

Tracking the Use, Uptake and Conditions for sustainability of Communication products

R8400 - Annex C

James K. Ndufa¹, Pascal C. Sanginga² Quareish Noordin³ and Sarah Kayanga⁴

¹ Kenya Forestry Research Institute, Maseno, Kenya

² International Centre for Tropical Agriculture, Kampala, Uganda

³ World Agroforestry Centre, Kisumu, Kenya

⁴ Uganda National Farmers Federation, Kampala, Uganda

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Table of content

Table of content	II
List of Tables	III
List of Figures.....	III
1. Introduction.....	1
2. Methodology	2
3. Results and Discussion	3
3.1. Distribution of communication materials	3
3.2. Profile of target institutions.....	7
3.3. . Use and Usefulness of communication products	11
3.4. Stakeholders' assessment of the Usefulness of the communication products.....	12
3.5. Uptake promotion of the products	19
3.6. Expected impact on use of products	20
3.7. Conditions for Sustainability of products.....	21
4. Lessons learnt and Recommendations.....	21
5. Conclusions	24
Appendix 1: Tracking the use of communication products.....	25

List of Tables

Table 1: Number of institutions tracked by category	3
Table 2: Distribution of different communication products	4
Table 3: Profile of Target institutions for uptake promotion of communication products	9
Table 4: Number of institutions that have read used and found product useful	11

List of Figures

Figure 1: A map showing distribution of communication products in Uganda....	5
Figure 2: COSOFAP mandate area, partners and coverage	6

1. Introduction

Over the years, a number of research products under the Natural Resources Systems Programme in Eastern Africa have been and continue to be generated. However, the uptake and utilisation of research results and products has been limited. Against this background a project titled “*Advancing the Use of the Products of NRM Research Projects in Eastern Africa*” was initiated by NRSP previous projects in Uganda and Kenya. The project aimed at developing and encouraging a more efficient, proactive and sustainable communication strategies for the uptake promotion of research products from four NRSP supported projects in Kenya and Uganda. The project developed a total of 11 communication products on various aspects of natural resources management (See Annex B).

It was hypothesized that promotion of communication products will create more awareness, knowledge and capacity among selected target institutions, which will enable them to accelerate adoption and impacts of improved NRM technologies and innovations by small- scale farmers. To test these hypotheses, an end of project evaluation sought to investigate, monitor and evaluate the process and the effectiveness of alternative communication and uptake promotion strategies within the context of Uganda and Kenya. The study aimed to answer several research questions, including:

- What are the communication needs and expectations of the different stakeholders? What products are needed by what stakeholders, and in what format? What are the effective mechanisms for engaging with the stakeholders, building consensus and defining their interests, priorities, and participation strategies in the UP plan? How do we reach the marginalized groups, especially women and the rural poor?
- How effective are the different promotional materials and delivery processes for different target groups, e.g. resource poor farmers, development organizations, policy makers, donor organizations? Are there significant differences in the uptake of technology-based NRM products, and process-based research products?
- What would be alternative communication strategies to achieve greater impact and uptake of technology and process research products
- What are the necessary conditions for effective use and promotion of NRM research products?
- What lessons can we learn from the UP experience? What are the constraints, challenges and opportunities for sustainability of the UP plan? What experiences do we learn from the Consortium approach?

This report results from a tracking survey of the distribution, use and potential uptake of communication products to a variety of stakeholders and target institutions, and attempts to provide answers to these questions. Although still preliminary, the report brings out the key issues and stakeholder assessment of the usefulness of the different

products, and strategies for promoting their uptake and sustainability. The rest of the report is divided in three main sections. Section 2 describes the methodology of the survey, target institutions and content of the checklist. Section 3 presents the results of the study by profiling the target institutions and analysing the distribution of the products. It then investigates stakeholders' perception of the usefulness of the different products and modifications that need to be made to make the products more useful to the end users. The sections that follow examine uptake promotion pathways, the expected impacts of the different products, and the conditions for sustainability. The concluding section of the report presents a set of lessons and recommendations that can be derived from this study.

2. Methodology

From a methodological point of view, it is important to note that a key limitation of this report relates to timing of the tracking survey. At the inception of the project, it was expected that the monitoring and evaluation component would be conducted at least three months after distribution of the products when most people would have used the products. However due to different factors, particularly underestimation of the time necessary to develop, review, pre-test, adapt, produce and disseminate communication materials, the tracking study was only possible only three to four weeks, and in some cases two weeks, after distribution of the different products. This meant that the exercise was done when a number of target institutions had not had time and opportunities to use the products in real field situations. Secondly, the tracking study was conducted towards the end of the year when many TI are preparing annual reports, attending meetings and are involved in different activities, including political campaigns. In some cases, the target institutions had closed for Christmas holiday. Finally, the survey could only last a few days to allow time for report writing and analysis of the results before the end of the year.

In Uganda a total of 24 target institutions were surveyed in eight districts in eastern, central and south-western Uganda. These included districts that were involved in the different projects (Kapchorwa, Mbale, and Kabale) as well as other districts where products were distributed (Kampala, Mbale, Sironko, Pallisa, Kisoro) as shown in Figure 1. In Kenya a subjective sample of 44 target institutions was selected from the original population of target institutions that got the communication products. The sampling was based on the type of organisation, geographical coverage. The target institutions were surveyed in 14 districts were covered. These included districts that were involved in different projects (Siaya, Vihiga, Kericho and Busia) as well as other districts where products were distributed (Kisumu, Bondo, Teso, Kisii, Homabay, Migori, Kakamega, Nyando, Butere/Mumias and Rachuonyo) as shown in Figure 2. The convenience sample included government agriculture departments, NGOs, CBOs and private sectors that are agricultural related. A key factor in determining sample size was the evidence that the organisation has received the communication products.

