Smallholder Pig Value Chains Development (SPVCD) in Uganda Project

OUTCOME MAPPING/SITE SELECTION WORKSHOP

Ridar Hotel, Seeta (Mukono)

Workshop Facilitated and Report Produced by
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ILRI

11th - 13th October 2012
Executive Summary

The Smallholder Pig Value Chain Development in Uganda Project (SPVCD) addresses the opportunities for improvement of incomes and assets among pig producers and traders in Uganda. The main goal of the project is to improve livelihoods, incomes and assets of smallholder pig producers, particularly women, in a sustainable manner, through increased productivity, reduced risk, and improved market access in pig value chains. The project responds to CGIAR Systems priorities 3 (Reducing rural poverty through agricultural diversification and emerging opportunities for high-value commodities and products) and 4 (Poverty alleviation and sustainable management of water, land, and forest resources). The main target group is resource-poor smallholder pig keepers in Uganda, with a special focus on women and other marginalized groups who participate in pig value chains, especially as small scale producers, as well as the communities in which they live. The key beneficiaries of the project include smallholder pig farmers, the public officials responsible for livestock research for development, animal disease surveillance and control, and for livestock market development and regulation. In addition, beneficiaries will include other value chain actors, including small-scale traders, input and service providers.

As part of the planning and implementation process for the ILRI coordinated project entitled “Catalysing the emerging smallholder pig value chains in Uganda to increase rural incomes and assets”, an Outcome Mapping and Site Selection workshop was convened in Seeta – Mukono, Uganda between 11th and 13th October 2012. The workshop was attended by 36 participants representing the implementation partner organizations and other stakeholders in the pig sector in Uganda. The purpose of the workshop was to design strategies for causing behavioural changes among partners in the project; it was convened as a facilitated outcome mapping exercise and site selection process with a view to engaging partners to gain a common understanding of the project activities, their role and approaches to tracking progress towards anticipated outcomes. The workshop employed different forms of presentations, group work, task assignments, outcome mapping process-based exercises, discussions, stakeholder accounts and experience sharing. The facilitation process was highly flexible and structured to ensure the workshop remained participatory and interactive at every stage with emphasis on stakeholder common understanding of the project design and ownership of processes as well as internalization and ownership of OM concepts and roles of participant organizations.

The workshop was officially opened by Dr Loyce Okedi, Director General of NaLiRRi who reiterated the value of the pig sector to the country, with Uganda rated as the biggest pig consumer in Africa based on the national per capita consumption. At the end of the workshop the following outputs were realized:

- Common understanding and general representation of the logic of the high level changes to which the project will contribute (vision, mission, boundary partners, and outcome challenges);
- Strategy maps outlining the projects activities in support of each outcome strategy maps);
- Illustration of change process for each boundary partner to monitor the progress towards the achievement of outcomes (progress markers, outcome monitoring plan);
- Plans assessing progress for monitoring what the project will be performing internally in order to assist in tracking of project implementation and its pathway towards contributing to desired changes in the boundary partners.
- Template for data collection on the strategies to be employed by the project to encourage change in the boundary partners;
- Monitoring and communication plan detailing: the priority evaluation/communication topics, issues, and questions
- Identify the pilot districts in which the project will be implemented over the next two years.

The workshop did not complete the evaluation plan and the steering committee was charged to complete it facilitated by the ILRI M&E experts. This will include the evaluation issue, the way findings will be used, the questions, the information sources, the evaluation methods, the evaluation team, the dates for the evaluation, and the approximate cost. The plan, once completed, will guide the evaluation design and, which could be used to set the terms of reference for the external evaluation. Other pending activities were listed as formation of the steering committee, completion of site selection in the pilot districts and implementation of the activities as outlined in the outcome protocols of each objective.
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List of Abbreviations and Acronyms

AI - Artificial Insemination
ASF - African Swine Fever
BP - Boundary Partner
CGIAR - Consultative Group on International Agricultural Research
CIAT - International Centre for Tropical Agriculture
CRP - CGIAR Research Programs
CSO - Civil Society Organization
DSIP - Development Strategy and Investment Plan
DVO - District Veterinary Officer
FFA - Force Field Analysis
GOU - Government of Uganda
ICT - Information and Communication Technology
IEC - Information, Education and Communication
ILRI - International Livestock Research Institute
ITK - Indigenous Technical Knowledge
LG - Local Government
M&E - Monitoring and Evaluation
MAAIF - Ministry of Agriculture Animal Industry and Fisheries
MOH - Ministry of Health
MSC - Most Significant Change
NAADS - National Agricultural Advisory Services
NaCCRI - National Crops Resources Research Institute
NaLiRRRI - National Livestock Resources Research Institute
NARO - National Agricultural Research Organization
OM - Outcome Mapping
R4D - Research for Development
RI - Research Institutes
RUFORUM - Regional Universities Forum for Capacity Building in Agriculture
SA - Stakeholder Analysis
SFFF - Safe Food, fair Food
SLO - System Level Outcome
SPVCD - Smallholder Pig Value Chain Development Project
TI - Training Institutes
UBOS - Uganda Bureau of Statistics
VEDCO/CSRL - Volunteer Efforts for Development Concerns/Centre for Sustainable Rural Livelihoods
WCS - Wambizi Cooperative Society
Acknowledgement
The success of the workshop was the result of individual and collective contribution of many individuals and organizations. The workshop organizers would wish to thank the following for their valuable role in the workshop:

- Uganda government through its agencies for agreeing to work with the research teams in addressing value chain development for pig sector in the country
- The project team at ILRI-Uganda lead by
- Danilo Pezo and Emily Ouma for the ground work, initial technical work to prepare the material and plans for the workshop
- ILRI technical team of experts from Nairobi and other CGIAR CRPs who directly or indirectly supported the workshop
- Participants from government agencies, local governments, research institutions, universities, private sector and civil society for taking time to plan with other partners in the workshop
Part 1: Introduction

Background to SPVCD Project

Background

The Smallholder Pig Value Chain Development (SPVCD) Project was mooted to address opportunities for improvement of incomes and assets among pig producers and traders in Uganda. The main goal of the project is to improve livelihoods, incomes and assets of smallholder pig producers, particularly women, in a sustainable manner, through increased productivity, reduced risk, and improved market access in pig value chains. The specific objectives are to:

1. Identify market opportunities for pork in Uganda, and the multiple factors preventing smallholder pig producers from exploiting those opportunities, with focus on constraints caused by animal disease threat, feed resources, and performance of markets and services.
2. Develop and pilot test a set of integrated packages for smallholder pig production and market access for specific production systems, resource profiles and market settings in Uganda.
3. Document, communicate and promote appropriate evidence-based models for sustainable, pro-poor pig value chains.

The project responds to CGIAR Systems priorities 3 (Reducing rural poverty through agricultural diversification and emerging opportunities for high-value commodities and products) and 4 (Poverty alleviation and sustainable management of water, land, and forest resources), and is part of the CGIAR Program named Livestock and Fish, by and for the Poor (CRP 3.7). In addition, the project contributes directly to three of the CGIAR System Level Outcomes (SLOs): reduction of rural poverty, food security increase, and improvement of nutrition and health of communities. The initiative seeks to transform subsistence-level pig-keeping into a viable, profitable business model- increasing incomes and thereby reducing poverty and enhancing food security, while preserving community natural resource systems. Figure 1 illustrates the project strategy.

Target Group and Beneficiaries

- The main target group is resource-poor smallholder pig keepers, with a special focus on women and other marginalized groups who participate in pig value chains, especially as small scale producers, as well as the communities in which they live.
- The key beneficiaries of the project include the public officials responsible for animal disease surveillance and control, and for livestock market development and regulation. In addition, beneficiaries will include other value chain actors, including small-scale traders, input and service providers.
About Outcome Mapping

Outcome mapping (OM) is a methodology for planning and assessing projects that aim to bring about ‘real’ and tangible change (Earl et al., 2002) which focuses on development outcomes and is also applicable to research projects and programs as well as undertaking targeting policy influence and research uptake (Pellini, 2011; Young & Mendizabal, 2009). Though seemingly complex, OM is a valuable way of planning, monitoring and evaluating a project, while also engaging stakeholders for ownership and sustainability assurance.

Outcome Mapping introduces monitoring and evaluation considerations at the planning stage of the project. It presents an opportunity to depart from the conventional notion that monitoring and evaluation are done to a project, and, instead, actively engages the project team in the design of a monitoring framework and evaluation plan and promotes self-assessment. OM provides a set of tools to design and gather information on the outcomes, defined as behavioural changes, among the ‘boundary’ partners of a project. Identifying the behavioural changes that a project aims to deliver becomes synonymous with its outcomes, and part of a wider process of focusing on how change happens. OM can be used as a standalone methodology or in combination with a variety of others, such as Logframe Analysis (LFA) or Most Significant Change (MSC). In addition, a variety of tools, such as Force Field Analysis (FFA) and Stakeholder Analysis (SA), can be used to support the OM process.

OM facilitate the influence or progression of change among direct partners as part of a project or program (boundary partners), and therefore helps those assessing a project think systematically and practically about what they are doing and to adaptively manage variations.

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1 This section is entirely based on synthesis of OM by Andrew Clapisson. Accessed on November 2 from [http://www.researchtoaction.org/2012/01/outcome-mapping-a-basic-introduction/outcome-mapping-40](http://www.researchtoaction.org/2012/01/outcome-mapping-a-basic-introduction/outcome-mapping-40) as well as excerpt from Earl et al. (2001)
in strategies to bring about desired outcomes. OM supports research communication as it is useful in planning and monitoring the research communications strategy and can be linked to a policy influence plan (Pellini, 2011). The following three terms are at the heart of outcome mapping:

- **Behavioural change**: Outcomes are defined as changes in the behaviour, relationships, activities, or actions of the people, groups, and organisations with whom a programme works directly. These outcomes can be logically linked to a programme’s activities, although they are not necessarily directly caused by them.

- **Boundary partners**: Those individuals, groups, and organisations with whom the programme interacts directly and with whom the programme anticipates opportunities for influence. Most activities will involve multiple outcomes because they have multiple boundary partners.

- **Contributions**: By using Outcome Mapping, a programme is not claiming the achievement of development impacts; rather, the focus is on its contributions to outcomes. These outcomes, in turn, enhance the possibility of development impacts – but the relationship is not necessarily a direct one of cause and effect.

