

On-line survey of Access Agriculture: Video-mediated farmer-to-farmer learning for sustainable agriculture

Summary

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Executive summary

In 2015, Access Agriculture (AA) commissioned an on-line survey to collect feedback regarding the AA website and for a better assessment of their activities.

From May to July of 2015, 953 people took the on-line survey, which was available in English, French, Spanish and Portuguese, to include as large an audience as possible.

Respondents from 102 countries answered the survey, from Africa (63%), Asia-Pacific (23%), the Americas (6%), Europe (3%) and some who work on more than one continent (5%). Most users (56.1%) watch the videos on the site, followed by about a third who download them. Respondents use the videos to train themselves (45%), farmers (38%), colleagues (21 %), students (15%) and for “other” uses (9%).

The sectors that are most likely to use the videos in farmer training are: national or local NGOs (53%), followed by farmer organisations (47%), radio & TV broadcasters (45%), and government extension (43%). Nearly a quarter of the respondents share the videos with other organisations; they listed 435 organisations by name, although many other organisations also received videos.

Nearly all (79%) of the respondents find the videos (and the website) useful, and they tend to use the videos for training two to five times a year. Over 800,000 farmers watched Access Agriculture videos in meetings with the respondents, their institutions or their partners. By a conservative estimate, at least 42 million more viewers watched some of the programs on TV, or listened to radio broadcasts, using the audio tracks of some of the videos. Three international research and nine radio & TV broadcasters reached over 10,000 farmers with the videos.

The top four uses of the videos are: showing them to small groups (34%) and to communities (15%), using the videos to get ideas for extension activities (23%), and watching the videos on cell phones or tablets (12%). We are not sure how many people were watching videos on cell phones four years ago, but it was certainly much less than now, especially in Africa.

Two-thirds of the respondents want translations of the videos, into Hindi, Spanish, Arabic, Swahili, Bengali, Luganda, Portuguese and many others. The respondents like the videos for their simplicity, high-quality images and sound, their narrations and the topics which are useful for real farmers.

Suggested improvements: people want more translations, more topics, and they want the videos to be easier to download. They want more publicity so that more people know about the site. The respondents want the website and the videos to be easier to use with cell phones. They want Access Agriculture to link with more platforms and professional groups.

In a word, the respondents like Access Agriculture, find the videos appealing, and useful for extension work. People who have used the site want more of the same (videos in more topics featured in more languages). And they want the site to be better known.

1 Background

Access Agriculture is an international NGO with headquarter in Nairobi and an office in Cotonou for partners from western and central Africa. The organisation has developed a bilingual website (www.accessagriculture.org) in English and French. It is a platform that hosts more than 100 videos

on agriculture and livestock. Grouping into 14 categories (cereals, fruits, vegetables, IPM, etc.) on the website, each video lasts approximately 15 minutes. Any user can watch the videos on the site or download them for free, to play them for farmers or anyone else.

Each video has a thumbnail photo and a one-paragraph summary in English and French. Each video is accompanied by a one-page fact sheet (with an English and French version), which users can download and print to use as a memory aid. Videos are designed to be used by radio stations. The audio track for each video is also available for downloading as radio program.

Many of the videos on the website are also translated into other languages, especially African ones and the website offers videos in more than 60 languages to enable the sharing of knowledge and to trigger cross cultural learning. Smallholders like to see farmers in other countries and are fascinated to see people elsewhere that face the same problems like them. The current survey has shown that many service providers are open to support farmers in cross-cultural learning.

Sometimes Access Agriculture has collaborated with international research and development organisations to make DVD compilations of several videos in several languages, so that extensionists or farmers can put the DVD in a player, choose a language and watch the videos in any order they want. As example, AfricaRice distributed a DVD in 2009 with 11 rice videos in English, French, Swahili and various East African languages. ICRISAT distributed tens of thousands of DVDs widely over Africa, especially in West Africa. The DVDs contain 10 videos on managing soil fertility and striga, a weed that parasitizes cereal. CIMMYT in Bangladesh pressed a video on machinery for conservation agriculture onto a DVD, along with earlier videos on rice seed health.

