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My.Coop

Managing your agricultural cooperative

MODULE 3

Supply of Farm Inputs

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Agriterra is an organization for international cooperation founded by rural people's organizations in the Netherlands. Agriterra offers, among others, farmer-to-farmer advice and direct financial support to rural people's organizations in developing countries so that they become strong and representative organizations. These organizations are indispensable for the promotion of democracy, for a better distribution of income and for the economic development of a country. If farmers organize themselves to jointly coordinate their production and to improve their presence in the market, they stand a better chance to succeed in increasing their incomes and in the creation of employment. Agriterra aims to promote such economic activities and to stimulate, support and finance the international cooperation between rural people's organizations in the Netherlands and those in developing countries.
http://www.agriterra.org

Centre for International Development Issues Nijmegen (CIDIN)) is an interdisciplinary academic institute addressing issues of inequality, poverty, development and empowerment. It carries out undergraduate and postgraduate education in development studies, as well as research in a variety of subjects related to development, economics, sociology and anthropology. CIDIN has broad experience in interdisciplinary research on rural development and value chains, collection action and market integration, impact assessment of value chain codes and standards, and gender theory, policy and mainstreaming.
http://www.ru.nl/cidin

Cooperative College of Kenya (CCK) is located 17 kilometres from Nairobi city centre in a serene environment. The College was established in 1952 to train government cooperative inspectors to oversee the activities of the cooperatives in Kenya. The College has grown until now it is pursuing a charter to become a university. The broad aim is to equip the staff of the cooperative movement and the associative economy with appropriate managerial and supervisory skills in order to contribute more effectively to the development of cooperatives. The College offers Degree Diploma and Certificate courses in Cooperative Management and Banking. It also offers short courses that target the employees and management of cooperatives. The College is ISO 9001:2008 certified.
http://www.cooperative.ac.ke

Cooperative Facility for Africa (*COOP*^{AFRICA}) is a regional technical cooperation programme of the International Labour Organization (ILO) in support of cooperative development. It promotes favourable policy and legal environments, strong vertical structures (such as cooperative unions and federations) and improved cooperative governance, efficiency and performance. The programme covers nine countries in East and Southern Africa (Botswana, Ethiopia, Kenya, Lesotho, Rwanda, Swaziland, Tanzania mainland and Isles, Uganda and Zambia) from the ILO Office in Tanzania with technical support from the ILO Cooperative Programme (EMP/COOP) in Geneva. It was launched in October 2007 with core funding from the UK Department for International Development (DFID). *COOP*^{AFRICA} is a partnership initiative involving a range of international and national organizations.
http://www.ilo.org/coopafrica

Empowering Smallholder Farmers in Markets (ESFIM) is a partnership between national farmers' organizations in eleven countries and AGRINATURA. ESFIM's overall objective is to generate demand-driven action research supportive to the policy activities undertaken by farmers' organizations to strengthen the capacities of smallholder farmers in developing countries to generate remunerative cash income from markets by creating an enabling policy and regulatory environment as well as effective economic organizations and institutions.
http://www.esfim.org

International Labour Organization (ILO) is the tripartite UN agency that brings together governments, employers and workers of its member states in common action to promote decent work throughout the world. The ILO views cooperatives as important in improving the living and working conditions of women and men globally. Its Cooperative Programme (EMP/COOP) serves ILO constituents and cooperative organizations based on the ILO Recommendation 193 on the Promotion of Cooperatives Recommendation, 2002. EMP/COOP works in close partnership with the International Cooperative Alliance (ICA) and is part of the Committee for the Promotion and Advancement of Cooperatives (COPAC).
http://www.ilo.org and http://www.ilo.org/coop

International Training Centre of the ILO is the training arm of the ILO. Its Distance Learning and Learning Technology Applications (DELTA) programme has a double mandate of strengthening the Centre's internal capacity in applying state-of-the-art learning and training methodologies and processes as well as providing training services to outside partners and customers. It provides these services in line with ILO Recommendation 195 on Human Resources Development. Its Enterprise, Microfinance and Local Development (EMLD) programme offers training on cooperatives and the social and solidarity economy as well as, among others: entrepreneurship education and training; enabling business environments for sustainable small enterprise development; value chains and business development services and women's entrepreneurship development.
http://www.itcilo.org

Food and Agriculture Organization of the United Nations leads international efforts to defeat hunger. Serving both developed and developing countries, FAO acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy. FAO is also a source of knowledge and information, helping developing countries and countries in transition modernize and improve agriculture, forestry and fisheries practices and ensure good nutrition for all. Since its founding in 1945, it has focused special attention on developing rural areas, home to 70 per cent of the world's poor and hungry people.
http://www.fao.org

Kenya National Federation of Agricultural Producers (KENFAP) is a registered non-political, non-commercial, democratic membership federation that was founded in 1946 as Kenya National Farmers' Union (KNFU). Its mission is an empowered Kenyan farmer with a strong voice making informed choices for improved sustainable livelihoods. As the legitimate 'voice' of the Kenyan farmers, its key role is to articulate issues specifically affecting farmers and the general agricultural sector. KENFAP serves its members by offering representation, lobby and advocacy services. It facilitates cooperation and networking among its members and with national, regional and international associations. It also provides consultancy services and carries out research activities in the interest of the farming community.
http://www.kenfap.org

Moshi University College of Cooperative and Business Studies (MUCCoBS) is the oldest cooperative training institution in Tanzania, accumulating the experience of 48 years in the fields of cooperative accounting, cooperative management and rural development. MUCCoBS came into being as a result of upgrading the former Cooperative College into a Constituent College of Sokoine University of Agriculture (SUA) in May 2004. It offers cooperative and business education at both undergraduate and postgraduate levels. It provides opportunities for acquisition, development, promotion, dissemination and preservation of knowledge and skills in cooperative, community, business, organizational and entrepreneurship and any other area as may be determined by the University College through training, research and consultancy activities.
http://www.muccobs.ac.tz

The Nigerian Cooperative Development Centre (NCDC) is located at kilometre 61, Abuja–Lokoja highway. It occupies a 14-hectare plot of land away from the city centre to ensure a conducive research and learning environment. The Centre provides technical backup to the Federal Department of Cooperatives and the entire cooperative movement. It does this through research and adoption of global best practices in cooperative policies, legislation and training. It also generates and analyses cooperative data to support policy and programmes for the development of the cooperative sector, including the training of a cadre of competent cooperative management, supervisory and training personnel.