![Figure 2: Illustration of Outcome Mapping for translating research into action](http://www.researchtoaction.org/2012/01/outcome-mapping-a-basic-introduction/outcome-mapping-4/)

There are generally three stages to Outcome Mapping:

1. The first stage is the **design stage** (Intentional Design Stage), which helps a project to establish consensus on the macro level changes it will help to bring about and plan the strategies it will use. It helps answer four questions: Why? (What is the vision to which the project wants to contribute?); Who? (Who are the project’s boundary partners?); What? (What are the tangible changes that are being sought?); and How? (How will the project contribute to the change process among its boundary partners?).

2. The second stage is the **monitoring stage** (Outcome and Performance Monitoring), which provides a framework for the on-going monitoring of a project’s actions and the boundary partners’ progress toward the achievement of outcomes. It is based largely on systematized self-assessment. It provides the following data collection
tools for elements identified in the Intentional Design stage: an Outcome Journal’ (to track impact against progress markers); a Strategy Journal’ (that seeks to test and adapt the projects strategy in ever changing circumstances); and a ‘Performance Journal’ (that logs organizational practices and gauges the need for improvements).

3. The third stage, *Evaluation Planning*, helps the project identify evaluation priorities (more in-depth review of progress) and develop an evaluation plan that makes good use of resources and provides strategic benefit to the project.

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**Figure 3:** The three generic stages of outcome mapping

*Source: Earl et al. (2001)*

In a nutshell, outcome mapping (Earl *et al.*, 2001):

- Defines the program’s or project’s outcomes as changes in the behaviour of direct partners
- Focuses on how programs facilitate change rather than how they control or cause change
- Recognizes the complexity of development processes together with the contexts in which they occur
- Looks at the logical links between interventions and outcomes, rather than trying to attribute results to any particular intervention
- Locates a program’s/project’s goals within the context of larger development challenges beyond the reach of the program to encourage and guide the innovation and risk-taking necessary
- Requires the involvement of program/project staff and partners throughout the planning, monitoring, and evaluation stages
About the Outcome Mapping and Site Selection Workshop

Background to the Workshop
As part of the planning and implementation process for the ILRI project named “Catalysing the emerging smallholder pig value chains in Uganda to increase rural incomes and assets”, an Outcome Mapping and Site Selection workshop was convened in Seeta – Mukono, Uganda between 11th and 13th October 2012. The workshop was attended by 36 participants representing the implementation partner organizations and other stakeholders in the pig sector in Uganda (See Annex B for the full list of participants and their organizational affiliation).

Purpose and Objectives of Workshop
In order to design strategies for causing behavioural changes among partners in the project, the workshop was convened as a facilitated outcome mapping exercise and site selection process with a view to engaging partners to gain a common understanding of the project activities, their role and approaches to tracking progress towards anticipated outcomes.

1. To appraise the situation of pig production and marketing in Uganda in the context of the SPVCD project and the ILRI Research for Development (R4D) strategy
2. To gain common understanding of the design and implementation scheme of the SPVCD project
3. Use the Outcome Mapping Approach to design project implementation plan including specific strategies for: (1) identification of constraints and opportunities in smallholder pig value chains in Uganda; (2) development and pilot testing of integrated packages for smallholder pig production and market access in Uganda; and (3) documentation, communication and promotion of appropriate evidence
4. Use outcome mapping approach to lay out the impact pathway for the project and indicators of progress towards specified outcomes.
5. Select pilot sites (districts) for the implementation of the project

Workshop Approach and Methodology
The workshop employed different forms of presentations, group work, task assignments, outcome mapping process-based exercises, discussions, stakeholder accounts and experience sharing. The facilitation process was highly flexible and structured to ensure the workshop remained participatory and interactive at every stage. Emphasis was made on stakeholder common understanding of the project design and ownership of processes as well as internalization and ownership of OM concepts and roles of participant organizations. The approaches and methodologies were a combination of different OM facilitation techniques in order to generate the project implementation and outcome monitoring strategies and plans. Intensive discussion opportunities were accorded to the participants during the sessions. Adult learning principles were used to facilitate the learning by the participants. In addition, brainstorming exercises were also employed throughout the workshop.

On the whole, the workshop designed to be:
♦ *Research-based*, in taking as its starting point the lessons learned from an extensive review of the experiences, gaps, concepts and perspectives of OM as applied in research for development;

♦ *Experience-based*, in building upon the field experiences of individuals and organizations who have planned, designed, monitored pig sector projects and used OM previously;

♦ *Participant-focused*, in soliciting the identification by each participant of the key challenges implications of OM in project implementation;

♦ *Action-oriented*, in having each participant and organization/boundary partner make a “pledge” based on the challenge statements outlining a specific and realistic plan of action to be initiated in support of the project; and

♦ *Output-based*, in encouraging participants to work around specific workshop output including communication strategy and monitoring plan.

The general approach adopted in the workshop is illustrated **Figure 4**.

![Figure 4: Process of OM deployed in the workshop](image)

**Part II: Proceedings and Outputs**

**Welcome Remarks and Opening**

The workshop was officially opened by Dr Loyce Okedi, Director General of NaLiRRi. In her brief remarks, she reiterated the value of pig sector to the country with Uganda rated as the biggest pig consumer in Africa based on the national per capita consumption (Tatwangire, 2012). She noted the role the sector is playing with a huge potential for job creation. Despite this potential, challenges/constraints prevail with regards to diseases, feeds, organization of marketing groups, pork safety. She welcomed the implementation of the project in the pilot districts of Uganda and called upon participants to pay great attention to ensuring local ownership of the process as the country moves forward towards prioritizing pig production in the national agenda.
The participants were then introduced to the workshop objectives after an exercise to identify the key expectations and fears of participants. The output of the exercise is summarized below.

<table>
<thead>
<tr>
<th>“What you do NOT want during the workshop?”</th>
<th>“What would be an extraordinary output?”</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do not want the cocktail today but tomorrow</td>
<td>• Commitment from all stakeholders</td>
</tr>
<tr>
<td>• Don’t want to finish beyond the time</td>
<td>• Knowing specific roles in this project</td>
</tr>
<tr>
<td>• We do not want to waste time</td>
<td>• Strategies to include pig as a priority in DSIP</td>
</tr>
<tr>
<td>• Long presentations (stick to allocated time)</td>
<td>• Sites selected, interventions by civil society mapped</td>
</tr>
<tr>
<td>• We don’t want this workshop to be dominated by ILRI</td>
<td>• Pig development be structured right from farmer and given support from the government</td>
</tr>
<tr>
<td>• Phones in silence</td>
<td>• Select the utmost right sites</td>
</tr>
<tr>
<td>• Not to work in isolation</td>
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</tbody>
</table>

These were linked through a brief discussion to the main objectives of the workshop, namely to:

1. Appraise the situation of pig production and marketing in Uganda in the context of the SPVCD project and the ILRI R4D strategy
2. Gain common understanding of the design and implementation scheme of the SPVCD project
3. Use the Outcome Mapping Approach to design project implementation plan including specific strategies for: (1) identification of constraints and opportunities in smallholder pig value chains in Uganda; (2) development and pilot testing of integrated packages for smallholder pig production and market access in Uganda; and (3) documentation, communication and promotion of appropriate evidence
4. Use outcome mapping approach to lay out the impact pathway for the project and indicators of progress towards specified outcomes.
5. Select pilot sites (districts) for the implementation of the project

**Workshop outputs**

The main outputs expected from the workshop were outlined as:

- Common understanding and general representation of the logic of the high level changes to which the project will contribute (*vision, mission, boundary partners, and outcome challenges*);
- Agreed set of strategy maps outlining the projects activities in support of each outcome (*strategy maps*);
- A clear illustration of change process for each boundary partner to monitor the progress towards the achievement of outcomes (*progress markers, outcome monitoring plan*);
- A plan for self-assessment for monitoring what the project will be performing internally in order assist in tracking of project implementation and its pathway...
towards contributing to desired changes in the boundary partners (organizational practices, performance journal);
- A template for data collection on the strategies to be employed by the project to encourage change in the boundary partner (outcome strategy);
- A monitoring and evaluation plan detailing: the priority evaluation topics, issues, and questions (the evaluation plan); and
- List pilot districts in which the project will be implemented over the next two years.

**Setting the Scene**

Key introductory presentations were made to inform the workshop process and create a common understanding of the context of pig production in Uganda while presenting findings from two recent studies. The presentations included:
- The SPVCD/SFFF project by Danilo Pezo and Kristina Rösel
- Situational Analysis of the pig sector in Uganda by Alex Tatwangire
- Stakeholders and their mandates in the pig value chain by Francis Ejobi

**Brief of Situation Analysis**

The presentation (The Conditions within which the Smallholder Pig Value Chains Operate in Uganda: preliminary results) focused on (see Annex Ba for the detailed PowerPoint presentation):

**Section 1**
- The livestock sector and policy framework in Uganda
- Consumption of pork and pig meat products

**Section 2**
- The potential of pig production in Uganda
- Pig production, production systems, and pig breeds

**Section 3**
- Import & export of live pigs and pig meat products
- Value addition by actors, processing and marketing of pig products

**Section 4**
- Access to extension and credit services
- Major constraints of pig production in Uganda

The main constraints to smallholder pig production highlighted were:
- Lack of capital on farms; limited access to information/training on pig husbandry
- Poor animal feeding/nutrition and management
- Expensive veterinary/extension services, when available
- Fake drugs and feeds
- Limited access to knowledge of which pig breeds are more productive under different production systems.
- Poor structure of the pig sector (more traders in the supply chain).
- Farmers are poorly organized (unable to take advantage of collective marketing/upgrading)
- Low productivity due to technical/management problems on farms
Poor transport & market infrastructure
- Limited value addition on pork & pig meat products.
- Pig production not among priority areas in the Agricultural Sector Development Strategy and Investment Plan (DSIP) for Uganda.
- Pork safety problems of zoonoses (e.g. tape worms, TB, & anthrax) & contamination
- Pig diseases: -African Swine Fever, helminthiasis, scabies, mange (i.e. skin disease characterised by intense itching and caused by mites), coughing and diarrhoea

The presentation informed the OM process by making key conclusions about pig value chain and its improvement in Uganda. It noted that access to affordable credit, training, extension services, veterinary services, improved infrastructure and good breeds is crucial for improving pig productivity. Improvement in the pig production system due to recent routine interventions in the control of animal diseases is also pivotal to the sector. There should be concerted efforts to achieve meat output targets in the country limited by livestock policies that focus more on cattle, goats, sheep and chicken enterprises that require high cost of production. In terms of actors, the private veterinary services sector is growing at a very slow pace compared to the demands for such services. The animal feed industry is currently underdeveloped, unable to ensure supply of quality feed all year round due to limited infrastructure while problem of substandard feeds and feed stuffs persist and the project should factor it through OM.