Many studies have shown the advantages of quality farmer-learning videos, but none have looked at Access Agriculture as a whole, taking into account the wider use of videos downloaded directly from the web. That is why an on-line survey of Access Agriculture’s users was conducted from June to July 2015, with a questionnaire in English, French, Spanish and Portuguese sent to thousands of people with SurveyMonkey.

2 Results

2.1 Respondents to the on-line survey

951 people from 102 countries responded to the survey. Africa is by far the best represented, with 563 survey takers, especially from Kenya, Benin, Ghana, Mali and Uganda. Asia follows with 203 respondents, just over half of which came from India, which is quite impressive given that Access Agriculture has not yet started activities in South Asia. The Americas had a respectable showing with 56 people from 18 countries.

Most of respondents came from Universities, national research institutions, international and

Table 1. Sectors where respondents work (n=951; 2015)		
	Number	%
University and education	178	18.7
International NGO	136	14.3
Government extension	126	13.3
National research	104	10.9
National or local NGO	95	10.0
Farmer organisation	78	8.2
International research	50	5.3
Radio and TV	31	3.3
Food industry	13	1.4
Other	140	14.7
Total	951	100

national NGOs and farmer organisations. Fewer people took the survey from international research, radio & TV broadcasting, and the food industry (see Table 1).

Since the second largest category was “other” it deserved a second look. About a third of the “others” could have been classified in one of the above, original categories (e.g. “farmer organisation”). For example, many wrote in “student” instead of classifying themselves in “university/education”. From others, 42 respondents work in international organisations (e.g. FAO), and 35 are in other types of agricultural-related businesses. Eight farmers took our survey, suggesting that farmers are starting to access the internet, and are interested in the Access Agriculture website.

2.2 Accessing the videos

The survey asked how people access the videos (e.g. downloading them and watching them on the site) respondents could tick more than one answer. Only about a quarter of them had never used the site (Table 2).

Table 2. How do you access the videos (n=953; 2015)*		
	Number	%
I have not used them	251	26.3
I watch them on the site	535	56.1
I download them from the site	333	34.9

*some responded more than once

Half of them watch videos on the site and a third download videos. This suggests that there is a solid group of users downloading videos from the site to share with other people.

2.3 Using the videos

The survey also allowed respondents to check more than one box to describe how they use the videos (Table 3). About 30% had not used the videos, they only discovered the site by taking the survey. For many respondents, people use the videos to train themselves. Nearly 40% use the videos to share information with farmers. While about 20 % of respondents have used the videos to train colleagues, 15% of the respondents have used videos to train students.

Table 3. How do you use the videos (n=883; 2015)		
	Number	%
To train myself	395	44.7
To train farmers	332	37.5
I haven't used them	266	30.1
To train colleagues	189	21.4
To train students	133	15.1
Other	79	8.9

*some responded more than once

Of the 79 people, who used the videos in “other” ways, 35 shared the information or the videos, including broadcasters and one who made a DVD of the videos. Three used the videos for farming, including one man in Benin who used a video to show a carpenter how to make him a solar dryer. Seven people looked at the videos for insights into video-making and five used them to link with their own or other sites. Nine people used the videos to learn, including one who said “To learn what happening in the other side of the world” and another who uses the videos as evidence that research is reaching the end users.

By 2015, national and local NGOs are the most likely to share information from the videos with farmers. They were followed closely by farmer organisations, radio & TV and government extension. It is encouraging that professional broadcasters and people who work closely with farmers (such as farmer organisations and grassroots extension people) see enough value in the videos to use them

with their constituencies. International research is near the bottom, i.e. few of these agencies actually use the videos themselves. However, as we will see below, when they do use the videos, they do so in a big way.

