


Module 10: The Role of Extension in Supporting Value Chains Part 2, Practical



LECTURER GUIDE

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Pre-assessment

After reading through the module overview and introduction, complete the following pre-assessment in order to determine how comfortable you are with the topic of extension. You will be asked to complete a post-assessment after you have worked through the learning content. Rate your knowledge on the topics on a scale of 1 to 5 by circling the corresponding number.

	Question	Self-assessment				
		Low			High	
1	Can you confidently use market analysis tools?	1	2	3	4	5
2	Can you explore value chain upgrading strategies?	1	2	3	4	5
3	Are you able to evaluate the use of ICTs in value chain services in the agriculture sector?	1	2	3	4	5

Answer: Learner's own answer.

Study Unit 1: Using market analysis tools

Session 1.1: Market strategies

Activity 1.1 Individual activity: Market strategies

Answer the following questions in your own words.

1. Distinguish between the intermediary firm and the inclusive business model. (20)

Answer:

Intermediary firm business model

The intermediary firm business model takes on a chain-wide approach, but it is selective in that the work is channelled towards a single or a small number of firms. These firms are normally major aggregators within a sub-sector or processors. They are not at the end of a market chain: they are supplying other larger processors or retail firms.

Marketing approach

Intermediary firm has identified market with links to target buyers. This approach seeks to align suppliers more effectively, to improve efficiency in the series of actors who supply them. Many value chain projects work around a large intermediary firm, which often provides the bridge between informal and formal business operations. This is a particularly important partnership process for smallholder farmers who are often unaware of the product requirements for formal and higher value markets.

<i>Target clients</i>	<i>Business partners from farmers; Traders; Business development services; Finance services; and Government support for business.</i>
<i>Lead agency</i>	<i>Intermediary firm working with NGOs</i>
<i>Key service providers</i>	<i>Public research; Input supply; Farmer groups; and Value chain actors.</i>
<i>Finance services</i>	<i>Banks; and Impact investors.</i>
<i>Funding</i>	<i>Private sector co-investment; Public sector; Foundations; and NGO co-investments.</i>

Inclusive business model

The inclusive business model is an approach based on lead firms that build robust and long-term trading links with a set of established business partners, from production through to retail. The traditional business model focuses on a single firm, whereas the inclusive business model aims to provide a set of core business principles that are supportive of partners along the chain and specific attention is paid to the types of procurement (payment) practices and support services that are required to improve the stability of trade with smallholder farmers.

<i>Marketing approach</i>	<i>The lead firm identifies a market to align suppliers more effectively and to improve efficiency in the series of actors who supply them. Many value chain projects work around a large intermediary firm, who is often the bridge between informal and formal business operations.</i>
<i>Target clients</i>	<i>All suppliers in the value chain that support the lead firm, with particular emphasis on trading conditions and relations with smallholder farmers.</i>
<i>Lead agency</i>	<i>Lead firm working with NGOs and target suppliers.</i>
<i>Key service providers</i>	<i>All required core chain and service providers necessary for the smooth operations of the market chain.</i>
<i>Finance services</i>	<ul style="list-style-type: none"> • <i>Banks; and</i> • <i>Trade finance through business partners.</i>
<i>Funding</i>	<ul style="list-style-type: none"> • <i>Private sector; and</i> • <i>Co-investment from public sector</i>

Total: 20 marks

Session 1.2: Market opportunity identification (MOI)

Activity 1.2 Individual activity: Market opportunity identification (MOI)

Answer the following questions in your own words.

1. Briefly explain the term market opportunity identification (MOI). (5)

Answer:

The aim of market opportunity identification (MOI) is to provide farmers and field agents with a simple and systematic participatory method for collecting market information to identify and select products and services for investment and agri-enterprise development. MOI enables local producers to undertake market studies and identify investment options, based on their local knowledge and on market demand, rather than relying on pre-selected products that have been selected by external experts. The ability to identify market opportunities is a core skill that farmers and field agents need to acquire if they are to engage with markets successfully, particularly when a marketing project ends.

2. Identify the steps involved in the MOI process. (5)

Answer: The following steps are involved in the MOI process:

- *Step 1: Organise the survey team;*
- *Step 2: Design an MOI survey questionnaire or checklist;*
- *Step 3: Assess and select market options;*
- *Step 4: Analyse profitability;*
- *Step 5: Share results with farmers and select products.*

Total: 10 marks

Session 1.3: Value chain analysis and upgrading

Activity 1.3 Individual activity: Value chain survey

Answer the following questions in your own words.