Outcome Mapping Process
After a presentation on the rationale, principles and process of outcome mapping, the facilitator launched the participatory outcome mapping exercise for the SPVCD project with the hope of serving as a monitoring and evaluation scoping tool and partner engagement platform for implementation planning, learning and improvement. The process begun with participants getting inducted to the aspirations of taking ownership, understating their roles and committing to playing active part in the project implementation. It was designed, albeit with some changes in process, to be as empowering, participatory, and learning-oriented as possible. Caution was taken not to overplay the utility of OM and raise unrealistic expectations but the process concentrated on merely developing a simple system that would meet both accountability and learning needs of the SPVCD project given the short time remaining in its implementation.

Intentional Design of OM process

The Project Vision

In order to facilitate the creation of a common project vision, the participants answered the question “How do we see a pig farmer in the future?”

The following responses were generated by the groups:
After discussions the participants arrived at a consensus and adopted the following group vision:

“Empowered and efficient smallholder pig producers with increased productivity, having equitable access to markets, information, knowledge, improved technologies, and inputs for sustainable and resilient livelihoods”

The Project Mission

In order to achieve the vision above, the participants further mentioned the following as possible building blocks of the mission (considered under OM process as the “bite of the vision that project partners can manage”) within the 2-year time span:

- Organize interest groups of producers and other value chain actors
- Improve access to information and markets
- Create linkages among stakeholders to service provision and sustainability
- Increase knowledge of pig farmers on animal health and disease control, food safety, breeding and feeding

After discussions and group consensus, the participants agreed to have all statements to be part of the mission statement as the pathway to realize the vision of the project. The process was guided by the understanding that the SPVCD has the desire to influence or cause changes
(Outcomes) that reflect positive changes in the behaviour, relationships, activities, or actions of the people, groups, and organizations with whom the project will work directly, the boundary partners.

**The Boundary Partners**

Noting that the boundary partners comprise of those individuals, groups, and organizations with whom the project will interact directly and with whom the program anticipates opportunities for influencing pig value chain improvement, an exercise was conducted by groups to:

- Identify individuals/institutions as partners (research, training, farmers, etc.)
- Use the colour codes to characterize the organizations named
- Map the organizations on the wall to reflect their position with respect to working relations with the project

The main categories of the boundary partners include:

- Farmers and Farmer Organizations
- Training Institutions
- Research Institutions
- Farmer Support Agents/Extension
- Project Implementation Partners/BPs
- Government Line Ministries (Agriculture, Regional Trade, Education, Health, Planning, Finance, Natural Resources, etc.)
- Private Sector (industrialists, seed companies, input suppliers, processors, exporters, buyers, small traders)
- Donors
- Civil Society Organizations (CSO)
- General Public
Outcome Challenges, Progress Markers and Strategy Maps

The participant worked in five groups to generate expected behaviour changes in line with the project objectives. In the OM process adopted, these represented the outcome challenges associated with each boundary partner. The OM were phrased in such a way as to capture how the partners are expected to behave and relate to others if the project is to achieve its full potential as a facilitator of change pig value chain development in Uganda. The statements discussed in groups were meant to transcribe how the project will intentionally contribute to the most profound transformation possible among smallholder pig producers and other actors in the value chain. The “challenge” is for the SPVCD project to help bring about these changes. Because changes in people, groups, and organizations cannot be understood in isolation from one another, the outcome challenge incorporates multiple changes within and across groups. They were discussed in groups along the lines of project objectives.

The groups, working on each objective then considered selected graduated progress markers which were identified for each of the outcome challenges that the project would help to bring about. In order to capture the complexity of the change processes expected of each boundary partner and to represent the data/information that the project has to gather in order to monitor achievements toward the desired outcome changes. The participants used the progress markers to represent the projects change model for the boundary partners. In order to illustrate degree of the depth and complexity of change being sought, the progress markers were graduated from the minimum changes the project expect to see the boundary partner doing as an early response to the project's basic activities, to what the project would like to see them doing, to what it would love to see them doing if the project were having a profound influence. The progress in change cumulatively illustrates the complexity and logic of the change process.

In order to complete the intentional design phase of the OM process, the groups designed strategy maps along the lines of each outcome challenge. This was conducted to help identify the strategies to be used by the project to contribute to the achievement of outcomes. A matrix was used to draw the strategy map for each outcome challenge. The matrix and processed helped:

- Clarify the approach (mix of strategies) to be used by the project to tackle the particular outcome challenge;
- Indicate the relative influence that the program is likely to have on the individual, group, or organization being targeted;
- Pinpoint strategic gaps in the approach or identify whether the project is overextended; and
- Suggest the type of evaluation method appropriate to track and assess the changes

The following section presents the findings of the discussions on outcome challenges, progress markers and strategy maps for each objective.

Objective 1: Identify constraints and opportunities in smallholder pig value chains in Uganda
Some of the constraints already identified and captured in the situation analysis report include:
- Production level
  o Production systems and production related constraints (feeds, animal diseases, breeding, husbandry and management)
  o Smallholder pig producers engagement with market systems
  o Gender issues and concerns
  o Limited access to services and inputs (AI, extension, etc.)

- Market level
  o Characterize the marketing system (actors, distribution of benefits, etc.)
  o Market performance
  o Identification of market constraints and opportunities for smallholder pig producers
  o Access to business development services

- Activities
  o Synthesis of available information on the pig sector in Uganda (situation analysis)
  o Site selection for target value chain types and sampling strategy
  o Ex ante baseline assessment of the pig value chain
    ▪ Rapid value chain analysis and constraints analysis of the pig systems (production → marketing)
    ▪ Tool development → analysis
    ▪ Baseline surveys (quantitative) for future impact/outcome assessment against target indicators
    ▪ Consumer demand and preference structures
  o Diagnostic surveys (disease, risk and disease burden assessments, feed resources, breeding services and breeding management)

**Outcome Challenge: Inputs and services**

<table>
<thead>
<tr>
<th>Research Institutions</th>
<th>Training Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Conducting research on input and service delivery chains and models, intervening</td>
<td>- Repackaging findings from input and service delivery assessments and</td>
</tr>
<tr>
<td>to bring about change and delivering findings timely</td>
<td>disseminating them to different stakeholders the most appropriate forms.</td>
</tr>
<tr>
<td>- Coordinating value chain assessments/research between different actors</td>
<td>- Including inputs and service as part of their training curricula</td>
</tr>
<tr>
<td>- Building a data bases of information (availability/quality/quantities) to support</td>
<td></td>
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<tr>
<td>delivery of inputs and services.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>GOU/LGs</th>
<th>CSO</th>
</tr>
</thead>
<tbody>
<tr>
<td>- To identify policy barriers that interfere in efficient delivery of inputs and</td>
<td>- Civil societies are engaged in identifying bottlenecks in inputs and</td>
</tr>
<tr>
<td>services, formulate policies and enact corrective legislation</td>
<td>service delivery and advocating for policy change with governments</td>
</tr>
<tr>
<td>- Government to provide enabling environment to conduct assessments of inputs and</td>
<td></td>
</tr>
<tr>
<td>services supply.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Others</th>
<th>Farmers groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>- They are facilitating adoption and up scaling new innovation and capacity building</td>
<td>- They are actively participating by helping identify gaps, priority</td>
</tr>
<tr>
<td></td>
<td>researchable areas and entry points</td>
</tr>
<tr>
<td></td>
<td>- They are testing, piloting and adopting new interventions</td>
</tr>
</tbody>
</table>
**Progress Markers: Research Institutions (NALIRI, Makerere University)**

<table>
<thead>
<tr>
<th>Expect to See</th>
<th>Like to See</th>
<th>Love to see</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Researcher developing proposals that are focused on assessing and coordinating input and services delivery</td>
<td>- Researchers conducting surveys to identify constraints, opportunities and interventions in inputs and services delivery</td>
<td>- Researchers working with inputs and services providers to test and implement interventions</td>
</tr>
<tr>
<td>- Researchers developing a framework for compiling market and quality information to support input and service delivery systems</td>
<td>- Researchers developing protocols to implement interventions</td>
<td>- Inputs and service providers adopting interventions and improving efficiency</td>
</tr>
<tr>
<td></td>
<td>- Value chain assessments prioritizing inputs and services delivery</td>
<td>- Input and service providers using market and quality information to improve efficiency of their business</td>
</tr>
<tr>
<td></td>
<td>- Researchers periodically collecting/updating market and quality information to inform decision making in input and service delivery</td>
<td>- Researchers disseminating market and quality information to stakeholders</td>
</tr>
</tbody>
</table>

**Progress Markers: Government**

<table>
<thead>
<tr>
<th>Expect to See</th>
<th>Like to See</th>
<th>Love to see</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) including assessments of inputs and supply chains in their annual plans</td>
<td>- MAAIF participating in surveys to identify constraints, opportunities and interventions in inputs and services delivery</td>
<td>- MAAIF working with researchers, inputs and service providers to test and implement interventions</td>
</tr>
<tr>
<td></td>
<td>- MAAIF periodically participating in collecting/updating market and quality information to inform decision making in input and service delivery</td>
<td>- MAAIF disseminating market and quality information to stakeholders</td>
</tr>
</tbody>
</table>

**Strategy Map: Researcher developing proposals that are focused on assessing and coordinating input and services delivery**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-1</td>
<td>I-2</td>
<td>I-3</td>
<td></td>
</tr>
<tr>
<td>E-1</td>
<td>E-2</td>
<td>E-3</td>
<td></td>
</tr>
</tbody>
</table>
### Project

| Sending out Call for Proposals with guidelines | Facilitating the identification of resource persons to conduct skill training | Seeking for research funds for students and faculty |

### Strategy Map: Researchers compiling market and quality information to support input and service delivery systems

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-1</td>
<td>I-2</td>
<td>I-3</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Providing funds to prepare reports, develop databases and support sharing of information</td>
<td>Catalyzing or encouraging inputs and service providers to have a buy in e.g., by investing their own resources</td>
<td>Liaising with private sector to manage market and quality information (as a business service)</td>
</tr>
<tr>
<td>Researcher</td>
<td>Preparing research reports Developing databases and systems for sharing information</td>
<td>Synthesizing the reports targeting different actors</td>
<td>Linking and networking with other stakeholders Holding stakeholders workshop to share reports</td>
</tr>
<tr>
<td>E-1</td>
<td>E-2</td>
<td>E-3</td>
<td></td>
</tr>
</tbody>
</table>

### Prevalence surveys, risk and burden assessment - ASF Cysticercosis: Identification of options for risk mitigation

**Outcome Challenge: Disease Risk mitigation**

### Research Institutions

- Test designed disease control packages
- Translate the benefits from disease control packages into economic terms.
- Publicize and disseminated results to farmers and other stakeholders.
- Document ITK, myths on disease control and evaluate them.