The Royal Tropical Institute (KIT) in Amsterdam is an independent centre of knowledge and expertise in the areas of international and intercultural cooperation. The Institute aims to contribute to sustainable development, poverty alleviation, and cultural preservation and exchange. Within the Netherlands, it seeks to promote interest in and support for these issues. KIT conducts research, organizes training activities, and provides consultancy and information services. Central to KIT's approach is the elaboration of practical expertise in policy development and implementation. The Institute stewards cultural heritage, organizes exhibitions and other cultural events, and provides a venue for meetings and debate. A key objective underlying the Institute's work is to enhance and exchange knowledge of and understanding for different cultures. "KIT is a not-for-profit organization that works for both the public and the private sector in collaboration with partners in the Netherlands and abroad" (Mission Statement).
http://www.kit.nl

Uganda Cooperative Alliance Ltd. (UCA) is an umbrella organization of cooperative organizations in the country. It was registered in 1961 with the aim of promoting the economic and social interests of cooperatives in Uganda. It was formed for the purposes of promoting, advocating and building the capacities of all types of co-operatives in the country (primary societies, district and national unions). In its development activities, UCA has concentrated on six key areas: capacity building in primary societies and area cooperative enterprises; development of a strong cooperative financial system based on members' savings; technology transfer; women's empowerment; creation of youth self-employment and environmental protection and improvement.
http://www.uca.co.ug

Wageningen University & Research Centre (WUR) explores the potential of nature to improve the quality of life. A staff of 6,500 and 10,000 students from over 100 countries work everywhere around the world in the domain of healthy food and living environment for governments and the business community-at-large. Its Centre for Development Innovation (CDI) works to create capacities for change. It facilitates innovation, brokers knowledge and develops capacities with a focus on food systems, rural development, agri-business and the management of natural resources. The Centre links Wageningen University Research Centre's knowledge and expertise with processes of society-wide learning and innovation.
http://www.wur.nl/UK and http://www.cdi.wur.nl/UK

List of abbreviations

CFA	*Communauté Financière Africaine* / African Financial Community
FUCOPRI	*Fédération des Unions des Coopératives de Producteurs de Riz* / Federation of Unions of Cooperatives of Rice Producers
NGO	Non-Governmental Organization

Glossary

Balance sheet
A quantitative summary of an organization's financial condition at a specific point in time. A balance sheet includes the assets, the liabilities and net worth of the organization. The first part of a balance sheet shows all the productive assets a company owns, and the second part shows all the financing methods (such as liabilities and shareholders' equity).

Source: http://www.cdfifund.gov/CIIS/2010/FY%202010%20CIIS%20Glossary.pdf (accessed 17 Oct. 2011)

Collateral
Assets pledged by a borrower to secure a loan or other credit. These assets are subject to seizure in the event of default. Collateral is also called security.

Source: http://www.cdfifund.gov/CIIS/2010/FY%202010%20CIIS%20Glossary.pdf (accessed 17 Oct. 2011)

Competitive edge
The ability of a cooperative to produce goods and services more effectively than competitors do, thereby outperforming their competitors.

Financial statements
A written report which quantitatively describes the financial health of a company. This includes an income statement and a balance sheet, and often also includes a cash flow statement. Financial statements are usually compiled on a quarterly and annual basis.

Source: http://www.investorwords.com/1957/financial_statement.html (accessed 17 Oct. 2011)

Goods received note
The book where the incoming goods are recorded. It acknowledges the receipt of goods from the supplier.

Market share
The percentage of the total sales of a given type of product or service that is attributable to a given company.

Operational plan
A short-term, highly detailed plan formulated by management to achieve tactical objectives.

Source: http://www.businessdictionary.com/definition/operating-plan.html (accessed 17 Oct. 2011)

Organic products
Items that are produced using methods that do not involve modern synthetic inputs such as synthetic pesticides and chemical fertilizers, do not contain genetically modified organisms, and are not processed using industrial solvents, or chemical food additives.

Pricing

Method adopted by a firm to set its selling price. It usually depends on the firm's average costs, and on the customer's perceived value of the product in comparison to his or her perceived value of the competing products.

Source: http://www.businessdictionary.com/definition/pricing.html (accessed 17 Oct. 2011)

Profit maximization

A process that companies undergo to determine the best output and price levels in order to maximize their return. The company will usually adjust influential factors such as production costs, sale prices, and output levels as a way of reaching its profit goal.

Source: http://www.investorwords.com/7690/profit_maximization.html (accessed 17 Oct. 2011)

Profitability

The positive gain from an investment or business operation after subtracting all expenses.

Source: http://www.investorwords.com/3880/profit.html (accessed 17 Oct. 2011)

Sales management

The process of encouraging customers to buy goods or services.

Sales revenue

The amount realized from selling goods or services in the normal operations of a company in a specified period.

Source: http://www.businessdictionary.com/definition/sales-revenue.html (accessed 17 Oct. 2011)

Sales volume

The quantity or number of goods sold or services sold in the normal operations of a company in a specified period.

Source: http://www.businessdictionary.com/definition/sales-volume.html (accessed 17 Oct. 2011)

Stock control

The record system for movement of goods in and out of a store. It establishes the actual balance in the store at any point of time.

Stock holding cost

Costs of holding the stock for a certain time period, including rent of storage, management and governance of storage; other equipment needed for storage.

Stock out cost

A situation in which the demand or requirement for an item cannot be fulfilled from the current inventory.

Source: http://www.businessdictionary.com/definition/stockout.html (accessed 17 Oct. 2011)

Stock taking	Counting the items in stock during a specific period to establish the actual balance of stock.
Stock turn	The speed at which inventory enters and leaves a business.
Stock turnover	The total value of stock sold in a year divided by the average value of goods held in stock.
Storage	All processes which are conducted in the warehouse to ensure the goods stored are in good condition, so as to satisfy the needs of the members.
Stores ledger	The book which records receipts and issues for the day for each item in stock.
Stores record keeping	The process of recording all transactions of stock movement, such as receiving and issuing of goods.
Supply management	The methods and processes a cooperative uses for its purchasing.
Surplus	Term used in cooperatives for the economic results at the end of the financial period. **Source:** Münkner, H.H. and J. Txapartegi Zendoia (2011), Annotiertes Genossenschaftsglossar, Annotated co-operative glossary, Glosario cooperativo anotado, International Labour Organization, Geneva.
Trading account	Trading account is a comparison of the sales revenue and variable trading cost to determine gross surplus or gross loss.

My.Coop
Managing your agricultural cooperative

Introduction

Why this training package on the management of agricultural cooperatives?

Agriculture is a crucial sector for global development as "farmers feed the world". Agriculture is also the second greatest source of employment worldwide.[1] Historically speaking, agriculture has been key in the development paths of many countries. Within the diversity of cooperatives worldwide – one finds for instance cooperatives amongst news agencies, schools and green energy suppliers – agriculture remains a sector where cooperatives are a prominent form of enterprise. This package is motivated by the conviction that *"strong and representative agricultural organizations are indispensable for the promotion of democracy, for a better distribution of income and for the economic d evelopment of a country."*[2] Evidence shows that many countries with an important agricultural sector, such as, for instance, Argentina, Ethiopia, France, India, the Netherlands, New Zealand, as well as the United States of America, also have strong agricultural cooperatives.[3] However, agricultural cooperatives face numerous external and internal challenges. External challenges may be linked to markets, regulations, infrastructure or climate change. Challenges that are internal to the cooperative usually have to do with governance and management issues. Cooperatives are enterprises for which the primary aim is not making profit but responding to members' needs and aspirations. Cooperative members **own** their enterprise through cooperative shares, they **control** their enterprise

1 The service sector is the most important source of employment in the world. See: http://www.ilo.org/public/english/dialogue/sector/sectors/agri/emp.htm (accessed 7 Oct. 2011).