Table 1: Number of institutions tracked by category

Category of institution	Uganda	Kenya
Non-government organizations	7	12
Government agricultural departments	6	6
Community based organization		7
Farmer associations/organizations	4	10
Private	5	3
Research Institution	2	4
Policy makers		2
Total	24	44

Representatives of these institutions were interviewed face-to-face by the using a simple checklist on the following key aspects:

- 1) Profile of target institution
- 2) Distribution and use of different products
- 3) Stakeholders' perceptions of usefulness of different communication products
- 4) Assessment of different products in terms of clarity and utility
- 5) Needs for modification of different products
- 6) Institutional communication and information sharing mechanisms
- 7) Changes to be made in the products and the communication strategy
- 8) Uptake promotion pathways
- 9) Conditions for sustainability of uptake of communication products
- 10) Stakeholders' Perceptions of potential Impacts

Data analysis is still descriptive at this stage given time constraints. Information is tabulated, and the main lessons and conclusions are highlighted.

3. Results and Discussion

3.1. Distribution of communication materials

The distribution of products followed the stakeholder analysis conducted in Phase A, and subsequent workshops where stakeholders were consulted on their communication needs. Table 2 below shows the production and distribution of different products. The target institutions that received the products were also supposed to distribute them to the end users, particularly field staff and farmers organizations/groups. However the distribution to the users was further marred by the fact that the products were few.

For example with the exception farmer associations/organization there was no farmer group that received the products.

Table 2: Distribution of different communication products

Product	Characteristics	Number of copies	Number of institutions	
			Uganda	Kenya
01. You are loosing your soil	Poster	500	24	86
02. Bridging research and development in soil fertility management	Handbook (63pp)	500	24	84
03. The power of visioning	Handbook (134pp)	500	24	84
04. A guide to SCOBICS	Handbook (32pp)	1000	24	86
05. DSS for better land management	Poster	1000	24	86
06. DSS for <i>striga</i> management and control	Poster	1000	24	86
07. Integrated <i>striga</i> control strategies for increased crop yield and soil fertility	Poster	1000	24	86
08. Improve soil fertility/food security/income generation: Plant dual purpose soybean	Poster	1000	24	86
09. DSS for nutrients deficiency diagnosis and corrective measures	Poster	1000	24	86
010. Type for improved fallow species suitable for soil fertility improvement	Poster	1000	24	86
011. Improve soil fertility and increase crop yields using fertilizer trees	Poster	1000	24	86

An important observation is that the Kenya component produced a total of eight products (4-11), and more copies (1000) per product, compared to Uganda component, which had three products (1-3) with 500 copies each. However, there were considerable differences in the process of producing and distributing the products, as well as in the quality, content and audience of the products. . The Uganda products are meant to relatively professional audience, and in some cases to development professional with minimum higher education levels whereas the Kenya products meant to cut across the information divide between the professional audience, the community service providers and the farmers on the ground. The relatively higher quality (paper quality, photographs, and graphics) and length of products in Uganda, as per recommendation from reviewers and pre-testing meant that production cost was higher and therefore limited number of copies.

and staff according to their responsibilities and work plans. It is argued that this will ensure that the products are considered as organization property, and the line managers will ensure their proper distribution to and use by field staff. Field staff will be in the obligation to use the products as part of their work, and provide feedback to the project manager or unit. More people and staff in the organization can then use the products, rather than being considered as individual properties kept in office drawers or people's homes.

However, we also found that in a number of cases, there was no evidence that products delivered to the Head office will eventually reached the end users or field staff. In many cases they ended up in the office shelves, some times still in the form of their delivery. In this case, more proactive strategies were necessary to reach field staff. The challenge is to assess organizational culture and information sharing mechanisms of different target institutions and before distribution to determine the most effective ways of distributing products.

3.2. Profile of target institutions

Results of stakeholder analysis and subsequent stakeholders workshops carried out in Stage A revealed a range of target institutions for uptake promotion of NRSP products in Uganda and Kenya. However, given the time constraint, our M&E focused on seven categories of the target institutions based on their role and participation in the promotion and use of communication materials. These are:

- Local, national and international NGOs
- Research organizations
- Government departments of agriculture, environment and planning
- Policy makers in local and national level
- Private sector
- Farmer association/organization
- Community based organization

It is important to note that in Uganda the ultimate beneficiaries of small-scale farmers were not included in the sample because it was clear that they had not had access to the products, and had not had opportunities to use them. Only in a few cases, the products had reached farmers. Evaluating the use and impacts of these products at farm level at this time would not provide meaningful results.

In total, twenty-four organizations were interviewed in Uganda. These are diverse by their coverage, number of years of activities, number of technical field staff, estimated number of their beneficiaries and type of activities. Many of these organizations have national coverage, operating in several districts in the country, or region of the country. As shown in Table 3 Some institutions such as the Uganda National Farmer Federation have national coverage, reaching over 200000 of farmers through 73 members' organisations representing several farmers groups (average of 3000 farmers per member).