### Training Institutions

- Develop tailor made courses for farmers based on the designed disease control packages.
- Create on outreach programmes to Pig farming communities.

### GOU/LGs

- Strengthen education and communication on regulations related to disease control.
- Put in place incentives for farmers to control diseases.
- Encourage more self-policing/regulations by stakeholders.
- Commitment to funding disease control programmes.
- Make recommendations on effective disinfectants and ensure their availability.
- Establish an early warning system for pig diseases.
- Improved and effective management of quarantines during disease out breaks.

### CSO

- Get interested in advocacy and participation in disease control e.g. include disease control Kits in their packages
- Increase and strengthen cooperation with LGs, especially DVOs

### Farmers groups

- Work together for disease control and self-regulation
- Commitment to adhere to quarantine restrictions.
- Adoption of disease control packages
- Have a local system of information exchange.
### Progress Markers

<table>
<thead>
<tr>
<th>Change</th>
<th>Boundary Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1 (Expect to see)</strong></td>
<td></td>
</tr>
<tr>
<td>- Pig disease trends surveillance &amp; monitoring carried out</td>
<td>RI/MAAIF</td>
</tr>
<tr>
<td>- Farmer friendly disease control packages</td>
<td>TI</td>
</tr>
<tr>
<td>- Pig production prioritized in DSIP</td>
<td>GOU/MAAIF</td>
</tr>
<tr>
<td>- Meat inspection and disease control regulations enforced</td>
<td>GOU/MAAIF/LGs/</td>
</tr>
<tr>
<td>- Traceability systems established</td>
<td>GOU/MAAIF/LG/</td>
</tr>
<tr>
<td>- Farmers participating in capacity building, surveys, and disease control programmes</td>
<td>Farmers/CSO</td>
</tr>
<tr>
<td><strong>Level 2 Like To see</strong></td>
<td></td>
</tr>
<tr>
<td>- Farmers receiving regular feedback on disease trends and surveys</td>
<td>RI/MAAIF</td>
</tr>
<tr>
<td><strong>Level 3 Love to see</strong></td>
<td></td>
</tr>
<tr>
<td>- Survey findings accessible and published in farmers friendly formats</td>
<td>RI/MAAIF</td>
</tr>
<tr>
<td>- Tailor made courses for farmers on disease control/risk mitigation</td>
<td>TI</td>
</tr>
<tr>
<td>- Pig disease burden translated on economic terms</td>
<td>TI</td>
</tr>
<tr>
<td>- Pig disease control programmes funded</td>
<td>GOU</td>
</tr>
<tr>
<td>- Pig Production and disease control records kept by farmers</td>
<td>Farmer</td>
</tr>
<tr>
<td>- Farmers actively participating in disease reporting</td>
<td>Farmer</td>
</tr>
</tbody>
</table>

**Progress Markers: Disease risk mitigation**

**Expect to see**

- Recommended control package.
- Rapid response team on pig diseases.
- Community education programmes on disease control regulation and laws.

**Like to see**

- Dissemination of information to farmers
- ITKs & myths evaluated
- Community outreach programmes for farmers

**Love to see**

- Economic benefits of control packages
- Effective control of pig disease
- Timely reporting of disease
- Confirmatory diagnosis of outbreaks of pig diseases.
- Farmers adopting effective control measures
### Strategy Map: Disease risk Mitigation

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
</table>
| **I1** Aimed at a specific Individual or group | - Conduct regular surveys  
- Publication & dissemination of survey reports | - Refresher training of DVO and other relevant personnel. | - Facilitation of the survey l activities.  
- Provision of equipment e.g. laptops, etc.  
- Technical back up |
| **I2**                  | - Promoting the formation of farmers platforms | - Training farmers  
  o Record keeping  
  o Disease reporting | - Establish and facilitate Rapid Response Team for control of swine disease out breaks |
| **I3**                  | - Retooling RI & diagnostic facilities. | - Capacity building (MSc, Post Doctorate trainings) | - Equipping farmers & DVOs for ICT/SMS reporting |

| **E1** Aimed at a specific Individual or group Environment | - Establish structure for coordination of activities at all levels. National, District & farm level) | - Establish networks for surveillance and dissemination  
- Develop IEC materials for dissemination through various media channels | - Fund the networks  
- Strengthen linkages between BPs.  
- Bi annual reviews by networks  
- Strengthening linkage between MOH and MAAIF for resources sharing and information on zoonotic diseases |
| **E2**                  | - Provide equipment and tools for surveys & surveillance. | | |
| **E3**                  | | | |

### Objective 2: Development and pilot testing of integrated packages for smallholder pig production and market access in Uganda

#### Outcome Challenge: Feeding and Management

**Research Institutions**
- Researchers characterize production systems to identify and prioritize constraints/gaps and opportunities  
- Researchers compile an inventory of potential ‘best bets’ options to tackle prioritized constraints/gaps  
- Participatory development of protocols for implementing ‘best bet’ interventions  
- Engage partners to plan and implement prioritized ‘best bet’ interventions  
- Monitoring implementation of intervention (data collection/processing) and documenting lessons and compiling results.

**Training Institutions**
- Developing curriculum and modules for training and improving knowledge on ‘best bet’ interventions  
- Building capacity for use of ‘best bet’ interventions for farmers, extension workers and other stakeholders  
- Design and implement training for feed dealers and manufacturer

**MAAIF/LGs**
- To formulate policy and legislation to regulate the feed industry  
- To provide enabling environment to operationalize policies and guidelines in feeding and management  
- To set standards and periodically check to ensure adherence.

**CSO**
- Civil societies engaged communities to promote ‘best bet’ interventions  
- Advocating for policy change affecting feeding and management with government  
- Organize feed dealers and manufacturer into association and cooperatives

**Others (Feed Dealers and Manufacturers)**
- Farmers groups
- They are actively participating in activities for feed development and management
- They are self-regulating the feed manufacturing industry

Progress Markers: Research Institutions (NALIRI, Makerere University)

<table>
<thead>
<tr>
<th>Expect to See</th>
<th>Like to See</th>
<th>Love to see</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Researchers conduct a survey to characterize production systems to identify and prioritize constraints/gaps and opportunities</td>
<td>- Researchers conduct action research to test and adapt ‘best bet’ interventions.</td>
<td>- Researchers piloting and up scaling best bet interventions</td>
</tr>
<tr>
<td>- Literature review to identify potential ‘best bets’ options to tackle prioritized constraints/gaps</td>
<td>- Researchers developing protocols to implement interventions</td>
<td>- Farmers are adopting improved feeding and management practices and improving productivity</td>
</tr>
</tbody>
</table>

Progress Markers: Government

<table>
<thead>
<tr>
<th>Expect to See</th>
<th>Like to See</th>
<th>Love to see</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) including assessments of inputs and supply chains in their annual plans</td>
<td>- MAAIF participating in surveys to identify constraints, opportunities and interventions in inputs and services delivery</td>
<td>- MAAIF working with researchers, inputs and services providers to test and implement interventions</td>
</tr>
<tr>
<td></td>
<td>- MAAIF periodically participating in collecting/updating market and quality information to inform decision making in input and service delivery</td>
<td>- MAAIF disseminating market and quality information to stakeholders</td>
</tr>
</tbody>
</table>

Strategy Map: Government

<table>
<thead>
<tr>
<th>Cause</th>
<th>Persuade</th>
<th>Support</th>
</tr>
</thead>
</table>

Outcome Challenge: Researchers are developing proposals focused on assessing and coordinating input and services delivery. They are conducting surveys to identify constraints, opportunities and interventions in inputs and services delivery and are also working with inputs and services providers to test and implement interventions.
### Individual BP

- Include project activities into their work plans
- Joint field days with project staff
- Progress meeting with government staff
- Sharing project report with government staff
- Capacity building on goat husbandry and veterinary services
- Availing training materials (brochures)
- Follow-up visits
- Exchange visits

### Environment BPs

- Setting up processing plants (Sweet potatoes and Cassava)
- Improving infrastructure and market access
- Involving churches and local schools in creating awareness
- Training the ToTs
- Linking farmers to service providers
- Brand products from project sites

**Strategy Map: Characterize of production systems to identify and prioritize constraints/gaps and opportunities in feeding and management**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-1</td>
<td>I-2</td>
<td>I-3</td>
<td></td>
</tr>
<tr>
<td>Researcher</td>
<td>Develop tools and protocols to diagnose gaps and challenges</td>
<td>Write proposals to characterize production systems</td>
<td>Provide technical support</td>
</tr>
<tr>
<td>E-1</td>
<td>E-2</td>
<td>E-3</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Avail the necessary resource</td>
<td>Availing access to previous studies and reports</td>
<td>Linking researcher with experts with skills in tools protocols</td>
</tr>
</tbody>
</table>

**Strategy Map: Feeds & Breeds**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-1</td>
<td>I-2</td>
<td>I-3</td>
<td></td>
</tr>
<tr>
<td>Farmers groups</td>
<td>Disseminate proven intervention(s)</td>
<td>Promote skill enhancement and capacity building of farmers group(s) by training and learning events (e.g., field days, demonstrations) respecting gender equity</td>
<td>Funding of training and learning events respecting gender equity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Providing regular guidance on use of proven intervention(s)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Linking with other training institutions to facilitate dissemination</td>
</tr>
<tr>
<td>E-1</td>
<td>E-2</td>
<td>E-3</td>
<td></td>
</tr>
<tr>
<td>Aimed at individual’s or group’s environment (physical + policy)</td>
<td>Strengthen farmer(s) group</td>
<td>Capacity build extension staff - gender-sensitive</td>
<td>Provide linkages with other networks outside the communities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sensitization of input suppliers</td>
<td></td>
</tr>
</tbody>
</table>
Objective 3: To document, communicate and promote appropriate evidence-based models for sustainable, pro-poor pig Value Chain