2.4 Sharing videos with organisations.

Over twenty percent of the 953 respondents said they shared the videos with other organisations. They listed 435 organisations by name, although many other organisations also received videos.

2.5 Useful videos

Nearly all (79%) of the respondents find the videos were quite useful or very useful. In spot checks with those who wrote “not useful,” some said that they did not work in extension, so for them in particular the videos were not useful.

2.6 How often

About 60% of the respondents use the videos for training. Most people who use the videos to teach anyone (not just farmers) checked this box. There is a definite modal distribution: a big bulge of people who use the videos two to five times a year. But just over 10% are making habitual use of the videos, more than once a month.

2.7 Number of farmers reached

The authors attempted a rough count of how many farmers saw the videos. We assigned a middle value to each range. For example, 10-19 is 15, multiplied by the number of respondents. Those who reached over 10,000 were assigned a conservative figure of 10,000 except for the ones who had exact data of video screenings.

By this calculation, the respondents reached over 800,000 farmers, not including the millions who saw the videos on TV.

When the international research institutes (e.g. CIMMYT, ICRISAT) reached farmers, they reached large numbers. Some who classified themselves as “other” on Table 1 also reached over 10,000. These included a national network of NGOs in Benin, a private R&D service provider that works in various African countries, Countrywise Communication Ghana (a video service provider) in Ghana, an agro-business in Uganda and a TV station in Malawi.

Farmers’ organisations that get the videos always reach at least some farmers, and sometimes they reach over 10,000. So far, the food industry and national researchers tend to reach few farmers. In future the food industry may reach many more farmers, but they have just started experimenting with using videos for farmers.

Government extension is uneven, with far too many who reach no farmers at all. International NGOs and national NGOs show no clear pattern. The universities have a large cluster that reach no farmers, but some that reach over 10,000.

2.8 How respondents used the videos

People use the videos mainly by showing them to small groups (for which the videos are well suited) (Table 4). The authors were surprised by how many people are using the videos to gather ideas for extension activities. For example, S'bu Gondwe (Malawi Institute of Journalism MIJ FM Radio), did broadcast radio programs in Malawi that discussed topics like transplanting chillies, managing nematodes in vegetables, making a chilli seedbed and drying and storing chillies, based on the videos, reaching an estimated six million listeners in Malawi and Mozambique.

In third place, extension people showed the videos in communities. Smaller numbers watched the videos on phones or tablets, or handed out DVDs to farmers. Relatively few broadcast the videos on TV (although as seen above, those who did so reached large audiences). And still fewer play the soundtracks on the radio, although they also have many listeners. A hundred people described their activities as “other”.

Table 4. How have you used the videos to reach farmers? (n=790; 2015)

	Number	%
Showed them to small groups	271	34.3
Used them as ideas for extension experiences	179	22.7
Showed them in communities	122	15.4
Viewed them on mobile phone or tablet	96	12.2
Handed out DVDs to farmers	88	11.1
Broadcast them on TV	28	3.5
Used audio track for radio broadcast	23	2.9
Other	100	12.7
Not applicable	298	37.7

One hundred people took the time to write a note in “other”. Of these 100, 19 merely explained why they had not used the videos and 15 said that they only just found out about them, but wanted to use them. Ten people used the videos to reach fewer than 10 farmers, but most of them shared the site with other colleagues, which could translate to more farmers reached in the future.

2.9 Videos translation requests

Most of the respondents want videos translated into other languages. On a number of 760 respondents, only 280 respondents (27%) don't need videos to be translated into other languages. 480 respondents (63%) find important the need to have the videos translated into other languages.

Some of the national languages like Spanish and Arabic (and even Swahili) are split between various countries. There were 17 requests for translation to Spanish, which is a lot, considering that Access Agriculture only has a modest presence in Latin America.

