A checklist for farmer-friendly information

RIU

Validated RNRRS Output.

People who advise farmers—government, non-government and private enterprise—can now use a checklist to make sure that they give farmers the information farmers want, in a form that farmers can use. Most poor farmers in sub-Saharan Africa and South Asia just don't get user-friendly information that would help them decide how to make best use of their land and resources. The checklists reinforce the trend in agricultural information and extension towards demand-driven services. They're now used by national agricultural advisory services and universities in Uganda, private agricultural advisory services, and research and extension organisations. And, because they're not specific to any location or culture they have a huge potential to be used globally.

Project Ref: **CPP40:**
Topic: **5. Rural Development Boosters: Improved Marketing, Processing & Storage**
Lead Organisation: **Natural Resources Institute (NRI), UK**
Source: **Crop Protection Programme**

Document Contents:

Research into Use
NR International
Park House
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Geographical regions included:

Uganda,

Target Audiences for this content:

Crop farmers, Livestock farmers, Processors, Traders,

Description

CPP40

A. Description of the research output(s)

1. Working title of output or cluster of outputs.
In addition, you are free to suggest a shorter more imaginative working title/acronym of 20 words or less.

Linking demand for agricultural information with its supply

2. Name of relevant RNRRS Programme(s) commissioning supporting research and also indicate other funding sources, if applicable.

Crop Protection Programme (lead)

Livestock Production Programme

3. Provide relevant R numbers (and/or programme development/dissemination reference numbers covering supporting research) along with the institutional partners (with individual contact persons (if appropriate)) involved in the project activities. As with the question above, this is primarily to allow for the legacy of the RNRRS to be acknowledged during the RIUP activities.

R8281 (first phase)
R8429 (extension phase)

Partners:

- **Barry Pound, Barbara Adolph and Ruth Butterworth – Natural Resources Institute, UK**
- **Ms Jovia Manzi, Independent, Uganda**
- **Dr Joseph Oryokot, NAADS, Uganda**
- **Dr Otim-Nape and Dr Emily Twinamasako; NARO, Uganda**
- **Dr Chris Garforth, University of Reading, UK**
- **Dr Margaret Mangheni, Makerere University, Uganda**

*4. Describe the RNRRS output or cluster of outputs being proposed and when was it produced? **(max. 400 words)**. This requires a clear and concise description of the output(s) and the problem the output(s) aimed to address. Please incorporate and highlight (in bold) key words that would/could be used to select your output when held in a database.*

The following outputs were developed with partners between February 2003 and December 2005. All five outputs address the fundamental constraint of the lack of relevant agricultural (technical, **social and economic**) information available to farmers to enable them to make informed decisions that improve their food security, income and environment.

Specific outputs were:

a) Process to understand the **demand for agricultural extension services** of men and women **smallholder farmers** from different wealth groups. Five criteria were used to assess the effectiveness of the **demand-identification** process: (a) inclusion of the **poor**, (b) **participation** of farmers in decision making, (c) transparency of the process, (d) alignment between farmers' and **extension service** criteria and (e) the

extent to which **cross-cutting issues** were addressed.
b) Method for studying the **information needs of farmers** (content, format, style and media)
c) Identification of the **institutional constraints** to supplying the information needs of farmers by research, extension, academic institutions and private service providers. This includes the access to agricultural information, and its use, by private agricultural advisory service providers
d) **Innovative adaptive research process** for: (i) identifying research gaps, (ii) addressing these through participatory adaptive research involving farmers, **NGOs**, **private enterprise** and **researchers**, and (iii) disseminating the results in formats useful to different audiences.
e) Check sheet for use by researchers and others wishing to produce **effective dissemination materials** that include the information that farmers actually need in order to make a decision about whether to adopt a technology (relevance to their circumstances, **production** and **post-harvest** aspects (with photos), **markets and marketing**, access to and cost of **inputs**, **economic viability** and comparison with present practice, availability of technical and financial support and **production and market risks**).

All of these outputs are applicable, with minimal adaptation across **sub-Saharan Africa** and **South Asia**. The same key constraint of poor farmer access to **relevant, up-to-date information on agricultural enterprises** exists across East, West and Southern Africa, and in South Asia.

5. What is the type of output(s) being described here?
Please tick one or more of the following options.

Product	***Technology***	***Service***	***Process or Methodology***	***Policy***	***Other Please specify***
			X		

6. What is the main commodity (ies) upon which the output(s) focussed? Could this output be applied to other commodities, if so, please comment

The outputs are non-specific with regard to commodities. They apply to all farming, livestock and forestry activities, both pre and post harvest.