In conducting the OM process for objective 3, the key elements considered by the groups were the need to develop a strategy for communication and implementation of the project model; opportunity for scaling up and out communicated through advocacy activity with partners; need to develop and package communication strategy for keys targeted audiences and specific aspects of project management and M&E. The OM process reiterated the need to have an outcome evaluation plan that is:

- Aimed at improving project planning and delivery with a focus on pig value chain development;
- Designed to lead to action by partners especially on behaviour changes as outline by outcome challenges under each objective for each boundary partner;
- Comprise of generic tools and methods appropriate to the data to be gathered and analyzed, and appropriate to the project decision making and partner organizational practices needs;
- Facilitative of the participation of relevant stakeholders
- Compliant with standards for ethical research
- Adding value at the design of the SPVCD project
- Intended for capacity development for boundary partners

Results of Group Discussions

Outcome Challenges for Boundary Partners

<table>
<thead>
<tr>
<th>Research Institutions</th>
<th>Training Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol production easily utilizable by communities</td>
<td>Use of updated technologies for training of students</td>
</tr>
<tr>
<td>Continuous guidance of specificity and sensitivity</td>
<td>Continuous training of field staff and farmers</td>
</tr>
<tr>
<td>Research results should be available to communities</td>
<td>Give confidence to farmers to allow them demand the services</td>
</tr>
<tr>
<td>Development of appropriate vaccines</td>
<td>Appropriate package of information to deliver</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Government agencies</th>
<th>Farmer organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need supportive policies for testing potential diagnostic tests for ASF and cysticercosis</td>
<td>Cooperation with researchers</td>
</tr>
<tr>
<td>Quality management and monitoring of tests/vaccines</td>
<td>Mobilization of farmers to demand for the services</td>
</tr>
<tr>
<td>Integrate these tests in diseases control programs</td>
<td>Feed-back of research findings to farmers</td>
</tr>
<tr>
<td>Build capacity of national labs to be able to support research</td>
<td></td>
</tr>
<tr>
<td>Capacity building of extension workers (add more personnel)</td>
<td></td>
</tr>
<tr>
<td>Strategy for compensation of farmers during epizooties</td>
<td></td>
</tr>
</tbody>
</table>
Civil society
- Engage competent technical personnel to deliver the vision
- Promote ethical behaviour
- Integrate the technologies in their programs
- International organizations should take interest in supporting activities

Other organizations/groups
- Cooperation of all other stakeholders (traders, retailers, consumers, etc…)

Strategy Map

<table>
<thead>
<tr>
<th>Individual/Group</th>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide resources (funds, skilled personnel)</td>
<td>Training of personnel</td>
<td>Forum, opportunity for exchange (communication workshops)</td>
<td></td>
</tr>
</tbody>
</table>

| Environment | TOR | MOUs | Create supportive messages (radio, print, electronic media, workshop….) | Create group/associations (farmers, researchers, policy makers) |

Strategy MAP

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aimed at a specific Individual or group</td>
<td>- Fund evaluation</td>
<td>- Training farmers</td>
<td>- Facilitation of the evaluation of disease control package activities.</td>
</tr>
<tr>
<td></td>
<td>- Report on evaluation of control packages.</td>
<td>- Disease control packages</td>
<td>- Provision of equipment e.g. laptops, etc.</td>
</tr>
<tr>
<td></td>
<td>- Formation farmers platforms</td>
<td>- Build capacity of RRT and diagnostic labs</td>
<td>- Establish and facilitate Rapid Response Team for control of swine disease out breaks</td>
</tr>
<tr>
<td></td>
<td>- Publication &amp; dissemination of Disease control packages</td>
<td>- Refresher training of DVO and other relevant personnel.</td>
<td>- Technical back up</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Capacity building MSC, Post Doctorate trainings</td>
<td>- Equipping farmers &amp; DVOs for ICT /SMS reporting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Incentive for farmers for reporting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Support to farmers networks</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Harmonization of messages from stakeholders &amp; BP.</td>
</tr>
</tbody>
</table>

Outcome Challenge: Feeding and Management

Research Institutions
- Engender research results
- Gender analysis

Training Institutions
- Main stream gender in training programs
- Develop messages for training the
Engage communities to understand the welfare impacts of stakeholders that include gender and welfare issues.

**GoU/LGs**
- Mainstream gender in policies and disease control
- Integrate messages showing welfare gains from diseases control program

**CSO**
- Engaged to disseminate promote, highlight the gender and welfare related to disease risk mitigation

**Others (Feed Dealers and Manufacturers)**
- Help partners in spreading messages for disease risk mitigation by explaining welfare impact (traders, private, etc…)

**Farmers groups**
- Engender farmer organization
- Ensure gender balance in dissemination of message and mobilization

### Strategy Map

<table>
<thead>
<tr>
<th></th>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual/Group</td>
<td>Provide resources (finance, personnel, material)</td>
<td>Skill development Training workshop</td>
<td>Review Associations/networking Communication</td>
</tr>
<tr>
<td>Environment</td>
<td>Promoting policies MOUs with gender focus</td>
<td>Design appropriate messages</td>
<td>Group association with gender focus Collaborating partnership</td>
</tr>
</tbody>
</table>

### The Outcome Monitoring Plan

At the end of day two, the OM team developed a framework to monitor: the progress of boundary partners towards the achievement of outcomes; the project's strategies to support outcomes; and the organizational practices adopted to this end. The two main outputs of this stage were outcome monitoring plan and a communication strategy (see Annexes D and E respectively). The process considered three issues:

1. The changes in the behaviour, actions, activities, and relationships of the people, groups, and organizations with whom a SPVCP project works directly;
2. The strategies that a program employs to encourage change in its partners; and
3. The functioning of a project partners as a team.

The participation, during discussions on the findings of outcome mapping planning, expressed satisfaction with the monitoring and evaluation plans to be finalized later and noted that they should ultimately offer a system to gather data and encourage reflection on:

- The internal performance of the project (What mix of strategies are we employing? Are our partners satisfied? How can we improve?);
- The progress of boundary partners towards the achievement of outcomes (What progress markers have been achieved? What evidence demonstrates this change in behaviour, action, or relationship?); and
- The project's functioning as a unit (How are we doing in helping our partners? Are we learning from experience?).
The Evaluation Plan

The evaluation plan was not developed owing to time constraints but the task was assigned to ILRI M&E unit to work closely with the steering committee and partners.

Site Selection

The process

The preliminary work on the site selection identification process was presented by Emily Ouma. The selection of potential sites focused on districts with CGIAR Research program on livestock and fish and smallholder pig value chains development projects for purposes of learning before going full scale. The process involved:

Step 1: Geographical targeting using GIS characterization.
Step 2: Stakeholder consultation of step 1 and definition of “soft” criteria.
Step 3: Minimum checklist to gather data for more specific site selection (counties and sub-counties).
Step 4: Analysis of steps 1-3 and final site selection

The GIS process was based on 2 basic criteria (pig population density and poverty levels). It targeted 3 types of pig value chains: Peri-urban – urban; Rural – urban; Rural – rural.

Figures 5, 6, 7, 8 and 9 illustrate the result of initial GIS district mapping for the selection process.

Figure 5: Pig population density map
Figure 6: Pig population density map (cut off)

Figure 7: Uganda poverty map (Percentage of population living on less than 1.25$ per day)
**Figure 8:** Uganda poverty map - cut off 50% (Percentage of people living on less than 2$ per day)

**Figure 9:** Target sites based combination of pig population and poverty levels

Based on the hard criteria using GIS, the district that had the highest potential of selection were noted to be:
The other potential districts based on consideration of initial soft criteria were:

<table>
<thead>
<tr>
<th>District</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kayunga</td>
<td>Central</td>
</tr>
<tr>
<td>Mukono</td>
<td>Central</td>
</tr>
<tr>
<td>Bukedea</td>
<td>Eastern</td>
</tr>
<tr>
<td>Kumi</td>
<td>Eastern</td>
</tr>
<tr>
<td>Soroti</td>
<td>Eastern</td>
</tr>
<tr>
<td>Tororo</td>
<td>Eastern</td>
</tr>
<tr>
<td>Kasese</td>
<td>Western</td>
</tr>
<tr>
<td>Hoima</td>
<td>Western</td>
</tr>
<tr>
<td>Kibaale</td>
<td>Western</td>
</tr>
<tr>
<td>Kabarole</td>
<td>Western</td>
</tr>
</tbody>
</table>

The partners’ contribution to the process included helping to identify other non-GIS criteria (soft criteria) for site selection (local knowledge). For instance, the workshop noted that:

- Masaka district has high pig density, very good partnership, although is not high in poverty
- Kamuli district has lower pig density, lower poverty levels but very good partnerships
- Gulu district has low pig density, high poverty levels but promising project partnership ASF, as well as cross-border trade
- Lira district provides good sources of pork for Gulu

The participants commented on the criteria noting that other areas that were left out, Greater Wakiso surrounding Kampala had poverty levels that could be artificial because there are very rich people and very poor people. It was also noted that the spatial analysis along might skew the selection process and that already research has been conducted and available online on factors influencing piggery. Other issues note for consideration before site selection were:

- Participation should be included; in districts with population, many people involved into piggery – in other areas people might be forced into this activity
- Socio-economic factors like HIV/AIDS should be considered (national average has gone down, but some districts like Masaka is leading; ratio poverty-HIV/AIDS along the lake highest) and high number of female-headed households, food insecure (getting bananas from Western region)
- Some districts already have projects with similar objectives e.g. AEC is already working there with Sasakawa (strong partnership)

---

Consideration should also be made of other input suppliers (private sector) and whether they want to support
Existence of active farmers organizations must be considered
The year of the publication (of GIS data) is important because of rapid changes (administration etc.); are there layers on consumption, demand and surplus
Consideration of districts where work has started with other partners
The complete value chain should factored in and hence Kampala should not be left out in this chain to avoid focusing only on production;
updated data needs to be considered (Livestock census 2008), in Lira for example many pigs; partnerships catalyse

A participatory voting exercise was then conducted using small cards by each participant scoring the relation suitability of each priority districts against four soft criteria: potential for partnerships; disease burden; presence or access of inputs and services; and geographical access all year round. The voting process which excluded staff/participants from ILRI and other CGIAR Centers was well received and the results are presented in the following Table.

