	P-10
	Do's and don'ts of script writing	H-4
11h15 – 11h30	The three sections of a script	H-5
11h30 – 12h30	Script writing	C-14
12:30 – 1:30 pm	Lunch	-
13h30 – 15h00	Script writing	C-14
15h00 – 15h30	Interview questions	C-15
15h30–	Focus group discussions	F-3
	Day 5	
8:30 – 9:15 am	Farmers' knowledge, attitudes and practices	C-16
9:15– 12:30 am	Script editing	C-17
12:30 – 1:30 pm	Lunch	-
1:30 – 2:30 pm	Radio Uganda	C-18
2:30 – 4:00 pm	Planning	C-19
4:00 – 4:30 pm	Evaluation; certificates and closing	C-20

C – Classroom exercise, F – Field exercise (Vehicle required), P – Presentation (PowerPoint), V – Video

Annex 3: The fact sheets

Control of banana weevil

FACT SHEET

The banana weevil

The banana weevil is a small black beetle and a serious pest of bananas and plantains. Attacked plants grow slowly and produce little fruit. The weevils make holes in the underground part and in the lower part of the banana stem. When you split the stem open, you will see tunnels made by the small, white grubs which are the young of the weevils. When the grubs tunnel out of the stem they leave holes in it. The tunnels weaken the plant, and it may fall over.



The grubs make tunnels which make the banana plant weak

How weevils live

Banana weevils live in the trash around the banana plant. Weevils like hiding in the dried banana fibres at the bottom of the stem. The weevils go to the banana plant to lay their eggs. The weevils are spread to a new garden through infested suckers.

How to control weevils

Use clean suckers to avoid spreading weevils. Clean the suckers by trimming them with a knife to remove the old roots where the weevils may be hiding. Soak the planting material in cold water overnight to suffocate any remaining weevils. You can also soak it in a mix of water, ash, urine, and crushed hot pepper, or marigold or other repellent plants. Then pour the solution around the plants.

Continue to keep weevils out of your garden by removing all the dried banana fibres and any infested plants. Chop up the infested plants and feed them to your animals.

After harvesting the fruit, chop the stem into many small pieces and spread them around so that they dry quickly before weevils can lay eggs in them.

Keep the soil bare for 60 centimetres around the stool, so that the weevils do not lay their eggs in the banana plant.

Set traps for weevils remaining in the garden. Cover the stump with the split stem. This will attract weevils from within the stump and from other parts of the garden.

Regularly check the trap for weevils and kill them.



Remove the dried fibre from the stem so the weevils do not lay their eggs there

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Preserving leafy vegetables

FACT SHEET

We need local vegetables all year

Leafy vegetables are rich in vitamins and minerals, but they spoil quickly. In Uganda, dry spells are becoming longer and floods are more frequent. So some families no longer have vegetables to eat all year round. Sun drying can be used to preserve leafy vegetables like cowpea leaves, kale, bitter berries, pumpkin leaves, rosemary, and yam leaves.



Cowpea leaves can be dried and kept for up to a year

Dos and don'ts of preserving leaves

A family can dry vegetables to preserve them for a year. Avoid harvesting leaves from plants that have flowered, because they are too mature and not nutritious. Direct sun drying will scorch the leaves, remove the colour and also remove nutrients. Drying on a raised platform keeps the vegetables clean, healthy and nice to eat.

How to preserve cowpea leaves

Harvest 3 to 5 leaves from the tip of the plant. Sort and remove diseased leaves or leaves that are damaged by pests. Wash the leaves in clean water. Steam the vegetable leaves for about 15 minutes to soften them. Do not boil them or you will lose nutrients.



Powdered cowpea leaves wrapped in banana fibres

Dry the leaves inside your house on a clean mat, sisal sack or bark cloth placed on a table or some other raised platform. Spread the leaves lightly and dry them for 3 to 4 days. Keep checking and turning the leaves once every day so they dry quickly. To harden the leaves, put them in direct sunlight on the fifth day from about 10 in the morning to midday. Dry the leaves until they can be easily broken by hand.

Use a mortar and pestle to pound the leaves into powder. Then use a sieve to remove the sticks, pebbles and bits of rubbish. Pack the powder in a clean, airtight container to keep it dry. Store the container in a dry place. Or, you can wrap the powder in banana fibres and put it above a fire place. The smoke will keep the powder dry and give it a good flavour. If you dry more than one vegetable you may want to label each one. The powder is a great alternative to fresh leaves and adds interest to your meal. Add the powder to hot soup of groundnut stew and beans.

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Solar drying of pineapples

FACT SHEET

Too many pineapples go bad

During the peak season, it is difficult to sell all of your pineapples. Many pineapples are wasted, because they cannot be kept fresh for more than a week. Then, during the off season people want to buy pineapples, but there are hardly any for sale.



Fresh pineapples cannot be kept for more than a week

There is gold in sunshine

By solar drying pineapples we can reduce waste and earn more money throughout the year. Dried fruit can be kept for up to one year.

How to dry pineapples in the sun

A solar drier is used to dry pineapples. There are many types of solar driers, but the most common one is the box drier made of wood and polyethylene.

Harvest pineapples when three quarters of the fruit has turned orange yellow. After solar drying, this pineapple will be bright yellow and delicious. Unripe fruits will be sour and faded when they are dried. Over ripe fruits will become sticky and brown.

Place the pineapples in harvest crates to keep them clean, and free of bruises. Keep the fruit in the shade as it may quickly spoil when left in the sun.



Solar drying pineapples in a box drier

Sort the pineapples to remove those with blemishes. Wash them with a brush and rinse with clean water. Put them on a rack and let the water drip off.

All the people who work with the fruit should have clean hands and nails and should not be sick.

Peel the pineapples and remove all the eyes. Cut the pineapple into desired shapes.

Pineapple slices should be half a centimetre thick. Thicker slices take too long to dry and may turn brown. Very thin slices become hard and curved.

Lay the slices on the tray without overlapping so they dry evenly. Place the trays in the drier. Close the drier tightly to keep the heat in and the insects and dust out.

In a box drier, pineapples take 2 days to dry. When the pineapples are dry, remove them from the drier and pack them in air tight containers so that they stay dry.

Sort, weigh and pack the dried pineapple based on the required weight for market.

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Managing a pig house

FACT SHEET

The problem with pig houses

When pig houses are poorly built, the urine and manure get mixed together and become hard to remove. The smell becomes bad in the rainy season. Pig droppings for manure will be wasted if the house is not well constructed



If pigs wander loose they get sick more often

Why build a pig house?

Improved pig types can get burned by the sun. They need a cool shelter. Pigs moving around villages may not eat properly and may get swine fever and die if they join with sick pigs. When pigs move around they also destroy people's crops and belongings.

Keeping pigs in a house allows you to properly feed them, monitor their growth, collect their waste, and stop diseases. Pigs are clean animals and like mud, but they do not like to sleep in their waste.

Building and taking care of pig houses

There are different types of pig houses which are easy to build and maintain.

You can build a wooden pig house with 4 or more legs to raise the house above the ground. This allows the pig droppings to fall onto the ground for easy collection, and also protects the pigs from attacks by dogs or other animals.



Pigs are easier to manage in a good house

A pig house can be built on the ground, with a concrete floor to make it easy to clean. A pig house can also be built on the floor by mixing saw dust with the red soil. You can use wood for the walls and make a roof of iron sheets.

Keep the house and the area around it clean. You can clean the house with soap mixed with water. Clean the feeding and watering containers to keep the germs and diseases away. You must clean the feed and water containers every day. Keep the pig house clean and remove all the waste every day or after 1 day.

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