In Kenya though, demand for these products have stemmed from their use by COSOFAP and partners during training, workshops and trade exhibitions. Partners requested for more copies or if they could photocopy such and distribute to their clients or members. Similarly, there have been increased demands of research products and

extension materials from the other projects. Farmers who have participated in some of the NRSP projects have noted remarkable improved soil fertility and increased yield, and many of these are gaining access to advisory and support services. As a result more farmers within and beyond the pilot sites are demanding to participate in the research, and to benefit from the technology developed. Out of the field days held at such sites and networking with Ministry staff, many farmers from adjacent villages have also expressed desire to implement such technologies and have requested for help hence the inclusion of small farmer organisation and CBO ensured that the primary beneficiaries (small-scale) farmers were part of up scaling process. Of the 10 farmers organization interviewed, 9 are made up of a group of 50 - 300 small-scale farmers. Likewise, all the seven CBO's interviewed deal 1 - 25 farmer groups of 200 - 500 small scale farmer. All the research institutions interviewed had a national coverage, as were many of the NGOs.

Table 3: Profile of Target institutions for uptake promotion of communication products in Uganda

Organization/institution	Number of years	Number of staff (where products were delivered)	Areas of coverage/ Number of Districts	Number of beneficiaries
Non Governmental Organisations (7)				
A2N	15	15	11	100,000
VECO	11	8	11	*
UNFFE	13	10	53	220000
Africare	9	40	5	42,336
Prime West-Kabale	1.5	20	6	1000s
Prime West -Kisoro	1	3	1	
Nature Uganda	6	12	3	
Research organizations (2)				
Africa Highlands Initiative	8	10	2***	
ARDC	5	12	4	
Government Departments (6)				
Mbale District Agricultural Office	***	32	28 subcounties	60,000
Kisoro District Extension Coordinator	14	23		35000
Kapchorwa	***	23	16 subcounties	30,000
Sironko	2	33	19 subcounties	65,989
Pallisa	14	50	28 subcounties	70,000
Ntungamo				
Farmers Associations				
Kabale District Farmers Association	13	7	1	35000
Mbale District Farmers Association	13	6 staff and 70 ELF	20 subcounties	3,100
Pallisa District Farmers Association	13	7 staff and 60 ELF	15 subcounties	3,300
Private Sector				
Balton	20	50	All over the country	
Sukura Farm Suppliers(Mbale district)	20	4	13 districts	10,000
El-Shaddai Farm Supplies (Mbale district)	10	2	7 districts	8,000
El-Shaddai Farm Supplies (Kapchorwa district)	10	2	1	2,000
Mt. Elgon Seed Company	7	2	4 farm supply	1

			companies	
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Others like Africare have about 40 field staff working in five districts, reaching some 42,000 farmers. There is therefore a huge potential to reach big numbers of farmers and to cover wider areas in Uganda. The Local Government institutions are by definition based in one district where they cover a considerable number of sub-counties. Some of the target institutions, especially international NGOs operate in several countries in Africa, and therefore have the potential to promote the products beyond national boundaries to their other country offices. In Kenya, COSOFAP target about 50,000 to 60,000 households in western Kenya

3.3. Use and Usefulness of communication products

Table 4 depicts how the institutions have made use of the products and need for modifications in them.

Table 4: Number of institutions that have read used and found product useful

Product	Kenya				Uganda				
	Read the product	Used product	Found the product useful	Read the product	Used product	Found the product useful	Read the product	Used product	Found the product useful
01. You are loosing your soil	44	8	44	24	5	24			
02. Bridging research and development in soil fertility management	30	5	30	14	2	14			
03. The power of visioning	30	2	30	14	4	14			
04. A guide to Scobics	30	0	30	5	0	5			
05. DSS for better land management	44	20	44	20	3	14			
06. DSS for striga management and control	44	25	44	19	2	14			
07. Integrated striga control strategies for increased crop yield and soil fertility	44	25	44	19	2	14			
08. Improve soil fertility/food security/income generation: Plant dual purpose soybean	44	25	44	20	3	14			
09. DSS for nutrients deficiency diagnosis and corrective measures	44	30	44	20	3	18			
010. Type for improved fallow species suitable for soil fertility improvement	44	10	44	22	2	17			
011. Improve soil fertility and increase crop yields using fertilizer trees	44	20	44	22	2	17			

From table 4 it can be noted that almost all the institutions have read the posters. Posters are indeed easy to read as they are meant to provide simple and short messages with pictorial that attract attention, and can be read in a short time. However, only 15% of the institutions have used some of the posters, particularly the private input dealers. With only few weeks after delivery towards the end of the year and the cropping season, we could not expect institutions to use these posters.

Many of the TI had partially read the two handbooks (The power of visioning and Bridging research and development in soil fertility management), and many of them use the interview time to peruse its content and to make some comments. It was observed that many TIs in Uganda did not read the “Guide to SCOBICS”, mainly because of its title “SCOBICS” which does not have recognized meanings in Uganda.

3.4. Stakeholders’ assessment of the Usefulness of the communication products

Results of Stage A recommended that to be effective, an uptake promotion project should use a combination of alternative communication methods, strategies and channels. It was considered that various target institutions are heterogeneous and do not necessarily use the same approach to disseminate their products. It was therefore expected that the project would develop more proactive and efficient communication strategies to reach the needs and circumstances of various stakeholders. It was anticipated that the communication strategy would include more proactive and interactive communication materials with local and national target institutions (training workshops, policy learning events, seminars, radio shows and TV programmes) as well as electronic prints (manuals, guides, decision support tools, methodology guides, policy briefs, extension materials, posters, interactive CDs), and other mass media channels.