7. What production system(s) does/could the output(s) focus upon?
Please tick one or more of the following options. Leave blank if not applicable

All outputs apply to all production systems

Semi-Arid	***High potential***	***Hillsides***	***Forest-Agriculture***	***Peri-urban***	***Land water***	***Tropical moist forest***	***Cross-cutting***
X	***X***	***X***	***X***	***X***	***X***	***X***	***X***

8. What farming system(s) does the output(s) focus upon?
Please tick one or more of the following options (see Annex B for definitions).
Leave blank if not applicable

All outputs apply across all farming systems

Smallholder rainfed humid	*Irrigated*	*Wetland rice based*	*Smallholder rainfed highland*	*Smallholder rainfed dry/cold*	*Dualistic*	*Coastal artisanal fishing*
X	*X*	*X*	*X*	*X*	*X*	*X*

*9. How could value be added to the output or additional constraints faced by poor people addressed by clustering this output with research outputs from other sources (RNRRS and non RNRRS)? (**max. 300 words**).*

Please specify what other outputs your output(s) could be clustered. At this point you should make reference to the circulated list of RNRRS outputs for which proformas are currently being prepared.

There are a number of RNRRS outputs that align well with specific outputs (a) to (e) described in question 4 above. These include:

a) *Process to understand the demand for agricultural extension*
- R7562 (Participatory Action Plan Development, led by Julian Barr, ITAD, UK)

b) *Method for studying the information needs of farmers*
- R8152 (Information kiosks in India, led by Claire Heffernan, Reading University)
- ZB0380 (Knowledge management, led by Ruud Crul, NEDWORC Foundation, Netherlands)

c) *Identification of the institutional constraints to supplying the information needs of farmers:*
- R8438 (Development of private sector service providers, led by Dr Brigitte Nyambo, ICIPE, Nairobi)
- R8428 (Communication strategy for East African semi-arid systems, led by Dr Alistair Sutherland, NRI)
- R7502 (Decision tools for institutional change in public and private sectors, led by Richard Lamboll, NRI)

d) *Innovative adaptive research process*
- R8427 (Chickpea ICM, led by Philip Stevenson, NRI)

e) *Check sheet for use by researchers and others wishing to produce effective dissemination materials.*
- R8299 (Accelerated uptake and impact of CPP research outputs, led by Sarah Simons, CABI, Nairobi)
- R7865 (Scaling up process, led by Sabine Gundel, Independent)

In addition, the synthesis study on dissemination within the RNRRS by Dr Pat Norrish would also be relevant, as well as work by Joyce Adupa at the Agricultural Research Information System (Kawanda Research Institute, Uganda) and outputs of the COARD project under David Rees and Florence Oumo (Serere Research Institute, Uganda).

Validation

B. Validation of the research output(s)

*10. **How** were the output(s) validated and **who** validated them?*

*Please provide brief description of method(s) used and consider application, replication, adaptation and/or adoption in the context of any partner organisation and user groups involved. In addressing the "who" component detail which group(s) did the validation e.g. end users, intermediary organisation, government department, aid organisation, private company etc... This section should also be used to detail, if applicable, to which social group, gender, income category the validation was applied and any increases in productivity observed during validation **(max. 500 words)**.*

The outputs were validated through:

a) Field surveys with established groups of smallholder (men and women) farmers, extension staff, NGOs and researchers using wealth ranking to differentiate between the needs of different types of farmers, semi-structured interviews, questionnaires and group discussions. The field surveys were done partly as part of closely supervised Makerere University MSc theses, and partly by NRI researchers working closely with local stakeholders.

b) Institutional analysis of the organisations involved in the different links of the supply chain of information to farmers, using interviews and multi-stakeholder workshops to understand the institutional and technical constraints to the supply of farmer's information needs.

c) Pilot testing of the 9-step innovative adaptive research process with a broad base of stakeholders including farmer groups, national and international research organisations, NGOs and private input supply companies. The technologies used as test-beds for the process were integrated pest management of legumes, draft animal power and the de-worming of local goats using an indigenous technology from India. After identification of information gaps, activities were identified to fill these gaps (trials, surveys or community development actions). The known and new information was then compiled into dissemination materials that responded to farmer's information needs. These materials were tested with farmers before being disseminated.

The principles uncovered in the investigation of the effectiveness of articulating the demand of farmers for agricultural advisory services has widespread applicability, across farming systems and countries.

The output on the constraints and quality control of private service providers is probably limited to those places with, or contemplating the introduction of, private service provision to farmers.

Many of the institutional constraints to the supply of information demanded by farmers are common across sub-Saharan African countries. Similar studies would be of value to identify specific weak links that can be strengthened.

The novel adaptive research process tested by the project could be applied across farming systems and locations. It follows a multi-stakeholder (innovation systems) approach that is being considered or introduced in many locations.

The check list of what to include in dissemination materials has universal application where farmers have few formal sources of information, and as much relevant information as possible has to be presented through a

limited number of dissemination opportunities.

None of the methods used are location, region or cultural situation specific. It is anticipated that all the 4 RIU regions will have a similar mix of stakeholders (although in different proportions and with different relationships). Replication might be more difficult in areas with poor physical security, and special effort to work with women farmers would need to be made in some traditional societies.