<table>
<thead>
<tr>
<th>District</th>
<th>Potential partnership</th>
<th>Disease burden in pigs</th>
<th>Presence/ access of input and service providers</th>
<th>Geographical access all year round</th>
<th>Total votes</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kumi</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Tororo</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Lira</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>7</td>
<td>32</td>
<td>6</td>
</tr>
<tr>
<td>Mayuge</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Gulu</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>Soroti</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Bukedea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wakiso</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>56</td>
<td>2</td>
</tr>
<tr>
<td>Mukono</td>
<td>15</td>
<td>9</td>
<td>14</td>
<td>9</td>
<td>47</td>
<td>3</td>
</tr>
<tr>
<td>Kayunga</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Masaka</td>
<td>18</td>
<td>21</td>
<td>16</td>
<td>20</td>
<td>75</td>
<td>1</td>
</tr>
<tr>
<td>Kamuli</td>
<td>15</td>
<td>7</td>
<td>10</td>
<td>9</td>
<td>41</td>
<td>4</td>
</tr>
</tbody>
</table>

**Results of participatory voting for pilot district site selection**

Ranking of Districts

1. Masaka (75 votes)
2. Wakiso (56 votes)
3. Mukono (47 votes)
4. Kamuli (41 votes)
5. Gulu (38 votes)
6. Lira (32 votes)
7. Kumi (12 votes)
8. Soroti (10 votes)
9. Tororo (9 votes)
10. Mayuge (7 votes)
11. Kayunga (6 votes)
12. Bukedea → belongs to Soroti
Part III Way Forward and Concluding remarks

The workshop was concluded by presentation and agreement on the next immediate steps to implement the OM results and complete the site selection exercise as follows:

a. Specific sites in the districts (i.e., sub-counties, parishes, villages)
b. Value chain assessment
c. Test of interventions
d. Completion of the monitoring

The facilitator explained why the OM process was customised and highlighted to draft outputs from the process including project vision, mission, boundary partners, outcome challenges, progress markers, strategy map, monitoring plans. The workshop did not complete the evaluation plan and the Steering Committee was charged to complete it, facilitated by the ILRI M&E experts. The facilitator explained that by drafting the evaluation plan, the project will have a short description of the main elements of the evaluation to be conducted by the partners. This will include the evaluation issue, the way findings will be used, the questions, the information sources, the evaluation methods, the evaluation team, the dates for the evaluation, and the approximate cost. The plan, once completed, will guide the evaluation design and, if the project team decides to use an external evaluator, it can be used to set the terms of reference for the contract.

The OM workshop considered to be very participatory decision making process and ILRI and the project would like to see this throughout the project implementation stages. It was agreed that even if a participant’s district was not considered, one can learn from it for implementation in the district and may be this pilot and the evidence generated can be scaled out elsewhere in the country. A decision was made to establish a steering committee – in line with the needs of the project and this will be communicated to partners in good time to facilitate participation. A project communication site was established by Brigitte: project wiki
to facilitate all project partners to have access to all information (http://livestock-fish.wikispaces.com/spvcd_omworkshop_oct2012).

After concluding remarks from the facilitator about operationalization of the OM workshop strategies and results, final statements from project coordinating team at ILRI and others, participants certificates were awarded and workshop officially closed.
Key Resources and References


Bakewell, O. and Garbutt, A. (2005) The use and abuse of the logical framework approach, SIDA.

Earl, Sarah, Fred Carden and Terry Smutylo (2001). Outcome Mapping: Building Learning and Reflection into Development Programs, International Development Research Centre (IDRC)


Young J. and Mendizabal E. (2009). Helping researchers become policy entrepreneurs, ODI
## Annexes

### Annex A: Workshop Program

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thursday 11 October</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td>Opening of the event (Dr. Loyce Okedi, NaLIRRI)</td>
<td></td>
</tr>
<tr>
<td>8:45</td>
<td>Introduction of Participants (30 min)</td>
<td>W. Ochola</td>
</tr>
<tr>
<td>9:15</td>
<td>Introduction of Workshop objectives and procedures (10 min)</td>
<td>W. Ochola</td>
</tr>
<tr>
<td>9:25</td>
<td>Presentation of the ILRI Research for Development projects working on SPVC in Uganda</td>
<td>D. Pezo/K. Rosel</td>
</tr>
<tr>
<td>10:00</td>
<td>Situation Analysis of the Pig Sector in Uganda (Preliminary report)</td>
<td>A. Tatwangire/ F. Ejobi</td>
</tr>
<tr>
<td>10:40</td>
<td>Group photo</td>
<td></td>
</tr>
<tr>
<td>10:45</td>
<td>Tea/Coffee break</td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>Launching the Participatory Outcome Mapping Exercise</td>
<td>W. Ochola</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13:30</td>
<td>Group discussions on activities related to Objective 1: Identification of constraints and opportunities in smallholder pig value chains in Uganda</td>
<td>E. Ouma (Introduction) W. Ochola</td>
</tr>
<tr>
<td>15:00</td>
<td>Tea/Coffee break</td>
<td></td>
</tr>
<tr>
<td>15:30</td>
<td>Group discussions on activities related to Objective 1 (continues)</td>
<td>W. Ochola</td>
</tr>
<tr>
<td>16:30</td>
<td>Group reports</td>
<td>B. Maass/K. Rosel</td>
</tr>
<tr>
<td>18:00</td>
<td>Welcome Cocktail</td>
<td></td>
</tr>
<tr>
<td><strong>Friday 12th October</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td>Group discussions on activities related to Objective 2: Development and pilot testing of integrated packages for smallholder pig production and market access in Uganda.</td>
<td>D. Pezo (Introduction) W. Ochola</td>
</tr>
<tr>
<td>10:00</td>
<td>Tea/Coffee break</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td>Group discussions on activities related to Objective 2 (continues)</td>
<td>W. Ochola</td>
</tr>
<tr>
<td>11:30</td>
<td>Group reports</td>
<td>K. Marshal/M.Dione</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13:30</td>
<td>Group discussions on activities related to Objective 3: Documentation, communication and promotion of appropriate evidence-based models for sustainable, pro-poor pig value chains</td>
<td>M Kidoido (Introduction) W. Ochola</td>
</tr>
<tr>
<td>15:00</td>
<td>Tea/Coffee break</td>
<td></td>
</tr>
<tr>
<td>15:15</td>
<td>Group reports</td>
<td>B. Lukuyu/E. Mutua</td>
</tr>
<tr>
<td><strong>Friday 12th October (continues)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:45</td>
<td>Synchronizing project outcomes to overall project goal (Group work)</td>
<td>W. Ochola</td>
</tr>
<tr>
<td>16:45</td>
<td>Group reports to plenary</td>
<td>W. Ochola</td>
</tr>
<tr>
<td><strong>Saturday 13th October</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Activity</td>
<td>Presenter(s)</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>8.30</td>
<td>The site identification process</td>
<td>E. Ouma</td>
</tr>
<tr>
<td>9.00</td>
<td>Group discussions on “other soft criteria” for site selection and site scoring exercises</td>
<td>W. Ochola</td>
</tr>
<tr>
<td>10:00</td>
<td>Tea/Coffee break</td>
<td></td>
</tr>
<tr>
<td>10.30</td>
<td>Group reports</td>
<td>D. Pezo/ M. Kidindo</td>
</tr>
<tr>
<td>11:15</td>
<td>Brief on way forward with the site selection process</td>
<td>E. Ouma/D. Pezo</td>
</tr>
<tr>
<td>11:30</td>
<td>Wrap up and award of certificates</td>
<td>W. Ochola</td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13:00</td>
<td>Departure of participants</td>
<td></td>
</tr>
</tbody>
</table>
Annex B: PowerPoint Presentations
Annex Ba: Situation Analysis of Smallholder Pig value Chain in Uganda by Alex Tatwangire

The Conditions within which the Smallholder Pig Value Chains Operate in Uganda: preliminary results

Alex Tatwangire (tatwangire@yahoo.co.uk)

The livestock sector in Uganda

- Important sector of the economy
- Contributes up to 23.8% of the GDP, generating about 43% of export earnings (Republic of Uganda 2016; NASSA 2014)
- contributes 15% of agricultural GDP (NASSA 2013). A 3% increase in the number of livestock & poultry 2006-2010 (NASSA 2014)
- About 4.5 million households (70.8%) rear at least one kind of livestock/poultry (NASSA, 2013)
- Pig production widespread & increasing at a high rate
- About 33.8% (1.3 millions) of all households own at least 1 pig (NASSA, 2009)
- The number of pigs increased from 0.1 million in 1980 to 3.3 in 2000

Policy framework in Uganda

Committed to increase investment in core areas of:

- Agricultural research, agricultural advisory services, pest and disease control, regulatory services, promoting value chain development, improved use of water for agricultural production, and the support of extension services delivery in local governments,
- Concerns of a costly policy duplication in the past 12 years.

The National Development Plan (NDP), 2009-2014

- Replaced the two former national plans: The Poverty Eradication Action Plan (PEAP) and the Strategic Plan for Modernisation of Agriculture (SPMA), 2003 - 2008.
- In line with the Agricultural Sector Development Strategy & Investment Plan (ASDSIP), a guide to the country’s agricultural priorities, development programs, and agricultural transformation.
- A road-map to public interventions in the agricultural sector, to boost agricultural growth, food security and poverty reduction.

Policy framework in Uganda (ctn’d)

Animal health
- National Animal Health Policy
- National Veterinary Services Plan (NVSP) II 2014-2019
- National Animal Health and Disease Response Policy

Food safety
- National Food Safety Policy
- National Agricultural Marketing Board Policy

Other issues
- National Land Use Policy
- National Forestry Policy
- National Agricultural Policy
- National Water Policy
- National Seed Policy
- National Livestock Policy
Consumption of pork and pig meat products

- Increase in Uganda's human population, currently estimated to be about 34,612,250 millions; about 773,463 reside in Kampala.
  - High domestic & regional demand for pork/pork products; increase in human population growth, urbanization, purchasing power & change in tastes & preferences.

Daily consumption of pigs (pigs slaughtered per day) in Kampala is estimated to be between 300 and 500.

- Pork products in Uganda include: live pigs, large pieces (the thighs & chest) of pork, pork chops, pork sausages, bacon, ham, roasted (or fried) pork chops, and ribs.