2 *About Agriterra*, http://www.agriterra.org/en/text/about-agriterra (accessed 22 Sep. 2011).

3 Source: *Global 300*, http://www.global300.coop (accessed 7 Oct. 2011).

through democratic mechanisms, and, finally, they are the principal **users** of the cooperative services. This makes the cooperative a resilient but also a complex and challenging business model. Cooperatives may find themselves stretched between (at times conflicting) members' interests, business opportunities and social considerations.

What is My.COOP about?

My.COOP stands for *"Managing your agricultural cooperative"*. The My.COOP training package aims to strengthen the management of agricultural cooperatives so that they can offer high quality, efficient and effective services to their members.

The package draws on the ILO training series developed by the Materials and Techniques for Cooperative Management Training Programme between 1978 and the early 1990s. Today, My.COOP is a broad partnership initiative initiated by the ILO Cooperative Facility for Africa and ILO's Cooperative Branch. It is the result of a collaborative effort involving a wide range of partners such as cooperative development agencies, cooperative colleges, cooperative organizations, organizations of agricultural producers, universities and agencies of the United Nations. More information on the partners can be found in the list that is included at the beginning of this document.

The objective of this training material is to enable (existing and potential) managers of agricultural cooperatives to identify and address major management challenges that are specific to cooperatives in market oriented agricultural development.

As stated above, cooperatives may find themselves stretched between (at times conflicting) members' interests, business opportunities and social considerations. Within such context cooperative managers should ensure sound decision-making on service provision for services that are common to many agricultural cooperatives, including supply of farm inputs and marketing. These issues are reflected in the structure of the My.COOP training package:

For whom is My.COOP?

My.COOP has been designed for existing and potential managers of agricultural cooperatives as well as for members involved in managerial tasks of the cooperative. The material presumes that these women and men already possess some practical experience as active members in agricultural cooperatives. The material is not developed for people who are starting an agricultural cooperative for the first time.

In addition, the My.COOP package can be a helpful tool for organizations and individuals that train agricultural cooperatives. These can include:

- leaders and managers of cooperative structures, such as unions, federations and confederations;
- cooperative trainers working in cooperative colleges, non-governmental organizations (NGOs) and other (including private) training providers;
- cooperative officers and extension staff of government departments and agencies.

What's in the package?

The training package consists of one trainer's manual and four modules, as shown in the diagram below.

Each module consists of several learning topics. A learning topic consists of brief content descriptions that are complemented with real life cases from various parts of the world that present solution solving approaches to common challenges in the management of agricultural cooperatives. Besides, each topic offers explanatory boxes on definitions and concepts as well as self-assignments that help the self-learner to apply the contents to his or her own cooperative or situation. Modules and topics can be used independently from each other, in any given order, in line with the training needs.

My.COOP online

My.COOP is more than a training package. My.COOP is also a website (www.agriculture-my.coop) where you can find not only the package but also related services and tools online, such as a distance learning platform for training of trainers and a mobile learning kit.

About Module 3: Supply of farm inputs[4]

This module is about methods and processes of collective buying of farm inputs and the reselling of the inputs to members and possibly to other users. Good quality and affordable inputs can support farmers in improving agricultural outputs. Farm input supply is crucial for enhancing agricultural production and productivity both in quantity and quality.

Farm inputs include seeds, fertilizers, pesticides, tools, machinery, animal fodder and artificial insemination. Supply management involves deciding: what inputs to buy; where and when to buy them; how much to pay for the inputs; and how to manage, stock and resell the inputs to members and possibly to other farmers. This management should ensure the delivery of the right product at the right time in the right place for an acceptable price.

Cooperative input supply management is both about supplying inputs that meet the needs of the members of the cooperative and about the profitability of this service. It is also about managing expectations of the cooperatives' members. Members are not just clients but also the owners of the cooperative. Members expect to get high quality inputs at reasonable prices. They also expect to get inputs supplied at competitive prices compared to what is offered by other (often private) input suppliers. Moreover, there can be expectations in terms of their specific product needs, availability of the inputs, terms of payment (e.g. after their crops have been harvested, sold and paid for), convenient quantities, and additional services.

Input supply management also includes management of relations with stakeholders other than the members. Good relations with suppliers facilitate negotiation; there is better

5 This module is based on M. Harper: *Supply Management, Material for cooperative management training in agricultural cooperatives* (MATCOM) (Geneva, ILO, 1980) and M. Harper: *Storage Management, Material for cooperative management training in agricultural cooperatives* (MATCOM) (Geneva, ILO, 1982).

understanding and commitment to an agreement when the parties trust each other. Besides suppliers, cooperatives often also work with research and extension organizations. Good relations and regular contact supports the transmission of up-to-date information on inputs and technologies. The same applies for relations with authorities: these provide access to information laws and regulations, for example, the latest regulations on pesticides. Another important relationship is between the cooperative and the union or federation.

Content of this module

This module deals with the challenges that are involved in collective input supply. In taking up the role of delivering inputs the dual character of a cooperative poses the challenge of balancing serving members' needs with operating as a business. The challenge for the cooperative management is to find the correct balance between input supply, cost-efficiency and returns, so that members' needs are satisfied and the costs involved are controlled.

The module is split up into three subsections with the following topics:

Topic 1: Procurement of Inputs

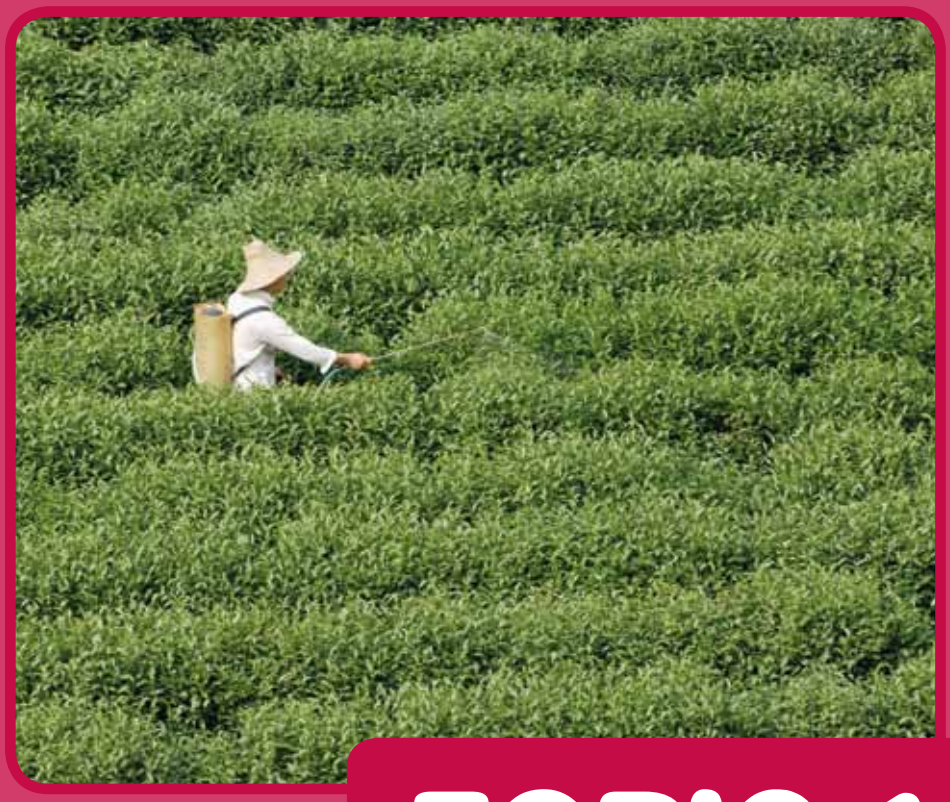
Topic 2: Storage and Stock Management

Topic 3: Selling the Service.

Learning objectives

After studying this module, you will be able to:

- explain the major management decisions to be taken in relation to cooperative farm input supply;
- determine when to perform the function of input supplier;
- take strategic decisions whether to stock or not;
- plan the input ordering and stock control;
- determine costs and benefits involved in storage;
- take decisions that help achieve a balance between satisfying members' needs and cost-efficiency;
- define a pricing policy, including price setting, formulating pricing objectives, choosing pricing strategy and timing and adapting pricing policies;
- measure the financial performance of supply services.



TOPIC 1

Procurement of Inputs

Introduction to the topic

A first step a cooperative has to take in order to supply inputs to its members is to actually procure the inputs. The term procurement refers to the acquisition of farm inputs to meet members' needs in terms of variety, price, quality and quantity, time, and location. Procurement involves searching for an input supplier, bargaining, setting the deal and arranging transport and payment.

Procurement is not a straightforward activity; it involves making a number of strategic decisions. First of all, the members of a cooperative differ in their needs and requirements (quality, quantity and time). Secondly, the cooperative has to decide whether it is worthwhile to supply the input itself. Following is the search for suppliers and the negotiation.

This topic reflects on the dilemmas and management decisions with regard to procurement. We will discuss possible ways that the cooperative could deal with these.

What to procure?

In the decision on what inputs to supply and thus what to procure, the following questions are important:

What are the members' needs?

The members of a cooperative do not form a homogeneous group. Each member is unique. Farmers' needs depend on many factors, including:

- the characteristics of the farmer and family, (for example: gender, age, physical abilities, level of education, personal interests and objectives, preparedness to take risks);
- the farming systems (for example: size of farm, employment of waged workers, crops, cropping patterns, number and types of livestock, soil, availability of water).

These cause a wide variety in types of input required, quality of the inputs, the quantity (packages), moment of delivery, and locality, amongst other things. Module 2 presents a methodology and some suggestions for carrying out a needs assessment that is helpful in getting clear ideas on the inputs required by members. Identifying needs for input supply services involves collecting information on the inputs needed by members, analysing this information, prioritizing need and deciding on the inputs to be supplied and to be stocked.

Needs identification will help the cooperative to keep the right quantity and quality of stock and to use available resources efficiently. If the process is carried out well, it will eliminate the trap of overstocking and understocking.

The management of the cooperative needs to bear in mind that even the best needs assessment is not a guarantee that all procured inputs will be sold. It only reduces the risks of over- and understocking.

The cooperative also has to determine whether it focuses on the needs of the majority of the members only, or also tries to cater to the specific needs of certain minorities in the membership. It is often easier and cheaper to procure one type of fertilizer in bulk rather than procuring smaller quantities of various types of fertilizer tailored to individual needs of farmers. A general assembly should take the final decision.

At times members will not buy inputs because they cannot pay cash until the crop comes in, not because they do not need them. In the absence of credit, members would fail to use inputs, adversely affecting production and translating into lower turnover and surplus for the cooperatives. A cooperative could consider providing credit services to enable members make use of the input supply service. Many cooperatives do supply on credit, recovering the money from proceeds realized from sale of members' produce.

What are the needs of the market (in terms of agricultural products)?

In the end, members' products will be consumed or sold at a market. Providing inputs for a product only makes sense when the end produce is consumed or sold. For all the inputs a cooperative aims to provide, it should always take into account the final market for products.

What are the objectives and strategies of the cooperative?

By providing inputs the cooperative supports its members in a certain direction. It is important that this direction is in line with the strategy of the cooperative.

It is important to realize that both the needs of the members as well as the needs of the market are not static. A change of one of these needs influences the type of inputs to be procured. Think for example of a sesame cooperative. The world market price has risen and the members of the cooperative decide to

increase their acreage produced with sesame. Consequently the cooperative has to buy more seeds and more fertilizer.

How much to procure?

Procurement of input supplies for reselling implies risks: if a cooperative is not able to sell the inputs, it will face additional costs (storage) and even losses; at the same time it should be able to respond to members when needed. Both over- as well as understocking have a negative impact on the cooperative. How can a cooperative know the right amount of inputs to procure?

A first step would be to investigate the amount of inputs needed by members, prior to procuring. What quantity do the members estimate they need? A small cooperative could ask its members to fill in a data sheet during a general assembly. A large cooperative could establish a data gathering system, for example, a system in which one member is responsible for collecting the data of 10 neighbour farmers and communicating the amount of input needed to the cooperative. More and more, mobile phones are being used in such data gathering. Some cooperatives or federations have advanced digital systems that are updated each year.

Secondly the cooperative should reflect whether the costs of responding to the needs are outweighed by the benefits. A proper cost–benefit analysis could help the cooperative to make the right decisions. Module 2 presents such an analysis.

If a cost–benefit analysis shows that a cooperative does not have sufficient capital to make, for example, bulk purchases, it could decide to look for another input supplier and outsource the service. Another option would be to investigate whether banks would be interested in financing the procurement, repaid when crops are harvested.

The following case of the Federation of Unions of Cooperatives of Rice Producers in Niger (FUCOPRI)[5] illustrates how a rice marketing cooperative manages risks involved in providing new services.

5 *Fédération des Unions des Coopératives de Producteurs de Riz* (FUCOPRI)

Case 1.1: Taking risks, one at a time

One of the major challenges for agricultural cooperatives is to take risks to provide new services for its members. If the new service is successful, the benefits can be great, but if it fails, the cooperative's very existence can be at risk. How can someone know whether a new investment or service is going to work or not? For FUCOPRI, a rice marketing cooperative in Niger, the solution to this problem was this: start by taking a small risk and if it works, take a bigger risk; if it does not work, not much is lost.