However, considering the budget allocated to the project, and the work and time involved in developing alternative communication materials, the project was only able to produce electronic prints in forms of posters (8) and handbooks (3). These provide basic materials that can be used for training, seminars, extension, radio shows, drama and other interactive communication channels. As discussed in the sections above, most target institutions found these materials as very useful as training, learning and reference materials that extension personnel can use to promote the adoption of natural resources management and develop community action plans. Tracking how these products are being used, and to what extent they have been translated into more interactive communication materials, is an issue that requires follow up.

Due to limited time for reading and using the products, the comments on usefulness of the products are from a perception point of view rather than physical usage. For each product, we asked two follow up questions on what aspects of the products that are more useful and what aspects could be modified before the products are widely disseminated and used. The comments are presented for each of the products

1. Bridging research and development in soil fertility management”

Contains useful material/information on soil problems and how to overcome them. He is also convinced that it is a good reference material for the extension workers.

Indicators of soil fertility decline/degradation and mapping of soil fertility levels It is a simplified handbook on soil fertility and degradation. Thus it is easy to use. Section 1 on diagnosis of soil management problems is very clear and easy to interpret. However, section 2 deliberating on cost benefit analysis is not clear and user friendly particularly to those who are certificate holders.

This is a good training handbook on soil fertility and management. It is also good for reference.

2. “The power of visioning”

At a glance it is good for institutional development such as forming farmers groups. The book also has relevant PRA tools and aids one to analyse issues. It is also good for action planning particularly in the rural areas.

The perception of promoting development from a solution/opportunity point of view rather than problem. It is good for action planning in rural areas. It aids groups to grasp planning skills. It is also good for graduate studies in the area of rural development

The book is a very good guide for those guiding institutional development. It allows questioning thus enabling participants to bring forth their problems and vital information. It also enables participants to vision solutions and opportunities to their problems. Community action planning and PRA tools

This book offers a change of perception from the problem to solution/opportunity point of view. Thus people should not labour much on problems but on solutions and opportunities. The book also gives realistic practical experiences. Thus it enhances learning.

It is good for involvement of the local communities, particularly in developing countries faced with development problems. It can be used to explore potentials and opportunities for sustaining the environment for better livelihoods within the communities.

The visioning depicted in this book makes the community development worker to have the urge to empower the community to devise solutions to their problems
Visioning, stimulating collective analysis of community livelihood assets and the sustainable livelihood framework

It is good teaching guide, particularly on areas of participatory planning, goal formulation. Hence, the field officers and Extension Link Farmers involved in promoting farmer group development will use it. We have used a similar approach during the COB’s project activities but we did not have a systematic guide. This

Handbook gives step by step process on how to enter the community, initiate community projects, and guides extension people how to monitor and develop community action plans.

The Boxes are good summaries and identify solutions. You can finish the book by reading the boxes if you don't have enough time. The pictures tell you what is going on. For example on page 36, you can see that they are discussing and sharing.

However, it is bulky and may need to be repackaged. A simpler version of the power of visioning could be made to enhance reading it. Nevertheless, the simplification should not compromise the content. It may need a collective effort involving the authors and interested partners, NGOs and Ministry of Agriculture Animal Industry and Fisheries.

3. A Guide to SCOBICS

It is very useful as it tries to assist us compare what is happening in Kenya and what we do here. It is a short cut to exchange visit.

It is useful in mobilizing loans, credits and savings. Loan is in form of inputs rather than cash. People will not end up "eating" the money, which is good for them to be able to pay back.

Can be useful in sensitizing the group on income generating activities

However, reading this book one gets the picture of a research report rather than a guide. Secondly the title is not clear. It would be better if SCOBICS is written in full. Page 23 and 25 are the same, thus content on page 24 is not complete. Figure 2 is missing. The message (given by the woman) on top of page 19 would come before that on page 18.

This guide could be rewritten using a guide format. This will make the book easy to understand and used to implement the credit scheme. The title SCOBICS should be written in full to attract users. The mistakes raised in the comments should be corrected.

3. "You are losing your soil"

It has straightforward messages and easy to interpret, hence, they save officers time from searching for material from resource centres. The messages contained in the poster act as a decision guide. The poster clearly illustrates the soil problems.

This is a very good poster on soil erosion and possible mitigations. The poster depicts how soil is being lost all over the country. It also gives a range of possible measures, which are within the reach of the resource poor. However the arrows could be made bold to enhance tracing of the different mitigations.

The poster clearly brings out the soil problems and their possible solutions. The picture of yellowish and stunted maize resulting from soil nutrient loss and the measure to apply fertilizer promotes Balton to sell fertilizers

The picture of yellowish and stunted maize resulting from soil nutrient loss and the measure to apply fertilizer promotes Balton to sell fertilizers

Depict all types of soil erosion and substitute arrows with something more clear

It is quite good but for farmers the arrows may be difficult to follow and it is worse for one who is colour blind! Solutions could be tagged to the soil problem to ease farmer understanding. Furthermore, there is no picture of sheet and rill erosion that are normally the first sign of erosion and which farmers often don't observe. The types of soil erosion could be depicted in a sequential and logical manner.