1. List the seven steps involved in the value chain analysis. (7)

Answer: The value chain analysis generally consists of the following steps:

- *Select the survey team, organise support staff and meet lead clients (training and innovation).*
- *Identify key issues for analysis.*
- *Conduct a literature review.*
- *Select market and key informants.*
- *Map the market chain.*
- *Prepare a market survey questionnaire or checklist.*
- *Visit markets and key informants in the market chain to collect information:*

2. Discuss the role of the literature review in the value chain analysis. (8)

Answer:

The literature review, which is based on the information in secondary sources, should precede the collection of primary data from the field. The literature review provides the team with information on:

- *The production and marketing system;*
- *Gaps to be filled by the primary data; and*
- *The essential background for subsequent fieldwork and analysis.*

Key sources of secondary information include:

- *Official statistics from statistical departments;*
- *Ministries of agriculture, trade or finance;*
- *Donor agencies;*
- *The Internet;*

- *NGO reports;*
- *Specialised journals;*
- *Bulletins and newsletters;*
- *Documentation of trade associations and chambers of commerce; and*
- *Other rural development projects.*

This information is cheaper to access than primary data from the field and it should provide the team with an important framework from which to assess information given at the interview stage.

3. Distinguish between market participants and knowledgeable observers as key informants in the value chain analysis. (5)

Answer:

Market participants are the actors involved in the production, marketing and processing of the agricultural commodity that is being analysed. Examples of market participants include:

- *Input suppliers, farmers;*
- *Traders;*
- *Transporters;*
- *Storage service providers;*
- *Processing firms;*
- *Importers; and*
- *Exporters.*

Knowledgeable observers are insightful, knowledgeable people who do not participate in the production or marketing of the commodity, but who can offer a broad, and sometimes detailed, perspective on the sub-sector.

4. Identify seven tools that can be used to collect primary data in the value chain analysis. (7)

Answer: Any seven of the following tools:

- *Focus group;*
- *Product ranking and prioritisation;*
- *Historical calendars;*
- *Market mapping;*

- *Evaluation of service provision;*
- *Market visits;*
- *Learning journeys;*
- *Checklists or semi-structured interviews;*
- *Structured interviews; and*
- *Direct observation.*

5. Explain the problem tree analysis and the way in which it can be used in the value chain analysis. (5)

Answer:

The problem tree analysis is a tool that can help a survey team to think through a specific challenge and to identify the range of problems that prevent a goal from being achieved. In the marketing context, the problem tree can be used to identify problems that reduce market performance for a specific product in a selected market chain.

6. Name the main sections that should be included in the survey report, which is written at the end of the value chain analysis. (8)

Answer: Survey reports generally have the following main sections:

- *Executive summary;*
- *Introduction;*
- *Target clients for the study;*
- *Methodology;*
- *Key findings;*
- *Specific recommendations to the target clients;*
- *Conclusions; and*
- *Annexures.*

Total: 33 marks

Summative assessment: Unit 1

Answer the following questions in your own words.

1. Briefly explain the livelihood marketing strategy. (6)

Answer:

The livelihood marketing strategy typically begins with a primary focus on supporting farmer organisations and identifying opportunities for farmers to enhance productivity, nutrition and market linkage. The intervention is regarded as a livelihood strategy, because it aims to assist farmers in adopting more sustainable production methods, promotes crop/enterprise diversification and support in other areas, such as savings and loans, as well as water and sanitation to stabilise farming families and build their resilience.

2. Identify three situations that offer market opportunities. (3)

Answer: The following three main situations that offer market opportunities:

- *Supplying a product that is in short supply;*
- *Supplying an existing product in a new or improved way; and*
- *Supplying a new product.*

3. Explain why it is important to include farmers in the survey team that conducts a market survey. (4)

Answer: Farmers are included in the survey team, because:

- *They are the clients in the research and, therefore, their point of view is important;*
- *The participate in the decision-making when market options are selected and discarded;*
- *The survey will gain more credibility from the rural community if smallholder producers, who are their equals, are included in the team, thereby increasing the possibility of implementing research results.*

4. Discuss the product filtering process, which is performed to assess and select market options. (10)

Answer:

The filtering process, which involves discarding unsuitable market options, is based on:

- *Production feasibility;*
- *Business attractiveness;*
- *Viability on small farms; and*
- *Risk and contribution to production sustainability.*

The product filtering process involves the following three levels of filtering:

Filter 1: Obvious discards

The first level of filtering discards products that are not suitable for further consideration. This filtering eliminates products that cannot be grown in the area for agronomic or environmental reasons, as well as products that are unsuitable for smallholder producers, in that they require too high a level of investment, sophisticated production methods, or they are culturally or socially unacceptable.