FUCOPRI was in need of many agricultural inputs like seeds and fertilizers. It also needed something less expensive: empty bags to pack the rice after the harvest. In 2006 members were asked to contribute a small amount of money to create a fund. This fund would serve as a guarantee to banks so that the cooperative could get loans to make large purchases and also as a source of funds to give small amounts of credit to its members. In 2008 there was enough money in the fund for the cooperative to take an initial risk and place its first order for empty bags. FUCOPRI tendered to find the best supplier and completed the purchase successfully.

The purchase of empty rice bags allowed the members to buy these necessary inputs at 160 *Communauté Financière Africaine francs*/African Financial Community francs (XOF) a price that was lower than the market price of 250 XOF. Because they were purchased in bulk, the cooperative still managed to make a profit of 40 XOF per sack. More importantly, the experiment with the empty bags (a total purchase of 14 million XOF) allowed the federation to realize that the union members were reliable payers and allowed it to confidently engage in larger purchases of other types of inputs. Currently, FUCOPRI uses its guarantee fund to make purchases of many types of inputs for up to 400 million XOF.

Source: Based on an interview with Mr Ayouba Hassane, of Agriterra's partner FUCOPRI, and with Marielle Schreurs, Agriterra's liaison officer.

Changing demand of members

Needs change over time. For example, sudden access to loans can increase the demand for the quality or quantity of inputs. The changes in needs will affect the amount or the type of inputs the cooperative has to procure. There are a number of factors that influence the demand for inputs, such as:

- better offers by competitors, for example lower prices;
- changes in relative qualities and prices of inputs;
- changes in weather conditions;
- changes in production patterns (new/other crops);
- availability of subsidies;

- availability of new products;
- access to loans;
- market changes, for example, a guaranteed outlet provides support for producers to make investments.

Non-members

A cooperative needs to decide whether to sell inputs to non-members or not. In certain cases, non-members also benefit from cooperative input supply. The incentive of being a member of the cooperative should provide more favourable conditions in terms of price and additional services, amongst other things.

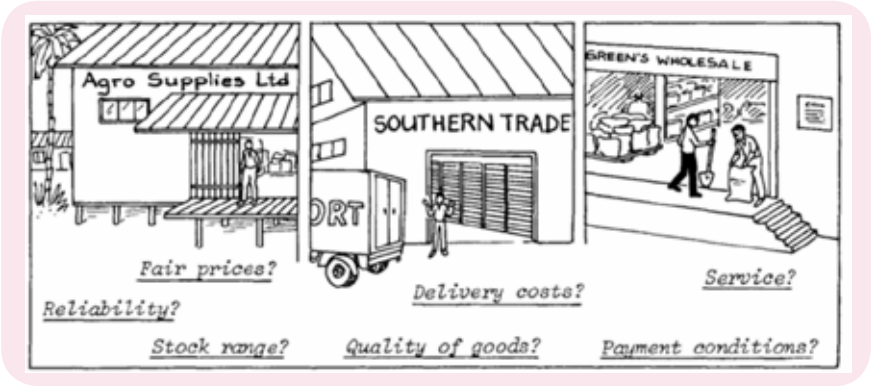
The major incentive for the cooperative to sell to non-members is increased profit that will eventually provide benefits to the members. The cooperative could also decide to provide additional services to members that are not accessible to non-members, or accessible to non-members against certain costs.

Selection of a supplier

Choosing the right supplier is crucial in ensuring a reliable and cost-effective supply of inputs. Common sources for input procurement include secondary cooperatives (or cooperative unions), national or local wholesalers and retailers, farmers (either members or non-members) or other local suppliers. Selecting a good and reliable input supplier is the cornerstone of successful supply management. Module 2 explained that the choice where to procure depends on availability, affordability, accessibility and appropriateness. When looking for an input supplier *availability* determines whether the input will be available in an accessible place and at an appropriate time, in line with the production cycle. *Affordability* is mainly about the prices, delivery costs, discounts and payment conditions. The *accessibility* of the service is mainly about location and timing of delivery. *Appropriateness* is about the quality of the inputs delivered by the supplier. Think about variety, quality, certification, and inputs that are passed by

formal authorities (e.g. bureau of standards, pesticide control). Besides quality, it is important to look at the stock range and the quantities and proportions of the goods delivered by the supplier (e.g. bags of 50 kg or 5 kg?). If a supplier provides additional services (e.g. transport, information and extension, credit, insurance of goods in transit) this can also be a reason to make a decision for a specific input supplier.

In order to select the best supplier you must balance the value of all the extra services provided by **Supplier B** against the lower price of **Supplier A**. Besides the above mentioned criteria, other aspects that play a role in the selection of a supplier include the reliability of the input supplier. The image below highlights some criteria to consider when selecting and contracting the supplier.



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The image poses some relevant questions for consideration. Besides prices, the other terms under which the supplier offers services should be favourable to the cooperative. It is possible for the cooperative to enter negotiations with the potential supplier to try to improve the terms and close an acceptable and affordable deal. Signing a contract is the final step; it is the agreement of the cooperative and the supplier to comply with terms associated with the supply of the goods. By signing the contract, the two parties agree to be bound by its terms. A contract is the legal document that forms the basis of the contractual relationship between the two parties. The cooperative might want to include sanctions for non-compliance in the contract. It is important to include all agreed points in the contract as in most national jurisdictions, oral agreements (that depart from or subsequently aim to alter the written agreement) are hard

6 M. Harper: *Supply management, Material for cooperative management training in agricultural cooperatives* (MATCOM) (Geneva, ILO, 1980).

to prove. The contract will be taken as authoritative unless the oral agreement can be proven.

Cooperatives can be members of a secondary cooperative (cooperative union), that is able to supply the required inputs. In many cases, primary cooperatives procure from the union. In certain cases, the cooperative management could decide to procure from other input suppliers. It is possible that the secondary cooperative may offer the same goods at less favourable conditions than the wholesaler. In this case, the cooperative may consider the following:

- The cooperative could negotiate with the secondary cooperative for more favourable terms.
- Due to the fact that the cooperative is a member and a user of the secondary cooperative, it could choose to bring up the issue at the annual general meeting.
- The cooperative could select the cooperative union as a supplier due to the fact that the cooperative will enjoy a dividend at the end of the year, assuming that the cooperative union will make a surplus.

There are some circumstances that may cause the cooperative to change supplier. Most contracts stipulate that the contract will be terminated if a supplier fails to fulfil the terms and conditions. Under normal circumstances, the supplier is supposed to fulfil all terms such as: quantity; quality; delivery time; provision of relevant product information; delivery to the correct location; accurate invoicing in terms of quantity and price; and observation of the client's code of ethics. If the supplier fails to fulfil these terms without a proper explanation, the cooperative should consider terminating the contract after establishing that the supplier could not improve the services.

When should a cooperative take up the function of input supply?