This poster is very clear and tells exactly what farmers are experiencing. This poster is good since it depicts the soil problems experienced in the district. However, the arrows are cumbersome and not easily distinguishable particularly to people who are colour blind. The recommendation of the use of tithonia hedgerows is questionable with regards to nutrient drawing

It is a good poster because it gives a picture of what farmers see in their gardens. Thus it helps them to stop loss of soil. The poster is easy to read and understand. The arrows clearly point at the mitigation measures.

It is a field tool for reference with farmers; it has colored photographs attracting attention of readers.

5. "Improve soil fertility...yields using fertilizer trees"

This poster gives a range of improved fallow from which farmers can select. This is an informative poster, informing farmers how to improve soil fertility by use of trees, which at the same time are used as firewood and fodder. Nevertheless one needs to know the names of the fertilizer trees and more so in the local language

The poster is very educative. The Sales Manager was surprised to learn that trees can be used to increase soil fertility. However, the names of trees are not given in local languages thus it is difficult to identify or trace them. It is also not indicated whether the trees do not share nutrients with the plants.

The picture of the average yields shows bigger cobs than that of the of the good yield

The poster is not new but its messages are very clear on what to do and the types of fallow trees to use. One wonders what the diagnosis in picture 6 and 7 is. I assume these are treatments rather than diagnosis. The poster should also include increment gained by using fertilizer trees

6 and 7. "DSS for striga management and control" and "Integrated striga control strategies for increased crop yield and food security"

The posters are very applicable in striga prone areas such as Pallisa and Tororo districts. They give information on how to control striga. However, the “Integrated striga control strategies for increased crop yield and food security” poster is more of a brochure (contains informative information) rather than a poster. Hence, if it is to be put up as a poster it needs to be simplified and text reduced.

This poster emphasizes the need to manage land and increase crop yields by adopting simple practices such as crop rotation and fallowing.

The title of the poster is good but the measures given to control the striga are not conclusive. Application of fertilizers and use of hybrid maize will never control striga! For sure no farmer is going to believe that. It is like telling a worm infested child to take nutritious food and expect that the worms will be controlled!

The two posters could be diffused into one

The treatment, “top dress at knee height “is not clear. It leaves one asking with what? The fertilizer application rates per unit area or plant are not given. Yet farmers must know the costs

The yields of the following different treatments are the same: (a) apply good quality manure and P fertilizer, plant hybrid maize and top dress at knee height, b) apply P fertilizer, plant hybrid maize and top dress at knee height, and c) Chop the fallow then mix with soil, apply P fertilizer and plant hybrid maize. This leaves the farmer to guess the best option.

The pictures of the maize garden beside the poor yield and average yield are almost the same.

This poster has good strategies and practices to control striga infestation, however it is congested. The information it contains would be better presented in a brochure or if the poster is to be maintained reduce the text on the problem and why striga is such a problem.

These posters are good for striga management however they have the following gaps:

- It is not clear who is the user of these products. Is for farmers or service providers
- The expected yields due to the different treatments are not given
- The rates of application of the fertilizers are not indicated. Farmers need to know the application rates so that they can calculate the costs verses the benefits
- The narrative description (Poor, good or average) of the yields is not conclusive. Farmers need to know the increment due to the treatments so that they can calculate the profits resulting from these treatments. Thus, quantify the yields per unit area. This could be in terms of bags of maize or kilogrammes
- In these posters one may hardly notice the difference because the background of the posters is almost the same and the picture of the woman and man are

the same! Please use different backgrounds and people.

- Picture numbered 7 on the poster of “DSS for striga management and control” is not clear. One cannot tell what is being depicted in the foreground of this picture. Is it bare ground or cultivated land?
- The maize cobs illustrating poor yields seem as if there are illustrating cobs infested by pests

These posters are not relevant in the highlands of southwestern Uganda where striga is not a problem.

8 and 9 “DSS for nutrients deficiency diagnosis and corrective measures” and DSS for better land management

These posters are overcrowded and one hardly notices the difference between them. (The woman and man applying fertilizer and planting maize hybrid respectively are the same in all the 3 posters.) Thus when put in the same place someone may read only one. Please use different illustrations to clarify the messages.

The poster of “DSS for nutrient deficiency diagnosis and corrective measures makes farmers to realize the need to apply fertilizer, hence promoting Balton’s fertilizers products are good for the small scale farmers, however they would be more informative and encouraging to adopt if the increment accrued from them are given. Informing farmers to use fertilizers are good but for the poor resource farmers it may not be sustainable, thus the posters could also emphasise the use of compost manure.

Pictures 5 and 6 in this poster are the same. One would suffice. In these pictures the caption indicating improved fallows are misleading. (The captions are placed in the foregrounds which seems to be bare!) How can one tell the causes of the nutrient deficiencies? Can this be included in the poster?

This poster has made the sales manager and farmers to realize the need to use fertilizers, fallows and hybrid seeds for one to get high yields. The message will encourage farmers to change their farming practices is very useful for empowering the local communities. It is good for guiding communities in participatory planning.

10. “Improve soil fertility /food security and income generation through dual purpose soybean”

It is giving out information similar to what a project being undertaken by Makerere University in Tororo district gave them. The messages are good and applicable.