Filter 2: Market option characterisation

The second level of discard is based on an objective analysis of agronomic, economic and financial characterisation. This leads to summary tables that are used to systematise information, based on economic characteristics, marketing requirements and profitability.

Filter 3: Final evaluation of market options with the rural community

The final filtering and product selection is based on producer preferences. This process can be done for mixed groups or through a series of meetings with producers according to their wealth ranking, so that investment options can be made according to the levels of risk that producers want to take on.

5. What are the main areas of investigation in the value chain analysis? (9)

Answer:

- *Commodity characteristics;*
- *Consumption patterns;*
- *The supply situation;*
- *Prices;*
- *The organisation of marketing systems;*
- *The operation of marketing systems;*
- *Marketing infrastructure;*
- *Government, marketing institutions and policies; and*
- *International trade and commodity competitiveness.*

6. Identify the main types of information provided by the literature review. (3)

Answer: The literature review provides information on:

- *The production and marketing system;*
- *Gaps to be filled by the primary data; and*
- *The essential background for subsequent fieldwork and analysis.*

Total: 35 marks

Study Unit 2: Value chain upgrading strategies

Session 2.1: Value chain upgrading strategies

Activity 2.1 Individual activity: Value chain upgrading

Answer the following questions in your own words.

1. Identify the factors that influence farmers' market access. (3)

Answer: The factors that affect market access are:

- *Location and business maturity within a target area;*
- *Access to infrastructure, agricultural services, water and production technologies; and*
- *The skills, education and organisation of the farming community in terms of their ambitions, discipline and ability to prepare plans, set goals and follow an implementation schedule.*

2. Briefly discuss commercialising smallholder farmers as a method of upgrading value chains on the farmer level. (5)

Answer:

By its nature, the private sector focuses on profit and sustainability planning. However, the larger firms have come to realise that, as the demand for food products continues to grow, they need to reach out to ever more marginal farming communities. This raises a critical question as to whether these firms have the investment capital and commercial appetite to invest in the business development of pre-commercial farmers.

The more marginal farmers require basic skills building to strengthen their farmer organisations and improve their productivity before they can embark on upgrading their business skills. Once they have acquired business skills, which will allow them to navigate modern market chains, farmers will seek market opportunities more aggressively.

3. Briefly explain the knowledge and skills that extension agents should acquire, in order to assist farmers in value chain upgrading. (8)

Answer:

There are different types of agencies and organisations involved in providing advisory services to farmers, ranging from the public, civil society and private sector. All these service providers need to collect information and gain certain levels of knowledge and competency, before they can provide meaningful advisory services to farmers. Farmers also have a choice in terms of the types of advisory services they need and that they can access through various means, such as kinship, memberships, partnerships, alliances and business relationships.

There is a growing range of extension topics and needs for which most teams and individual agents cannot provide a comprehensive set of services. The more pluralistic nature of modern extension means that farmers have considerably more choice in the types of advice they access, the way they access information and knowledge and whether or not they pay for services. In order to play an effective role, extension agents tend to specialise in specific advisory services.

Extension teams need to define their area of support and agents need to acquire the right set of skills in a particular area, be that input supply, production, post-harvest, marketing, nutrition, gender etc. These core sets of skills change with time and as research identify new needs and clients make investment decisions.

Depending on the type of services, there are many ways in which service providers gain skills and competencies in their professions. Some extension agents are specifically trained in an area through formal national education systems, such as university degrees or college diplomas, while others take courses as part of their working duties and gain certification for specific skills over time and others learn through long-term experience on the job.

Many extension agents are certified or affiliated with an organisation in some way. These certifications and affiliations give the agents legitimacy to provide quality services, which enables the agents to build networks and trust with their clients, whether these are farmer organisations or individual farmers. The long-term nature of extension-agent relationships is based on their performance and also on the means of supporting the service.

To maintain relevance and keep up with current thinking and trends, extension agents need to refresh their skills from time to time and the process of on-the-job training is important to maintain effectiveness.