There are circumstances under which a cooperative should not take up the function of input supplier. For example, the cooperative should not try to supply an input if members are already buying the input items elsewhere, unless it can offer a better service or price. It might be better to use the money and space on items or services not otherwise available. Also, if it is not likely that the cooperative can sell the items at a fair and competitive price, it might be better to leave this function up to a better equipped entity. The prices at which the cooperative sells its products must cover the costs, and/or allow for a profit, as well as be lower than other suppliers' prices. A cooperative should

not lose money on its supply services. Transaction costs such as time and costs to establish a contract need to be included in the selling price. This will be further discussed in Topic 3. Priority should be given to supplying essential items. Remember that some items may be necessary in the production cycle. For example, a new seed variety may require certain fertilizers or pesticides. If members cannot obtain these essential items, they may be worse off than before. In order to ensure that members obtain all essential inputs they need a cooperative that can supply input packages, containing seeds as well as fertilizers and pesticides.

Despite the risks, it is possible for a cooperative to decide to supply inputs that do not bring profit, or to supply products for which the cooperative cannot guarantee a regular supply. This can be the case when the inputs are essential for the main economic activities of members. Another reason can be that members would be seriously financially affected if they had to deal with private traders. It is also possible that private traders may supply low quality inputs that may affect production or that there is no substitute for the inputs. These can all be reasons for a cooperative to continue supplying inputs.

Another important consideration is the need for the inputs to be stocked without having serious negative environmental effects, such as air pollution and contamination of water sources. The products should be stocked safely and securely, without harming the wider community. The cooperative can play an active role in this. How? For example, if a cooperative wants to reduce safety and health risks related to chemical inputs at the cooperative site, it can put up warning signs and lock storage of dangerous products.

The storage facilities also need to be safe for the workers. This is especially true for pesticides; storage and handling practices need to minimize health risks to staff and members who are dealing with the product. Information (e.g. labelled containers, clearly indicating the toxicity, dosage, and proper methods of storage, handling, use and disposal) and training of members are important examples of how a cooperative can prevent negative effects.

Self-assignment 1.1

Dealing with inputs goes hand-in-hand in dealing with health. What kind of measures do you take to ensure safe application of inputs? How do you encourage farmers to follow safe practices?

TOPIC 2

Storage and Stock Management

Introduction to the topic

Storage can be defined as all processes that are conducted in the warehouse to ensure the goods stored are in good condition, so as to satisfy the needs and protect the health of members. Among the activities involved in storage are:

- receive and inspect goods received from the supplier;
- arrange them in warehouse;
- keep proper records;
- ensure availability of adequate space and facilities for storage;
- run a safety and quality control system;
- control leakage (resulting from shrinkage, evaporation, pilferage, etc.);
- maintain cleanliness of the warehouse;
- identify deteriorated and damaged goods.

Holding and managing stock is expensive and therefore one has to balance the two objectives of being able to deliver to members at the right time and keeping storage costs as low as possible. The first implies large and permanent stocks, the latter limited stocks at specific times or no stock at all. Stock is money tied up in goods so it has to be given the same importance that is given to money. In order to ensure the security of goods and their proper movement, a control measure could be put in place (see section on stock control).

Stocking or not?

Stocking agricultural inputs improves their availability to members but storage is costly. The management of a cooperative needs to take important decisions on whether to stock or not. The nature of ordering supplies in any cooperative is intermittent rather than continuous. If a cooperative decides to stock, important decisions to be taken by the management include when and how much to stock and how to minimize costs.

Before we discuss how to stock in the optimal way, it is worthwhile exploring the possibilities for a cooperative to help members obtain farm inputs without actually having to stock them. This would avoid all the expenses required for stocking. An option would be that the cooperative organizes alternative means to provide the product. Suppose that members need several thousand bags of fertilizer in the beginning of October each year. Orders could be organized for the supply of fertilizer well in advance by collecting requests from all members.

It could be possible for an order to be placed for the total amount with a supplier, with delivery for a certain day made directly to farmers' villages. Cooperative staff or board members would be in the villages on the delivery day, distributing the bags to members as ordered. There would be no need for storage space at the cooperative's premises. This arrangement would only be possible if a significant number of members require the product at about the same time and when the time is well known in advance and will not change. Direct delivery to a large number of members could minimize delivery costs. It would also be a requirement that there is a certainty of products being available from the supplier at required quantity and that direct delivery could be easily organized. It would also require that the goods are to be used immediately after delivery, and thus do not require any storage space.

If this arrangement is not an option, it will be necessary for the cooperative to maintain a stock of inputs. There are also other reasons for maintaining a stock. For example, members may prefer to buy small quantities from the cooperative, rather than the large bulk quantities sold by wholesalers. It can also be the case that items required throughout the year need to be available locally. Or the cooperative can keep a "buffer stock" of inputs when they may not always be available from the wholesalers.

Generally, a well managed storage system will have a number of benefits but storage can also have some disadvantages (table 2.1).

Table 2.1: Advantages and disadvantages of storage

Advantages of storage	Disadvantages of storage
• The cooperative will be able to supply farm inputs to the farms at the right time and therefore satisfy the needs of farmers • To protect the goods from damage that may be caused by rain, sunshine or pests • Ensure good stock safety as all forms of leakage are minimized • Minimize ordering costs as storage allows ordering large quantities at once • The cooperative minimizes health and safety risks as inputs are stored safely instead of in farmers' houses	• High storage costs such as tying up capital in stock, storage space and facilities, insurance, leakage and wages • Risk of deterioration • Technological advancements can render the stored goods obsolete • Decrease of the market price can force the members to buy inputs at higher prices than market prices. Sometimes members can go and buy cheap farm inputs elsewhere and the cooperative has to reduce prices and suffer loss

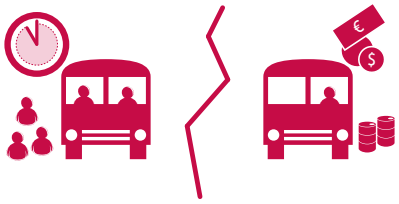
How to manage stocks

Inspection of delivered goods

Inspection is the act of verifying the physical quantity and quality of the delivered goods and comparing this with the order and delivery note from the supplier. It involves counting, measuring, quality verification, testing, and observation of physical appearance, so as to ascertain the status of the delivered goods. When buying small quantities it might be possible to check each bag a cooperative buys. In case the number is bigger however, the cooperative could carry out a sample, for example, each fifth bag. Inspection is an expensive task.

Transport of inputs

Transport of inputs is costly. The management of a cooperative needs to ensure transportation of goods in an effective and efficient manner. It could decide to undertake this function itself, but it could also contract transporters for this purpose.



Planning the transportation of goods should be worked out wisely in order to avoid unnecessary costs. Whether the cooperative already has a vehicle or is thinking about purchasing one is an important factor. Alternatively, and possibly cheaper, the cooperative may hire transport from a transport operator, or the supplier may include transport as one of the services it provides. A cost–benefit analysis should be carried out to establish the most cost effective alternative to be used. Own transport has advantages and disadvantages (table 2.2).