This is a good poster bringing out the elements of soil fertility, food security and income generation. However, the illustrations of improving household nutrition do not represent the messages. The picture about combating malnutrition in children is more depicting family planning than malnutrition. A good picture of a malnourished child with a mug/bowl of soya porridge before her/him as those used by World Food Programme or ministry of Health would bring out the message clearer.

Use packs of Soya instead of a picture of a mother with her children to illustrate a rich protein product

The picture portraying industrial millers is not good enough. May be one showing milling with bags piled would be better.

The market shown is rather a local than a regional one.

The space between the fallow plants is not indicated. Farmers need to know the spacing if there are to adopt the fallow technologies. Also the time when the plants are to be planted in relation to the intercrop is not given. Furthermore, the specific use of incorporating the chopped fallow into the soil is not indicated.

The posters on Soybean are not useful, as soybean is not grown in the highlands.

“DSS for nutrients deficiency diagnosis and corrective measures”

This is a good poster, showing farmers the different nutrient deficiencies. However, diagnosis 5 and 6 do not show the nitrogen/phosphorus deficiency clearly.

Include use of compost manure

“Types of improved fallows

The amount of nitrogen fixed by each tree/fallow per unit area for a period of time is not given. Thus it is difficult to relate the increase of the yield to the nitrogen fixed.

Avoid scientific latin names and use simple names. Use simple language for captions to describe the pictures.

In general, most respondents found all the products informative and very useful. They are clear and easy to understand, and have practical relevance in increasing agricultural production and improving soil fertility. The language used was straightforward that even those with low education level understand. They can be used as teaching aids support and reference materials, and can enhance learning of both extension personnel and farmers. All the posters are self-explanatory and are good visual teaching aids. Thus, they enable service providers to articulate a point

easily and also ease farmers' learning. All products convey messages that farmers have been asking and are good reference material for service providers. The posters contain illustrations and messages that will be used as teaching and learning aids for both farmers and extension workers, thus aiding the communities to identify solutions to their farming problems. In addition, they will be used as reference materials and guides to decision-making. The posters are particularly good for teaching farmers on agronomic practices which if carried out will enhance productivity, and provide incentives for purchasing and using recommended inputs such as hybrid seeds, fertilizers and pesticides which will consequently increase the business turnover.

Although many of the posters are useful they need to be modified in order to make them easy to use and well understood. About 85% of the institutions found that most posters are congested and some of them contain texts, which better suits brochures. In addition, the rate of application of the fertilizers, hybrid seeds and expected maize yield as a result of the treatments are not given in quantities, making it difficult for the farmers to judge the benefits versus the costs. Thus, the posters should be made simple, enlarged and the rates of application of fertilizers as well as the expected yields given so that farmers can calculate the costs and benefits. Some of the posters need proper targeting to make the posters more relevant.

However some respondents reported that some posters are crowded and some look similar. They lack the step-to-step methods of applying the measures, leaving the user guessing what to do next. The smaller posters have small font size and are congested. The use of abbreviations such as DSS and COBICS in the title does not help people who are not familiar to understand the products. The posters intended for farmers need to be translated into local languages to ease their understanding. Some posters could be made simpler and designed in a logical manner to ease understanding of the message they contain. It was recommended that the posters could be packaged in A-4 paper so that it is easy to photocopy them, and give as handouts to customers and visitors. Similar products have been got from IDEA project, which has been promoting sustainable agriculture.

The handbooks are good reference materials. They are easy to read and understand. They are applicable as teaching and learning aids for service providers and farmers respectively. They are also applicable as reference material. The information contained in them is concise for both the farmer and service providers. Some stakeholders recommended that they should be simplified and made smaller, pocket size, with large letters and colored photographs for easy reference, without losing the information contained. It is also important to have enough copies for field staff. The institutions that had read the two handbooks ("Bridging research and development in soil fertility management" and "The power of visioning") feel there may be no need to make modifications. However, taking into consideration the low reading culture simpler versions would be developed. Nevertheless, the handbook of "A guide to SCOBICS" needs to be rewritten in a guide format because it is in a report form. In addition, the abbreviation SCOBICS should be written in full so that the title is capturing.

3.5. Uptake promotion of the products

We assessed the information and knowledge sharing mechanisms in the target institutions. These varied in their organizational culture, with many of them not having a systematic process of sharing information and knowledge. In many cases communication materials are posted at the headquarters and no proactive efforts are made to pass the communication materials to field staff. Some well-structured NGOs have a library or resource centres where communication materials can be accessed. However, it is up to each staff to make use of the library. Since such libraries are often at the Head office, field staffs do not have access to them. Some use more informal and personalized channels for sharing communication materials.

The communication products are divided into two broad categories: posters and handbooks. Uptake promotion of the posters will be ensured by displaying the posters in public places and notice boards, by using and referring to them during different training sessions, demonstrations, field visits, field days and training workshops. They will be used as teaching aids and extension materials by the field staff, and distributed to farmers groups. Some of them can be reproduced and distributed to a large number of farmers and other users. However, they will need to be translated into local languages. It is important to note that the private sector input dealers have been some of the most effective target institutions who have made use of the posters by displaying them in their shops and explaining to customers. They will need A4 size posters that they can freely distribute to their customers as they purchase their inputs.

The Handbooks have a different target. They are meant for service providers and institutions at different levels. The main channels for their uptake promotion include using them as reference materials for training field extension staff, circulating copies and photocopies to different users, referring to them in internal meetings and sharing copies with other organizations.