Total: 16 marks

Session 2.2: Business planning (Business canvas)

Activity 2.2 Individual activity: The business plan

Answer the following questions in your own words.

1. Define the term business plan. (6)

Answer:

A business plan is a document that outlines the financial and operational goals of a business enterprise for the near future and shows how these goals will be achieved. In other words, a business plan is a written description of the future of a business enterprise. A business plan also describes:

- *The enterprise and its products or produce;*
- *How it produces and markets its products;*
- *The risks its faces and how to deal with them; and*
- *Its financial situation and financing needs.*

2. Outline the nine areas of the model canvas. (18)

Answer:

- *Customers: these are the buyers or customers of the product, such as traders or consumers. For most products, there are more than one type of customer, e.g. a supermarket market may buy the highest grade output, but the lower grades will have to be sold in a local wholesale market and lowest quality used to feed animals.*
- *Value proposition (product): this is a statement that clearly and concisely describes the unique value of a firm or group's products and services. It states the firm/group's core objectives, which set it apart from the competition. In most cases, the value proposition focuses on a specific product or service that the farmers plan to produce or sell, e.g. products may include things like maize or milk and a service may include*

- drying and cleaning facilities or contract spraying;*
- *Channels: these are indications of the way in which the group plans to deliver the product to the buyer, e.g. by having members deliver to a village collection center ready for pick-up.*
 - *Customer relationships, which indicate how the group plans to identify buyers and create and maintain relationships with them;*
 - *Income, which is the money the group earns from selling the product;*
 - *Key resources: these are the inputs and resources that the group uses to produce the product and they including land, equipment, seed, fertiliser and labour, as well as the group's internal organisation;*
 - *Key activities that the group plans to do to produce the product, e.g. planting, crop management, harvesting and drying;*
 - *Business services and partners: these are the services and partners that the group uses to produce and market its product, such as input suppliers, the agricultural extension service and a microfinance institution; and*
 - *The costs that the group incurs in order to produce and market the product.*

Total: 25 marks

Summative assessment: Unit 2

Answer the following questions in your own words.

1. What are the main assumptions on which a value chain upgrading strategy is based? (10)

Answer: The value chain upgrading strategy is based on the following assumptions and decision-points:

- *There are capable, organised farmers, who can produce a target product sustainably at a profit.*
- *Farmers share a common vision*
- *There are capable extension services to support a chain wide intervention.*
- *There are willing buyers:*
- *Markets have been identified; and*
- *Value chain studies have been completed.*
- *A value chain upgrading process has been planned and agreed by chain partners.*
- *Value chain partners are willing and able to commit to an upgrading process.*
- *There are available funds and access to financing for upgrading processes to take place.*
- *There is available trade finance to support the business transactions.*
- *The necessary business development services are in place.*
- *There is a conducive policy environment for market growth.*

2. Outline the actions involved in the value chain investment process. (10)

Answer: Investment in the value chain involves the following actions:

- *Write a business plan with farmers to meet market needs.*
- *Prepare an implementation plan with schedules:*

- *Prepare a technical assistance schedule;*
 - *Co-invest with farmers and to meet market requirements; and*
 - *Encourage farmers to market the produce as a group (collective marketing).*
 - *Strengthen the links to essential business development services.*
 - *Support the market process along chain to end market partners.*
 - *Support innovation analysis along the chain and co-invest in upgrading options.*
 - *Review the agri-enterprise performance of the actors along the chain.*
 - *Review, improve and scale up the process.*
3. Explain the purpose of a business plan in the context of value chain upgrading. (9)

Answer: The main purpose of a business plan is to:

- *Guide the enterprise over the long-term*
- *Facilitate understanding and agreement*
- *Improve organisation and decision-making*
- *Test and strengthen financial feasibility*
 - *Measure performance*
 - *Ensure continuity*
 - *Sell the enterprise*
 - *Convince lenders and donors*
 - *Guide implementation*

Total: 29 marks

Study Unit 3: Using ICTs in value chain services

Session 3.1: Using ICT-based support services

Activity 3.1 Individual activity: Using ICTs in value chain services

1. Identify the main ICT applications that are used in the agricultural sector.

(8)

Answer:

- Voice and text communication;
- GPS for locating, targeting, mapping, and tracing of people, assets, products and resources;
- Distance and e-learning;
- Analytical tools and calculators;
- Monitoring and impact analysis;
- Financial support via mobile transfers, mobile savings, mobile-investing;
- Agricultural market platforms for trading, transfer and barter; and
- Chain-wide production, trade and financially-integrated systems.