11. ***Where and when*** *have the output(s) been validated?*

Please indicate the places(s) and country(ies), any particular social group targeted and also indicate in which production system and farming system, using the options provided in questions 7 and 8 respectively, above ***(max 300 words)****.*

All the outputs were validated in Uganda between 2003 and the end of 2005. Two contrasting locations (Arua and Tororo Districts) were purposively chosen to represent different ecologies and institutional settings. In both cases production systems included semi-arid, high potential, hillsides and forest-agriculture. Mixed crop and livestock farming prevails, with the smallholder rainfed humid farming system dominating. Poorer (but not the economically-dependant poor) men and women were targeted, but often the farmer groups were a mix of poorer to medium wealth rank families. The few well-off families in the community were usually not present in the groups. Most families in the study areas could be described as subsistence farmers, with limited, but expanding, commercial farming activities and interests. Men and women work together as a family unit, and in farmer groups convened by different projects and programmes. There are some signs of collective marketing of produce.

Current Situation

C. Current situation

12. ***How and by whom*** *are the outputs currently being used? Please give a brief description* ***(max. 250 words****).*

The Uganda National Agricultural Advisory Service (NAADS) is incorporating aspects of the demand assessment process into its Implementation Guidelines.

Makerere University in Uganda is using the project output on information needs of private agricultural advisory service providers to develop a tailor-made degree course for private service providers.

The main research and extension institutions in Uganda (NARO and NAADS) are using the information on the institutional constraints to providing relevant information to farmers, to modify their dissemination programmes.

The novel adaptive research process has been integrated into the methods of the Zonal Agricultural Research Institutes of NARO.

A multi-institutional Working Group for the Coordination of Development and Dissemination of Information

Materials for Service Providers and Farmers was set up by the Ministry of Agriculture in Uganda. It recommended (to NAADS and NARO) that the Fact Sheet and checklist dissemination format developed by the project should be adopted by those institutions supplying information to service providers and farmers.

*13. **Where** are the outputs currently being used? As with Question 11 please indicate place(s) and countries where the outputs are being used **(max. 250 words).***

All Outputs are being used in Uganda. Given their integration into national research and extension organisations they are being used throughout the country. They are not location or production system specific.

*14. What is the scale of current use? Indicating how quickly use was established and whether usage is still spreading **(max 250 words).***

The Outputs are in widespread use by research and extension organisations. They therefore impact on a large number of beneficiaries indirectly. Outputs were adopted well before the end of the project in 2005, and they are still being incorporated into the grassroots level planning of research and extension activities.

*15. In your experience what programmes, platforms, policy, institutional structures exist that have assisted with the promotion and/or adoption of the output(s) proposed here and in terms of capacity strengthening what do you see as the key facts of success? **(max 350 words).***

The Outputs were designed from the start to fit with the needs and policies of the main agricultural research and extension organisations, so it is these that have particularly assisted the promotion of the outputs. In addition the DFID COARD (Client Oriented Agricultural Research and Development Project) within NARO assisted with the promotion of the check list for dissemination materials.

The project used a number of stakeholder workshops to both develop and promote the Outputs. These workshops included senior research and extension managers, as well as farmers, service providers and NGOs. These workshops established the credibility of the Outputs and assisted their uptake.

The current policies of the research and extension systems are to be decentralised and demand driven. The project Outputs are about identifying and responding to the demand of farmers for information, and therefore conform with policy direction which has hastened uptake.

Environmental Impact

H. Environmental impact

*24. What are the direct and indirect environmental benefits related to the output(s) and their outcome(s)? **(max 300 words)***
This could include direct benefits from the application of the technology or policy action with local governments or multinational agencies to create environmentally sound policies or programmes. Any supporting and appropriate

evidence can be provided in the form of an annex.

Improving the process whereby extension and research understand better the demands of farmers for agricultural advisory services, and are more able to respond quickly to those demands, will have a direct, beneficial environmental impact. This is because the short and long-term concerns of farmers about their environment (e.g. soil productivity, fuel wood availability, water quality and access) will be picked up quickly and translated into action that can be taken by farmers and external agencies. Under the NAADS system farmers are asked to identify enterprises (usually crop or livestock commodities), and then the constraints associated with those enterprises (which are often environment related, such as pests and diseases, water shortage, soil productivity decline etc).

The checklist method to ensure that all the information needs of farmers are covered by dissemination materials provided to farmers includes environmental risks, so that farmers are made aware at enterprise/technology selection stage of the potential risks of each technology or enterprise. Often dissemination materials emphasise only the benefits of the new technology, rather than also the production, environmental and market risks associated with the technology.

25. Are there any adverse environmental impacts related to the output(s) and their outcome(s)? ***(max 100 words)***

None

26. Do the outputs increase the capacity of poor people to cope with the effects of climate change, reduce the risks of natural disasters and increase their resilience? ***(max 200 words)***

The outputs are aimed at empowering communities and farmer groups to make their own decisions about enterprise choice and advisory service provision. The outputs define ways of understanding farmer information needs and supplying these needs so that they can make informed decisions, including those that will help them avert or cope with natural disasters. Empowerment of farmers groups, and the improvement of the quality of information to which they have access, improves social and human capital and the resilience of communities.