3.6. Expected impact on use of products

The expected potential impact on use of the products was assessed at farm level, service providers, and policy makers. At farm level, it was expected that the different products would provide farmers with knowledge to increase awareness of different types of soil problems and the possible improved agricultural practices/technologies to address soil erosion, soil fertility degradation, and *striga* management. The different posters can particularly be useful in increasing farmers' learning ability and decision-making that can change the mindset of some farmers, leading to adoption of improved soil fertility management practices, and increased agricultural productivity. Although not directly targeted to farmers, the handbooks are useful to build farmers capacity to develop their vision of desired future conditions, and to translate their visions into community action plans. Farmers will also acquire skills and knowledge to manage loans and credits to purchase inputs, and to use better soil fertility management technologies.

The use of these products by rural service providers, including government extension personnel, NGO staff, and other development agents will result into increased knowledge base and training capability to promote participatory planning, dissemination of improved technologies for soil fertility management, and skills to

manage inputs loans and credits. They will have access to training and reference materials, which are often lacking. Input dealers expect that there would be increase in their business as farmers learn how to use inputs, and can have access to loans and credits for purchasing inputs. The institutions that have read and partially used the products revealed that they staff increased knowledge, as the content is pertinent to agricultural development issues. Hence, there are now in a better position to deliver the agricultural advisory services or demonstrate the recommended practices/methods more effectively and with confidence. Policy-makers will also increase awareness of soil fertility problems and improved agricultural practices to address them. This will increase the need to advocate and lobby for bye-laws on farming practices, and formulate and enact bye-laws on soil degradation and fertility. The Visioning Guide is particularly useful for participatory planning and development of community action plans.

3.7. Conditions for Sustainability of products

There is no doubt that the different products are good training and learning materials that can be used by a variety of stakeholders. However the number of copies produced is much less compared to the demand and needs of different stakeholders. It was evident that many institutions need more copies for their field staff as well as for communities where they are working. Therefore, these products need to be reproduced continuously and distributed to the users.

One strategy to ensure uptake promotion of these products is to make them public goods with no restrictive copyrights for reproduction. There are partners who will be willing to share costs of reproduction of selected materials, or to cover costs of reproduction for distribution and use by their field staff and target groups. Some have already made a formal request. It was also suggested that partners could jointly mobilize resources to repackage the products and distribute them to a wider target group. The partners could be those involved in agriculture development such as National Agricultural Advisory Services (NAADS-Uganda), Agricultural Information Centre (AIC-Kenya), Farmer Associations, input dealers, and international and national NGOs.

There is need to develop promotion strategies that can ensure that the useful products are sold at affordable prices. Finally, it was suggested that the products should be posted on websites where they can be accessed, downloaded and photocopied for use by interested institutions. However, this will require creating awareness and strategies for promoting the use of the different products. More proactive and interactive promotion strategies such as training workshops and stakeholder meetings will be more effective in ensuring uptake, use and sustainability of these products.

4. Lessons learnt and Recommendations

Despite the fact that this tracking survey was conducted at a time when most stakeholders had no opportunities to use the different products in field situation, a

number of useful lessons can be drawn for uptake promotion of communication products.

First, the timing of this tracking survey was far from ideal situation to generate more informed feedback on the use of products in real field situation. The survey intervened only a few weeks after distribution. As a consequence, many products had not reached intended beneficiaries at the time of the survey, and most institutions have not had opportunities to use them in the field to provide constructive feedback. A monitoring and evaluation of the effectiveness of communication materials needs to be conducted at least six months after delivery of the products. However, a systematic tool for tracking use of products needs to be developed and shared with intended users.

Second, it was clear that the **active** involvement of different stakeholder categories in making the products makes it easy to identify how they should be packaged, thus making them user friendly. It is also very important to have a peer-review process and pre-test the different products with the intended users, revise them before mass production. This has however cost and time implications, resulting in a limited number of copies that can be produced. Pre-testing would avoid some of the comments and needs for modification made by the users. For example, it would help to make the title clear and attractive, and avoid congestion of text into a single poster.

Thirdly, the distribution of the products needs more systematic targeting and proactive communication strategies. To ensure that the product users receive them and use them effectively there may be need for follow up on the distribution and a stakeholder workshop to explain how the products could be used. This could also serve as training of trainers that will use the products in the field.

Fourth, the distribution process of the products was not uniform. There are differences in institutional set up and arrangements for communication. In some cases, communication is centralized, whereby the Head Office or Project Manager would be the central place to deposit information which is then shared to field offices and staff according to their responsibilities and workplans. It is argued that this will ensure that the products are considered as organization property, and the line managers will ensure their proper distribution to and use by a higher number of field staff, and ensure feedback. However, we also found that in a number of cases, there was no evidence that products delivered to the Head office will eventually reach the end users or field staff. In many cases they ended up in the office shelves, some times still in the form of their delivery. The challenge is to assess organizational culture and information sharing mechanisms of different target institutions and before distribution to determine the most effective ways of distributing products. Assessing the most effective way of distributing communication products, comparing the two approaches, remains a research challenge.