Table 2.2: Own transport: Advantages and disadvantages

Advantages own transport	Disadvantages own transport
• Reliability of transport services as the cooperative can access transport services at any time. The cooperative's vehicles are always available – no one else can claim them • Having a vehicle for the cooperative can reduce transport cost • The cooperative ensures the proper scheduling of trips • The cooperative knows exactly what its transport needs are, therefore will buy the vehicle that suits its needs. Rental companies might not have the right type of vehicle • It increases the amount of assets owned by the cooperative and therefore increases the security base for accessing loans • Provided that the market is not saturated, the cooperative can hire out the vehicle to other people for a charge and therefore generate income	• High investment costs of buying the vehicle, the need for a bank loan, paying interest on the loan. The cooperative also needs collateral for the loan • High operating and fixed costs: salaries, social security charges and daily subsistence; fuel; depreciation of value, maintenance and repair costs; insurance, licences, road taxes and income taxes; and extra time to manage the transport activities • Risk of accidents and breakdown result in the cooperative having no transport, while a rental company will provide another truck if one breaks down • Misuse of vehicle: It is possible for the driver, management and board members to use the vehicle for private activities that will increase operating costs and devalue the asset • Possibility of under-utilization as the procurement of farms inputs is seasonal and it is not easy to hire the vehicle due to the transport market being saturated

It is important to recognize that owning transport may actually cost more money and be more complex than hiring it. It is therefore necessary to consider ways

of optimizing the use of hired transport, so as to reduce the costs of supply services.

Self-assignment 2.1

How does your cooperative arrange transport? Why was this option chosen?

Determining the amount to stock

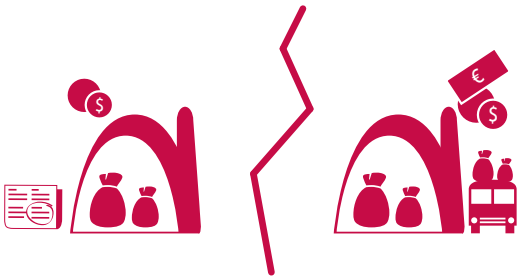
Storage is costly, but procuring larger amounts at once has advantages as well, for example the bulk discount given when larger quantities are procured. A cooperative needs to determine the economic amount of goods to be procured and stored. It is clear that this needs to be determined in order to minimize the risk and reap the benefits of storage. The decision on how much to procure and store depends on several factors. Procuring and storing large amounts of inputs has relative advantages as well as disadvantages compared to small amounts.

Certain farm supplies are not seasonal, but are needed all year round. The amount to order will depend on the advantages and disadvantages of ordering large and small amounts of stock. The supply function is faced with two conflicting forces:

- *Stock holding cost:* the costs involved in holding stock in store;
- *Stock-out cost*: the costs of not having stock to satisfy members (loss of member transactions and loss of member commitment).

The amount of stock to be ordered is the amount where these two costs are at minimum. For example, members buy 10 ploughs every month or 120 in a year. The cooperative must decide how many ploughs to order from the supplier and how often to order. The decision is important and is not easy. If the cooperative orders a very large quantity, say 120 ploughs, the stock should last the whole year. If the cooperative orders just a few ploughs, say two,

it will have to order again after just a few days. Ordering a large amount of stock or a small amount of stock has advantages and disadvantages (table 2.3).



It is the cooperative's responsibility to use its finance effectively and to give good service to members. In the above example, it is obvious that it would probably not order 120 or only 2 ploughs. Again, the cooperative management would have to decide on the ideal point between the two extremes. This depends on quantity discounts it could obtain as well as on the desired stock turnover.

Table 2.3: Advantages and disadvantages of large and small stocks

	Advantages	Disadvantages
Large stock	• The cooperative will not run out of stock quickly • The cooperative would get price reductions for large orders • Transport costs would be relatively low • The administrative work would be reduced • The members would be protected from future price increases	• High costs in interest as the capital is tied up in stock • High risk of deterioration, spillage, leakage, damage and loss • High storage costs in terms of storage space • Narrow range of stocks as one stock could consume a great deal of money leaving no money to order other products • Change of technology may render some of the stored products obsolete and useless • High insurance and security costs

Small stock	• The cooperative would "tie up" very little money in the stock • No need to borrow so much to pay for a small amount of goods • Low risk of deterioration • Little space will be required • Insurance would cost less; risk of theft or fire would be less • If a new design or cheaper supply appeared, the cooperative would not be "stuck" with a large quantity of the old model	• Higher transaction costs to issue orders, receive the goods, pay the bills, and so on • Higher transport costs due to the many trips required • Reduced surplus if the cooperative were to run out of stock and members had to buy elsewhere • Poor customer satisfaction • Risk of rising prices

Considering the advantages and disadvantages of larger quantities the cooperative should carefully consider whether to go for a quantity discount, as this might have repercussions.

Stock turnover indicates the speed at which inventory enters and leaves a business. For example, if the cooperative orders 20 ploughs, it will take the cooperative on average two months to sell the stock. The cooperative then reorders for another two months and so on. In this case, the cooperative's rate of stock turnover is six times in a year. If the cooperative ordered 60 ploughs at a time, the cooperative would turnover the stock only twice in a year. Usually cooperatives find it more economical to have a quick stock turnover. This means that they order rather small quantities that they can sell in a few weeks or months. That way they do not tie up too much capital in each item in stock and can earn a higher surplus on their capital.

Centralized or decentralized stock

Another decision to be taken by the cooperative management is where it could best hold stock: at a centralized warehouse or at decentralized level, closer to the members. A large cooperative might have a centralized store with smaller decentralized stores. Some advantages and disadvantages of centralized stocking are shown in table 2.4.

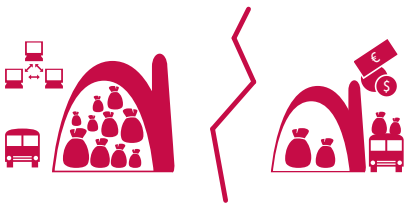


Table 2.4: Advantages and disadvantages of centralized stock

Advantages	Disadvantages
• Easier to control • Single point of delivery and single point of inspection • Easier communication with supplier • Provides opportunities for standardization • Higher inventory turnover: lower probability of obsolescence • Less handling costs	• Less sensitive to needs of members • Not located at most convenient place for members • Risk is accentuated in case of natural or manmade calamities (e.g. fire)

When to order inputs?

In addition to knowing how much to order, the cooperative must also know when to order and when products need to be delivered, either at the cooperative warehouse or at farm level (or both). Of course, the cooperative cannot wait to order until the stock is almost depleted. If it did this, the cooperative would run out of stock because suppliers usually do not deliver immediately. Some suppliers even take several months to deliver. The cooperative has to estimate how many goods it will sell from the time it places an order until it actually receives the goods. In determining when to order, the cooperative has to consider the following:

- the demand for the goods depending on seasonal cropping and grazing patterns;
- the lead time or waiting time required between order placement and receipt of goods;
- the minimum amount of stock to be left to cater for emergencies due to a delay in receipt or a change in demand.