The authors were pleasantly surprised that respondents took the time to request translations. Many countries have a dominant national language with many speakers, and most of those languages appear on our list, including Chichewa, Swahili, Spanish, Russian, Chinese, and Hindi. Many other languages were also listed, suggesting that our contacts have a presence in the field and in the provinces.

2.10 Why people like the videos

To the question “What do you like about the videos?”, 377 people left a comment. Mainly they commented that the videos were clear, practical and easy to understand. Below a few testimonials:

“Well researched, Information is presented in an easy to understand way for the farmer and the background music is also nice. I also like the fact that they have been translated to Swahili which is very useful for my program.”

Musdalafa Lyaga, Biovision Africa Trust, Kenya

“It’s a great tool to make farmers can see with their eyes while this video was created in another country. Farmers learn more from each other more than from experts or consultants.”

Mahmoud Mohammed Abd El-Rady, UNIDO, Egypt

“The themes of conservation agriculture, drip irrigation, nutritional practices like enriched porridge, yogurt. The presentation is perfect and educational.”

Ibrahim Bakoye, Samaritan's Purse, Niger

“Several things: 1. The topics covered in the videos. 2. The clarity of the images and the quality of the sound. 3. The duration of the videos is not too long. 4. The reminders of the points covered towards the end of the videos. 5. Etc.”

Raymond Allomasso, GAPIDEB (an NGO), Benin

“Very innovative and practical ideas and techniques that farmers can use to boost their productivity and income. Also, they are a good avenue to train journalists on the production of higher quality audio and video programmes for extension services.”

Ismaila N. Senghore, The Gambia Radio and Television Services

“Very simple and understandable for farmers; technology imparted is also generally appropriate and affordable for small farmers with limited resources.”

Raul Montemayor, Federation of Free Farmers, Philippines

“1. Show step-by-step details for a given practice being promoted 2. Emphasis put on Key aspects of the practice and the repeating of these Key aspects at the end of the video, 3. They are short and straight to points, 4. Very localised and interactive i.e. produced using farmers themselves and some translated into local languages 5. Most of them show the application of the promoted practice (s) in the different environments by the different farmers; a proof for adoption 6. They are very informative, 7. Highly researched and practical.”

Tonny Bukeera, Grameen Foundation, Uganda

The respondents requested new topics for videos: human nutrition, vegetables, fruits-&nuts, feeding animals, pest control, oils and small animals, irrigation, farmer organisation and youth.

2.11 Financial sustainability

To the question “What would be needed to make video viewing in rural areas financially sustainable?”, 519 people left a suggestion, more than previous optional questions. Many of them interpreted the question from their perspective (What would I need to make video viewing financially sustainable for me?). So they asked for equipment for themselves or electricity and equipment for communities. But many also suggested collaborating with farmers’ organisations, the private sector, NGOs and local extension agents. Others mentioned broadcasting the videos, organising public screenings, translations (Table 5).

Some of these ideas are better than others, but Access Agriculture has already thought of most of them. These include various ideas for working with cell-phone friendly video versions. One TV Company suggested linking the research with the TV station via the videos, involving both researchers and broadcasters from an early stage, to ensure best quality for broadcasting (this is done when contracts are signed between Access Agriculture and the TV station). There was a good idea to work with churches, all of which are organised and many have video players.

Table 5. Suggestions for making video viewing in rural areas financially sustainable (2015)	
Suggestion	Respondents
Provide viewing equipment to communities or individuals	184
Work with farmers' organisations	34
Distribute videos in physical form e.g. DVDs	29
Work with extension agents, e.g. so they know how to use the site & videos	21
Seek donor support	18
Charge farmers to watch the videos	15
Broadcast the videos on radio or TV	13
Make versions of the videos for cell phone viewing	13
Work more closely with NGOs, other local institutions	11
More translations	10