Table: Proportion of households that owned, sold, and slaughtered pigs, 1990-2010

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TotaI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of households (in thousands)</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Male &amp; female</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Total number of households</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
</tbody>
</table>

Pig production in Uganda

- Pig industry in Uganda underdeveloped.
  - About 80-90% of livestock keepers are smallholders, keep pigs in the backyard.
  - Has increased in the last 3 decades.
  - Livestock growth rate (3%) lower than growth rate (5.3%) in human population.

The current population of pigs estimated to be 3.2 million

- The country has the potential to be self-sufficient in pork products.
- The numbers of pigs slaughtered increasing.

- Pigs can have high productivity & growth rates.
  - Are relatively resistant to some diseases, and their unrestricted breeding habits allow the use of various feedstuffs.
  - Only pigs & poultry continue to register minor gains in off-take rate.

Table: Breeds composition of the national pig herd and access to improved genetics

- Pig breeds: Performance traits and constraints
  - Landrace: Medium-sized pigs, good mother and milker, good feed conversion, large and meaty, but strong pigs, many breeds have low back fat, are the most popular breed in Uganda.
  - Large white: White in color, large body, good mother and milker, not very docile, difficult to breed.
  - Hampshire: Dark in color, good mother and milker, not very docile, difficult to breed.
  - Duroc: White in color, large body, good mother and milker, not very docile, difficult to breed.
  - Welsh: Saddleback: Black in color, small body, good mother and milker, not very docile, difficult to breed.
  - Clydesdale: Medium-sized pigs, good mother and milker, not very docile, difficult to breed.
  - Various crossbreeds: Bred for production, resistance to disease, high feed conversion, large body, good mother and milker, not very docile, difficult to breed.
  - Local breeds: Medium-sized pigs, docile, well adapted to local weather, very resistant to diseases, high feed conversion, large body, good mother and milker, not very docile, difficult to breed.
Pig production systems in Uganda

- Pigs are kept housed all the time (are provided with feed, water, and protection from extreme weather).
- Characterized by high demand for labour/households. Provides higher farm outputs, assuming 10% of a small to medium farm.

- Pigs are partly housed & partly kept outdoors on the pasture.
- Allows improvement in feeding, growth rate, disease control, control of heat stress, and fostering the quality of meat. Demands high amounts of labour, but gives relatively high farm output.

- The simplest & most common system in Uganda. Pigs are kept out-door, so they move around the homestead as they feed on their own, or gathered.
- Often practiced by the very poor, who tend to invest in a slow-cost low-output farming system. Characterized as subsistence production.

Trends in the level of imports and exports (FAOSTAT, 2012)

The number of live pigs imported and exported in and out of the country is almost non-existent. This has been the case since 1980.

Imports and Exports of Live Pigs and Pig Meat products, 2007-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live pigs imported</td>
<td>-</td>
<td>1086</td>
<td>762</td>
<td>48</td>
<td>-</td>
</tr>
<tr>
<td>Value (Million US$)</td>
<td>25.5</td>
<td>62.1</td>
<td>80.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Quantity (Tons)</td>
<td>134</td>
<td>201</td>
<td>122</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Live pigs exported</td>
<td>686</td>
<td>877</td>
<td>137</td>
<td>1255</td>
<td>2422</td>
</tr>
<tr>
<td>Value (Million US$)</td>
<td>139</td>
<td>195</td>
<td>26.5</td>
<td>224</td>
<td>448</td>
</tr>
<tr>
<td>Quantity (Tons)</td>
<td>134</td>
<td>179</td>
<td>205</td>
<td>320</td>
<td>540</td>
</tr>
<tr>
<td>Pig meat products imported</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Value (Million US$)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Quantity (Tons)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Compiled from Uganda Revenue Authority (URA) data, Division of Research.
Major constraints of smallholder pig production in Uganda:

- Lack of capital on farms; limited access to information/training on pig husbandry
- Poor management (animal feeding/nutrition)
- Expensive veterinary services/extension services
- Fake drugs and feeds.
- Limited access and knowing which pig breeds are productive for different production systems.
- Poor structure of pig industry (more traders in the supply chain).
- Farmers are poorly organized (unable to take advantage of collective marketing/upgrading).
- Low productivity due to technical-management problems on farms.

## Conclusions 1

Access to affordable credit, training, extension services, veterinary services, improved infrastructure and good breeds crucial if pig productivity is to improve.

Improvement in the pig production system due to recent routine interventions in the control of animal diseases.

Efforts to achieve meat output targets in the country limited by livestock policies that focus more on cattle, goats, sheep and chicken enterprises that require high cost of production.

The private veterinary services sector is growing at a very slow pace compared to the demands for such services.

The animal feed industry is undeveloped, unable to ensure supply of quality feed all year round due to limited infrastructure. Problem of substandard feeds and feed stuffs.

## Conclusions 2

Poor hygiene/contamination of pork, abattoirs, and pork joints is greatly reducing the competitiveness of pig sector in Uganda.

Boosting pig productivity requires improvement in breeds, feed production, and modern pig abattoirs.

Meat inspectors in the country demoralised due to the lack of authority to punish culprits of illegal and unhygienic pig slaughter.

The market of live pigs, pork & pork products is segmented and needs to be improved to reward quality and supply to the poor.

The increase in the number of pigs reared appears to be more pronounced among the richest 25 percent & poorest 25 percent of households.
Annex Bb: Outcome Mapping Process by Washington Ochola

Smallholder Pig Value Chains Development (SPVCD) in Uganda Project

Outcome Mapping and Site Selection Workshop
11 – 13 October 2012
Process Presentation by Washington Ochola

Specific Objectives

- Identify market opportunities for pork in Uganda, and the multiple factors preventing smallholder pig producers from exploiting those opportunities, with focus on constraints caused by animal disease threats, feed resources, and performance of markets and services.
- Develop and pilot test a set of integrated packages for smallholder pig production and market access for specific production systems, resource profiles and market settings in Uganda.
- Document, communicate and promote appropriate evidence-based models for sustainable, pro-poor pig value chains.

SPVCD Goal

- Initiated to address opportunities for improvement of incomes and assets among pig producers and traders in Uganda.

Improve livelihoods, incomes and assets of smallholder pig producers, particularly women, in sustainable manner through increased productivity, reduced risk, and improved market access in pig value chains.

Objectives of Workshop

- To appreciate the situation of pig production and marketing in Uganda in the context of the SPVCD project and the ILRI Research for Development (R4D) strategy.
- To gain common understanding of the design and implementation scheme of the SPVCD project.
- Use the OM Approach to design project implementation plan:
  - (i) identification of constraints and opportunities in smallholder pig value chain in Uganda;
  - (ii) development and pilot testing of integrated package for smallholder pig production and market access in Uganda;
  - (iii) documentation, communication and promotion of appropriate evidence.
- Use outcome mapping approach to lay out the impact pathways for the project and indicators of progress towards specified outcomes.
- Select pilot sites (districts) for the implementation of the project

Brief definition of OM

- A participatory method for planning, monitoring and evaluation
- Focused on changes in behaviour of those with whom the project or program works
- Oriented towards social & organizational learning

3 Many of the slides are adapted from presentation by Korapin Tohtubtiang at the Outcome Follow Up Meeting with the Vietnam EcoZD team – Accessed on October 10th 2012 from http://www.slideshare.net/ILRI/application-of-outcome-mapping-participatory-me-for-ecozd-13098686
**At the Heart of OM**

- **Behavioural change**
  - Outcomes are defined as changes in the behaviour, relationships, activities, or actions of the people, groups, and organisations with whom a programme works directly.

- **Boundary partners**
  - Those individuals, groups, and organisations with whom the programme interacts directly and with whom the programme anticipates opportunities for influence.

- **Contributions**
  - By using OM, a programme is not claiming the achievement of development impacts, rather it focuses on its contributions to outcomes.

**OM - Translating Research into Action**

**Three key concepts in OM:**

1. **Sphere of influence**
2. **Boundary Partners**
3. **Changes in behaviour as ‘Outcomes’**

**Steps in OM**

**Design Stage (Intentional Design Stage),**

- Establish consensus on the macro level changes
- Why? (What is the vision to which the project wants to contribute?)
- Who? (Who are the project's boundary partners?)
- What? (What are the tangible changes that are being sought?)
- How? (How will the project contribute to the change process among its boundary partners?)

**The Workshop Process**

- [Diagram showing process steps]
Monitoring Stage
- Provides a framework for the ongoing monitoring of a project’s actions and the boundary partners' progress toward the achievement of outcomes.
- Based largely on systematized self-assessment. Develop tools:
  - Outcome Journal (to track impact against progress markers);
  - Strategy Journal (that seeks to test and adapt the projects strategy in ever changing circumstances); and
  - Performance Journal (that logs organizational practices and gauges the need for improvements).

Evaluation Planning
- Helps the project identify evaluation priorities (more in-depth review of progress)
- Develop an evaluation plan that makes good use of resources and provides strategic benefit to the project.

There is a limit to our influence

Output – Outcome – Impact Continuum

The SPVCD Result Chain

Applying OM – The in-between Process

*Research findings
*Academic journal

- Access to markets
- Improved Feeding
- Reduced Disease Risks
- In full control of SPVCD
- ????

*Improved Assets base, Income, Food Security
*in full control of SPVCD
Step 1: Vision

Improved human, social, and environmental wellbeing

Step 2: Mission

The mission is that "bite" of the vision statement on which the program is going to focus.

Group Exercise

- Discuss and formulate SPVCD Mission and Vision

Step 3: Boundary Partners

Those individuals, groups, and organizations with whom a program interacts directly to effect change and with whom the program can anticipate some opportunities for influence.

Who are your boundary partners?