2. Briefly report on the use of ICT in value chain-wide systems.

(8)

Answer:

In every developing country, there are a number of first world commercial agricultural operators selling their goods into local, regional and international markets. Although the number of commercial farmers is currently low in places like sub-Saharan Africa, they are already using sophisticated ICT packages to support their crop planning, production, logistics and financial dealings. To support their needs, a small but growing number of

companies have built farm data management systems, which help these firms to optimise their operations along the value chain.

Muddy Boots is one of the data firms that has developed a number of products, including QuickFire and Greenlight REF, which are used by large commercial farming operators and exporters, such as Unilever, to manage produce sourcing from thousands of smallholder farmers. These sophisticated value chain products allow processors and international buyer to track goods in transit and to process information on finance, logistics and food safety along the entire value chain. This helps businesses to improve their efficiency and to address fundamental issues—including product quality, timeliness and food safety—as well as issues related to enterprise sustainability.

Another example that is focused on supporting smallholder integration within value chains is Cropster, which is mainly working in the coffee sector. Cropster is an ICT-based company that supports various stakeholders in the supply chain by providing specialised information resources for coffee farmers, traders, roasters and distributors. The company provides high level analytics for each of the actors in the value chain, enabling them to upgrade their existing practices to share their knowledge with their value chain partners in ways that optimise the entire chain.

Total: 16 marks

Summative assessment: Unit 3

Answer the following questions in your own words.

1. Identify the main ICT applications that are used in the agriculture sector. (8)

Answer: ICT applications that are being used within the agriculture sector include the following:

- *Voice and text communication;*
 - *GPS for locating, targeting, mapping, and tracing of people, assets, products and resources;*
 - *Distance and e-learning;*
 - *Analytical tools and calculators;*
 - *Monitoring and impact analysis;*
 - *Financial support via mobile transfers, mobile savings, mobile-investing;*
 - *Agricultural market platforms for trading, transfer and barter; and*
 - *Chain-wide production, trade and financially-integrated systems.*
2. The education gap and access to information and learning technologies are major challenges for many poor countries, where large percentages of the populations are illiterate. Discuss the use of e-learning to address the education gap in the agriculture sector. (8)

Answer:

E-learning tools are widely used in the teaching and learning environment. The e-learning environment is attractive, in that courses can be standardised to meet specific learning goals, the courses can be initiated by students at any time, which reduces costs and enables students to work to their own time table.

There are many options from basic ABC methods available on a mobile phone to sophisticated learning management systems (LMS), which help a teacher to set up a virtual classroom, load

course materials and enrol students. The students read or interact with the course materials, take quizzes to test their levels of comprehension of the lessons and exercises to test their ability to use the knowledge.

3. Briefly discuss Esoko as an example of an ICT application that is used in agricultural development. (6)

Answer:

Esoko is one of the pioneer mobile-based market information services. The company is developing a suite of marketing tools that enable farmers to:

- *Access commodity market prices in all the major markets in a country;*
- *Make offers and bids;*
- *Set up personalised alerts; and*
- *Ask questions to a helpline.*

Esoko is developing services to support farmers in terms of weather alerts and transport links.

4. Discuss NetHope as a support network in agricultural development. (5)

Answer:

NetHope is a consortium of NGOs working with the ICT industry, which aims to promote Web-based and mobile applications that support both disaster relief and development programmes. A recent initiative from NetHope is the humanitarian marketplace, which is a portal designed to help NGOs access a range of new applications for testing. The site will allow for ratings and expert analysis about the usefulness of a select number of services. NetHope is also seeking to help the NGO community aggregate demand for certain applications and products, to support bulk purchase and reduced costs for NetHope members.

Total: 27 marks

Post-assessment

The post-assessment is to be done once you have read through the module and completed all the activities. Compare your answers to those in the pre-assessment to identify where knowledge has been gained and where improvements can be made.

	Question	Self-assessment				
		Low			High	
1	Can you confidently use market analysis tools?	1	2	3	4	5
2	Can you explore value chain upgrading strategies?	1	2	3	4	5
3	Are you able to evaluate the use of ICTs in value chain services in the agriculture sector?	1	2	3	4	5

Answer: Learner's own answer.