Organise public screening	10
Create or encourage video clubs	10
Work with local government authorities	9
Use participatory videos or theatre	8
Sell DVDs with videos on them	7
Engaging with the private sector, e.g. input companies	6
Raise awareness (not enough people know about AA)	5
Make it easier to download videos	4
Get financial support from the government	2
To be available on social media like whatsapp	2
It should be shared through agricultural related programs and websites	1
Share them on social networks	1
Telephone Apps	1
No suggestion, unclear, other	100

2.12 Organisations that can reach many farmers

Our survey asked people to list up to “five organisations in your country/State that are well positioned to reach out to farmers in a large way.” 264 people responded to this request, usually filling in all five spaces, mentioning all types of agencies, from national government to local government to NGOs, universities. Not all countries listed any radio or TV broadcasters, suggesting that there is work to do building links with these. The respondents often mentioned their own organisations, a sign of optimism and enthusiasm.

The countries with the most respondents, like India, Benin and Kenya also made the longest lists. It seems that most countries, even small ones have a large pool of NGOs, farmer organisations and local institutions which can be contacted to reach out to farmers.

2.13 Website: usefulness and improvement

75% of the respondents think that the Access Agriculture website is quite useful or very useful and had no suggestions for improving the website.

156 respondents made suggestions for improving the website. Of those who did have suggestions:

- 17 had ideas for strengthening contact between Access Agriculture and other platforms and professional groups.
- 27 made suggestions for making the videos easier to download.
- Another 27 want more videos, more translations and more topics. This is a good sign. They like what they have seen and they want more of it.
- Others 27 think that Access Agriculture needs more publicity, because it is not well known enough. This is also a sign that they value the site and want more people to use it.
- 14 people want to change the look or format of the site, including five who argued that users should be able to leave comments on the site.
- 10 had specific suggestions for making the site easier to use with cell phones. The development community is starting to see the quiet revolution going on in the countryside, as people turn their cell phones into home entertainment systems.

3 Discussion and Conclusions

People who have seen Access Agriculture like its website. Not all of the respondents knew about the website. Some of them only discovered it while being invited to take the survey. They wrote that they wanted Access Agriculture to be better known, so that everybody in the agricultural sector can use it. The respondents obviously have great faith in the site. One felt that Access Agriculture is good enough to be advertised on Animal Planet and National Geographic. The question is: how to make Access Agriculture go viral?

Our respondents also included partners, and long-time users of the website. The respondents left hundreds of comments in prose on the survey form. The respondents were willing to invest their time to write about why they like Access Agriculture and what they want to see in the future.

Access Agriculture has a global reach. Most of the survey takers were in Africa, but most of the farmers who watched an Access Agriculture video saw the one aired on TV in Bangladesh, and respondents in India and Latin America expressed keen interest in the website. Translation to Hindi and Spanish will be important to bring these regions on-board.

Most of the international research organisations do little with the videos, except for the videos which they themselves have commissioned, and then the institutions do their best to publicise and use the videos. This has happened with CIMMYT and ICRISAT, and is just starting to happen with CIAT in SE Asia. IRRI has also expressed interest in working more closely with Access Agriculture.

Universities still concentrate on the job that they have always done: teaching students. Access Agriculture needs to contact as many universities as possible, so that the professors teach the students to use its website and themselves using some of the videos in their lectures. This will pay off in a few years when the students become young professional researchers or extensionists.

Farmer organisations, national or local NGOs and public extension services, specialize in working directly with farmers, and so they do use the videos, to work with their target audience. Access Agriculture needs to make more effort to make the website known to such organisations.

This report does not repeat all of the respondents' suggestions for improving the site here, but the most important one is so simple it could be overlooked: people want more videos (on many topics) and more translations. Each new piece of content makes Access Agriculture a bigger target for the search engines and more people will find the site and use it. But then, all of those new videos and translations would take a lot of work, and rapid growth.

In Africa in just the past few years all of the villages—on or off the grid—have started to use cell phones to watch videos. Some of our survey respondents already knew that as well, and were enthusiastic about the change. It is clearly time to start putting farmer learning videos on cell phones.

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