Group Exercise

- Identify, Characterize, and Position BPs for the SPVCD Project – Use Color-coded cards and illustration of the wall
Step 4: Outcome Challenge

- Describes how one BP is contributing maximally to the vision.
- Sets out the ideal actions, relationships & activities
- A cluster of ‘Love to see’

Outcome Challenge

SPVCD Team

Progress markers

Step 5: Progress Markers

Love to see
Like to see
Expect to see
(Late positive responses)

Strategy Map

Strategies for individual – aiming for BPs

<table>
<thead>
<tr>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-1.1</td>
<td>E-2.1</td>
<td>E-3.1</td>
</tr>
<tr>
<td>E-2.2</td>
<td>E-3.1</td>
<td></td>
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</tbody>
</table>

Strategy Map

Strategies to change working environment of BPs

<table>
<thead>
<tr>
<th>Causal</th>
<th>Persuasive</th>
<th>Supportive</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-1.1</td>
<td>E-2.1</td>
<td>E-3.1</td>
</tr>
<tr>
<td>E-2.2</td>
<td>E-3.1</td>
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</tr>
</tbody>
</table>

Three kinds of monitoring information

Program

Partner

Strategies

Implementation

Outcomes

Influence & feedback from the partners
Performance Journal

Strategic Journal

Outcome Journal
Group Exercises

• Based on Previous Group Work and in line with SPVCD outcomes/objectives/results,
  Design:
  – Outcome challenges
  – Progress markers
  – Strategy Map
  – Monitoring Plan

7 Key Organizational/Project Practices

1. Prospecting for new ideas, opportunities, and resources
2. Seeking feedback from key informants
3. Obtaining the support of your next highest power
4. Assessing and (re)designing products, services, systems, and procedures
5. Checking up on those already served to add value
6. Sharing your best wisdom with the world
7. Experimenting to remain innovative
8. Engaging in organizational reflection
## Annex C: List of Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Institutional affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyce Okedi</td>
<td>Director_NALLIRI</td>
</tr>
<tr>
<td>Henry Mulindwa</td>
<td>NARO/NaLIRRI – Tororo</td>
</tr>
<tr>
<td>Sam Mpiira</td>
<td>NARO/NACRRI – Kawanda</td>
</tr>
<tr>
<td>Noeline Nantima</td>
<td>MAAIF - Principal Vet Officer</td>
</tr>
<tr>
<td>Hellen Nakimbugwe</td>
<td>MAAIF (NAGRC&amp;DB)</td>
</tr>
<tr>
<td>Patrick Okello</td>
<td>UBOS (Kampala)</td>
</tr>
<tr>
<td>Francis Ejobi</td>
<td>College of Vet Med - Makerere University / SFFF-Uganda</td>
</tr>
<tr>
<td>Charles Waiswa</td>
<td>College of Vet Med - Makerere University</td>
</tr>
<tr>
<td>Zachary Nsadha</td>
<td>College of Vet Med - Makerere University</td>
</tr>
<tr>
<td>Denis Mpairwe</td>
<td>College of Agric. &amp; Environ Sci. - Makerere University</td>
</tr>
<tr>
<td>Donald Kugonza</td>
<td>College of Agric. &amp; Environ Sci. - Makerere University</td>
</tr>
<tr>
<td>David Mutetikka</td>
<td>College of Agric. &amp; Environ Sci. - Makerere University</td>
</tr>
<tr>
<td>Walter Odetikka</td>
<td>Dean Faculty of Agric &amp; Environment_Gulu University</td>
</tr>
<tr>
<td>Lawrence Mayega</td>
<td>DVO-Masaka</td>
</tr>
<tr>
<td>Tony Aliro</td>
<td>DVO Gulu</td>
</tr>
<tr>
<td>Patrick Oine</td>
<td>DVO Wakiso</td>
</tr>
<tr>
<td>David Kiryabwire</td>
<td>DVO Mukono</td>
</tr>
<tr>
<td>Noah Kiwanuka</td>
<td>Vet Officer Mukono Municipality</td>
</tr>
<tr>
<td>Eve Luvumu</td>
<td>NAADS-Masaka</td>
</tr>
<tr>
<td>Peter Lule</td>
<td>NAADS/ Ag. Econ. Makerere University</td>
</tr>
<tr>
<td>Nancy Rapando</td>
<td>VEDCO</td>
</tr>
<tr>
<td>Mary Nyasimi</td>
<td>CSRL – Iowa State Univ./VEDCO</td>
</tr>
<tr>
<td>Gideon Nadiope</td>
<td>VEDCO/CSRL (Kamuli)</td>
</tr>
<tr>
<td>John Jagwe</td>
<td>FARMGAIN AFRICA (Kampala)</td>
</tr>
<tr>
<td>Cyrille Pissang Tchangai</td>
<td>VSF - Uganda Country Director</td>
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<tr>
<td>Ponsiano Nyombi</td>
<td>Kamuzinda Farm (Masaka)</td>
</tr>
<tr>
<td>Samuel Ssekondwa</td>
<td>Secretary-Kyanamukaka-Kabonera Farmers Association</td>
</tr>
<tr>
<td>Joseph Sewanoda</td>
<td>Chairman Mukono Pork Traders Association (Mukono)</td>
</tr>
<tr>
<td>Christopher Mulindwa</td>
<td>Pig Production and Marketing Uganda</td>
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<tr>
<td>Alex Kyeyune</td>
<td>Pig Production and Marketing Uganda</td>
</tr>
<tr>
<td>Ezekiel Kisambira</td>
<td>High Heights Services Initiative (Kampala)</td>
</tr>
<tr>
<td>Winnie Babirye</td>
<td>Nirudi Firm (Wakiso)</td>
</tr>
<tr>
<td>Joel Lugoloobi</td>
<td>Agro-Empowerment Center</td>
</tr>
<tr>
<td>Simon Mateega Lubega</td>
<td>Project Coordinator-Wambizzi Coop Society Ltd</td>
</tr>
<tr>
<td>Washington Ochola</td>
<td>RUFORUM (Outcome Mapping Facilitator)</td>
</tr>
<tr>
<td>Maass Brigitte</td>
<td>CIAT-Nairobi</td>
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<tr>
<td>Ben Lukuyu</td>
<td>ILRI-Nairobi</td>
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<tr>
<td>Karen Marshall</td>
<td>ILRI-Nairobi</td>
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<tr>
<td>Edna Mutua</td>
<td>ILRI-Nairobi</td>
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<tr>
<td>Michael Kidoido</td>
<td>ILRI-Nairobi</td>
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<tr>
<td>Kristina Rosel</td>
<td>ILRI-Kampala</td>
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<tr>
<td>Michel Dione</td>
<td>ILRI-Kampala</td>
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<tr>
<td>Alex Tatwangire</td>
<td>ILRI-Kampala</td>
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<tr>
<td>Emily Ouma</td>
<td>ILRI-Kampala</td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
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</tr>
<tr>
<td>Danilo Pezo</td>
<td>ILRI-Kampala</td>
</tr>
<tr>
<td>Rachel Miwanda</td>
<td>ILRI-Kampala (Administrative Assistant)</td>
</tr>
<tr>
<td>Paul Basaija</td>
<td>ILRI-Kampala (Driver/Messenger)</td>
</tr>
</tbody>
</table>
### Annex D: Communication Plan/Strategy of the SPVCD Project

<table>
<thead>
<tr>
<th>Target/Audience</th>
<th>Products, Services and issues to communicate (1)</th>
<th>Knowledge, attitude and practice (KAP) (2)</th>
<th>Action to be taken after (communication) feedback (5)</th>
<th>Method/media of communication (3)</th>
<th>What feedback is needed from them (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers and Farmer Organizations</td>
<td>Market information</td>
<td>Good prices, animal characteristics (size, age)</td>
<td>Follow up and update information</td>
<td>Radio, telephone, leaflets</td>
<td>How relevant to the production; efficacy of information</td>
</tr>
<tr>
<td>Training Institutions</td>
<td>Best management practices on pig production</td>
<td>Problem-solving knowledge</td>
<td>Attachment of students of the institution to the farmers groups/project</td>
<td>Technical brief, journal article</td>
<td>Relevance of the information for the training</td>
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<tr>
<td>Research Institutions</td>
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<td>Farmer Support Agents/Extension</td>
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<tr>
<td>Project Implementation Partners/BPs</td>
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<tr>
<td>Government Line Ministries (Agriculture, regional trade, Education, Health, Planning, Finance, Natural Resources, etc.)</td>
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<tr>
<td>Private Sector (industrialists, seed companies, input suppliers, processors, exporters, buyers, small traders)</td>
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<tr>
<td>Donors</td>
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<td>Civil Society Organizations (CSO)</td>
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<tr>
<td>General Public</td>
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Annex E: Project Outcome Monitoring Plan

**Project Goal:** To improve livelihoods, incomes and assets of smallholder pig producers, particularly women, in a sustainable manner, through increased productivity, reduced risk, and improved market access in pig value chains.

**Objectives:**
1. To identify market opportunities for pork in Uganda, and the multiple factors preventing smallholder pig producers from exploiting those opportunities, with focus on constraints caused by animal disease threat, feed resources, and performance of markets and services.
2. To develop and pilot test a set of integrated packages for smallholder pig production and market access for specific production systems, resource profiles and market settings in Uganda.
3. To document, communicate and promote appropriate evidence-based models for sustainable, pro-poor pig value chains.

**Vision**
Empowered and efficient smallholder pig producers, with increased productivity, having equitable access to markets, information, knowledge, and improved technologies for sustainable and resilient livelihoods.

**Mission**
- Organize interest groups of producers and other value chain actors
- Improve access to information and markets
- Create linkages among stakeholders to service provision and sustainability
- Increase knowledge of pig farmers on animal health and disease control, food safety, breeding and feeding

<table>
<thead>
<tr>
<th>Outcome Change Monitoring Issue</th>
<th>Who will use information</th>
<th>Purpose of Information</th>
<th>When is the information needed</th>
<th>Who will collect information</th>
<th>How often will it be collected</th>
<th>How will it be collected</th>
<th>Proposed Monitoring Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary partner achievement of outcomes</td>
<td>Project - Smallholder farmers - Service providers and extension agents.</td>
<td>Causing change in behaviour/workin g - Enhancing productivity Reporting back to</td>
<td>Annually - Quarterly - End of project - Semi annual - ad hoc</td>
<td>Students - ILRI staff - Extensionist service providers - ME staff - Farmers and</td>
<td>Annually - Quarterly - Monthly - daily - End of project - Semi</td>
<td>- Short surveys - Periodic Periodic Reports - Actor testimony</td>
<td>- Project Outcome Plan/Journal - Questionnaires - Observation</td>
</tr>
<tr>
<td>Project Strategy(ies)</td>
<td>donors - Production of journals and theses</td>
<td>farmer organisations - annual ad hoc</td>
<td>Reviews</td>
<td>Project Performance Management Plan</td>
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<tr>
<td>Project Organizational Practices</td>
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<td>Project Risk Management Plan</td>
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<td>Project Communication Plan</td>
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<td>Project Communication Strategy</td>
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