Fifth, results of Stage A recommended that to be effective, an uptake promotion project should use a combination of alternative communication methods, strategies and channels. It was considered that various TIs are heterogeneous and do not necessarily use the same approach to disseminate their products. It was therefore

expected that the project will aim at developing more proactive and efficient communication strategies to reach the needs and circumstances of various stakeholders. It was anticipated that the communication strategy will include more proactive and interactive communication materials with local and national target institutions (training workshops, policy learning events, seminars, radio shows and TV programmes) as well as electronic prints (manuals, guides, decision support tools, methodology guides, policy briefs, extension materials, posters, interactive CDs), and other mass media channels. However, considering the budget allocated to the project, and the work and time involved in developing alternative communication materials, the project was only able to produce electronic prints in forms of posters (8) and handbooks (3). These provide basic materials that can be used for training, seminars, extension, radio shows, drama and other interactive communication channels. It is interesting to note that most target institutions found these materials as very useful as training, learning and reference materials that extension personnel can use to promote the adoption of natural resources management and develop community action plans. Tracking how these products are being used, and to what extent they have been translated into more interactive communication materials, is an issue that requires follow up.

Sixth, most target institutions found all the products informative and very useful. They are clear and easy to understand, and have practical relevance in increasing agricultural production and improving soil fertility. All products convey messages that farmers have been asking and are good reference material for service providers. However, there seems to be a difference between posters and handbooks. Posters were seen as straightforward and self-explanatory that even those with low education level understand. However, they should be made simple, enlarged and subsequently packaged in A-4 paper so that it is easy to photocopy them, and give as handouts to customers and visitors. The handbooks are good reference materials. There are very useful as teaching and learning aids, and reference materials for service providers and farmers respectively. There are also applicable as reference material. However, they need to be simplified and packaged into pocket size, without losing the information contained. More importantly the handbook of “A guide to SCOBICS” may need to be repackaged in a handbook format instead of its current report format.

Seventh, a number of institutions are willing to reproduce the products as long as there are no restricted copyrights. Finding more appropriate strategies for linking up with other institutions, and creating partnerships for reproduction and distribution of the different products will remain a challenge for the institutions involved. This might involve repackaging of the products, translating them into local languages, and allowing different partners to modify some aspects as necessary. In the meantime, posting these materials to websites to allow easy access needs to be accompanied with strategies to create awareness of these products.

Eight, other issues that are worthy to note includes:

- Uptake promotion requires more than one year especially for cross border projects
- Scaling up to districts outside target areas enables you get diverse and relevant information

- Modifications of products will always happen even after pre-testing hence need to make a decision how far to go in modifications
- Buy in of politicians takes time and need more than a month prior notice and have a plan B in place as they always are prone to changing programmes
- It is better to have fewer documents and give more/many copies to institutions
- Need earlier arrangements with target groups if you are to meet poor farmers on their own
- DSS posters need to be accompanied by Guides- stakeholders find it difficult to interpret the posters alone
- Visual presentations/media is still the best mode to target poor farmers and women groups
- Multiplicity of channels/pathways is preferred
- Need to use other forms of media apart from print alone---video, audio cassettes
- Branding issues/copy right issues to be addressed effectively and a written agreement put in place.
- NGOs and Private sector willing to invest money to reproduce products

5. Conclusions

Empowering various stakeholders on the use of research product through training seems to be the key prerequisite for scaling-up and catalyzing the use of products. COSOFAP has continuously been able to build the capacity of farmers and its partners who in turn help train other farmers and scale-up the adoption of the research products as compared to Ugandan stakeholders who were seeing the products for the first time. COSOFAP has also helped to strengthen regional and sub-regional networks that help promote institutional and policy environment conducive for the scaling-up and dissemination of agricultural technologies. These have been possible through development of strong links with high-level decision makers in the government and advocating for improved natural resource and agricultural policies.

Appendix 1: Tracking the use of communication products

A. Profile of the organization:

Name _____

Type: 1= Research; 2=NGO 3=Local Government 4=National Programme 5=Farmers Organization 6= CBO 7=Private sector 8= Other

Activities-----

Coverage/areas of operation -----

Staffing: -----

Number of years of operation: -----

Target groups-----

Number of Beneficiaries: -----

Respondent's position: _____

B. ASSESSMENT OF COMMUNICATION PRODUCTS

1. Which of these products did you receive?

List of products	How many copies did you receive?	Ever read?	Ever used?	When did you start using it?
1				
2				
3				
4				
5				
6				
7				

2. If you have used or/and read these products, in which way did you find them useful?

Products	How useful
----------	------------

3. What aspects of these products do you find more useful?

Products	Useful aspects

4. How would you assess these products in terms of clarity and applicability?

Products	Clarity	Applicability

**4. Do you see any need to modify the products before they are disseminated and used?
Give reasons for your answer**

Products	What can be modified
1	
2	
3	
4	
5	

5. How do you intend to use these different products?

Products	How do you intend to use these products
1	
2	
3	
4	
5	
6	

6. How do you intend to share the products with other people within and outside your organizations?

	Ever shared?		If yes, With who	How Many of them	How?
	Yes	No			
1					
2					
3					
4					
5					
6					

7. How do you share information/ Communication materials?

8. Which products would you promote use?

Products	How would you promote them?
1	
2	
3	
4	
5	

9. Do you see any need to modify the products before they are disseminated and used?
Give reasons for your answer

Products	What can be modified
1	
2	
3	
4	
5	

10. What potential impacts do you foresee the use of these products can create at farm level?
With policy makers? And service providers?

Products	

1	
2	
3	
4	
5	

11. Which is the best way to create awareness of the products amongst the users and target group?

12. How do you intend to sustain the use of these products?

Products	
1	
2	
3	
4	
5	