If the cooperative knows the delivery time and sales per week, it can work out a trigger figure for each item. When the stock reaches that figure, the cooperative must reorder. For example, the supplier of chicken feed can deliver one week after the cooperative places the order. The cooperative sells approximately 40 bags every month. That means the cooperative must order when there are 10 bags left. But even then there is a risk that the cooperative might run out

of stock if sales increase or delivery is delayed. To be on the safe side, the cooperative can decide to order feed when the stock is down to 15 bags. The trigger figure for chicken feed is 15.

Self-assignment 2.2

When does your cooperative order? On what factors is this decision based?

This is how the cooperative can decide to set minimum stock levels for all items in stock. It is essential for a manager to have a proper ordering system otherwise the cooperative will frequently run out of some items, while having excessive stock of others.

Stock control

Stock control is the system of keeping records of the movement of goods in and out the store and establishes the actual balance in the store at any point of time. Stock control involves three major elements: recording all incoming and outgoing goods, carrying out stock taking to verify the stock balance and valuating the stock in the store.

Stock control is important in any cooperative, as it is the only way through which the cooperative safeguards the investment made in cooperative supply service. Some examples of the benefits of effective stock control are:

- It ensures regular availability of goods at the right time and right quantity. Effective stock

control will help to establish a reorder level and process the order at the right time and therefore eliminate the risk of running out of stock.

- It minimizes theft and cheating, as the cooperative knows when products are missing.
- It facilitates easy determination of the amount of stock available in quantity and in value.
- It facilitates detection of theft, malpractices and other forms of leakage.
- It facilitates detection of damaged, deteriorated and obsolete goods.
- It facilitates the valuation of stock.
- It enhances proper preparation of financial statements which will facilitate measuring financial performance of the cooperative.

As noted in the previous topic, the members' need assessment can help to establish all products that are needed by the members, in what quantity and at what time. Once this information is available, and based on the objectives and strategies of the cooperative, the management can decide on the appropriate assortment of stock. When storage space or financial resources are limited, it is useful to rank the goods to be purchased in priority order. The ratio of monthly surplus to investment for all goods selected can show which goods are especially profitable for the cooperative and which are not. While purchase of less profitable goods that meet a specific member's need may still continue, the awareness of different levels of profitability will ensure that losses can be more easily predicted. Therefore, management can make more informed decisions.

Record keeping

Stores record keeping is the process of recording all transactions of stock movement, such as receiving and issuing of goods. It is important to note that every transaction should be recorded in the documents immediately as it occurs. The necessity of stores records should not be overemphasized, but a cooperative should make sure that proper records for stock in the supply service are kept.

Record keeping simplifies the task of reckoning the remaining quantity of stock in the store without the need for counting. In this regard the stock received or issued should immediately be entered and properly calculated to get an accurate balance. The risks of not keeping up-to-date and accurate records are as follows:

- Members are told they can have goods that are not in fact available.

- Goods are not re-ordered in time.
  - Excessive quantities of goods are ordered and added to the stock.
  - It is not possible to compile a balance sheet, and effective financial management is thus impossible.

Some of the following stores records may need to be kept: goods received note, delivery note (Annex I) bin card, stores ledger, or stock taking sheet (Annex II).

Storage costs

Storage implies costs that need to be included in the price that members and other clients pay for the products. Storage is expensive and affects the selling price of the products to members and non-members. Costs of storage include the storage building, equipment, packaging material, labour, leakage, insurance, money tied up in stock, fumigation and pest control, and stationary costs. In its decision whether to store inputs, the cooperative management should consider the following costs.

Storage building

If it is the cooperative's own building, depreciation should be calculated at regular intervals (for instance per year, depending on the national legislation) Depreciation is calculated by dividing the value of the building by the useful life of the building. The useful life of the building depends on the financial policy of the cooperative. If the storage building is hired then the cost is the monthly or annual rent.

In making a decision to build or hire storage it is important to think of the proximity to the members' farms, whether or not there are existing storage facilities accessible to farmers, and if there are funds available for construction, maintenance and operation of storage facilities?

Equipment

Storage requires specific equipment such weighing scales, pallets and other offloading and loading equipment, computer and other office equipment. If the lifetime of the equipment is more than one year, the cooperative should provide depreciation values. If the equipment is leased, the lease fee the cooperative is paying should be taken into account. If the useful life of the equipment is less than a year take the purchase price as the cost.

Packaging materials

Costs for packaging required for storage such as bags, papers, drums and buckets should be calculated.

Labour

Include the wages (including social security and possibly other costs and benefits) of people directly employed in storage plus a proportion of the supervision and management wages.

Leakage

You should have to provide cost involved in leakage in terms of pilferage, damage, loss, pest infestation, and deterioration amongst other things. It is advisable to provide leakage rate ranging from 0.1 to 2 per cent of the value of stocked goods depending on the nature of the stock.

Insurance

You may need insurance to cover certain risks associated with storage such as theft and fire.

Money tied up in stock

If you sell inputs immediately you receive money that can earn bank interest. If you store them, you miss this opportunity; hence it is a cost. You need to keep abreast of the bank interests on loans and include that it in the cooperative calculations.

Fumigation and pest control

You need to include expenses to be used to fumigate the warehouse in order to protect it from pests and other destructive insects.

Stationary

The supply service utilizes stationary in record keeping and other uses, therefore it is important to consider this cost when you carry out a cost–benefit analysis.

Besides costs, storage also creates financial benefits, but these cannot exactly be measured in monetary terms. Availability of inputs is likely to contribute to farmers' productivity and income. As a long-term result this can lead to an increase in crops delivered to the cooperative.
Storage also reduces ordering costs because the goods will be ordered less frequently.

TOPIC 3

Selling the Service

Introduction to the topic

Economy and simplicity of operation is in the interest of members. A cooperative that loses money by providing too good a service will soon have to cease operations, and members will lose the service and their investment. The cooperative management has to decide on the optimum level of service for each product, by balancing member needs for service with the need for economy. The cooperative needs to recover marketing, transportation and other costs through the sale of its products in order to cover market related risks, a small profit margin must be included that will, however, be returned to the members at the end of the financial year, should the risk not have materialized, and should the balance sheet show a profit. Efficient management helps ensure that the cost of operation is kept to a minimum.

Cooperative prices should balance the members' satisfaction and cost-efficiency, depending on the cooperative's sales objectives. The cooperative management could minimize its costs in order to charge low prices to its products or could provide additional services that imply extra costs and higher prices. Meeting members' expectations means incurring additional costs. Some of these costs are summarized in the table below.

Table 3.1: Additional costs to satisfy member expectations

Type of service	Costs
Wide stock variety	Administrative and stock holding costs
Credit	Interest costs and risk of bad debts
All items available at all times	Stocking and finance costs, and risk of deterioration
Convenient locations and individual delivery	Transport costs
Wide range of package sizes	Storage and administrative costs
Full information about all products, extension	Staff training and wage costs
Lowest prices	Small surplus to cover supply service costs

Depending on its objectives, the cooperative may consider the interests of the wider community in its operation, as the fulfilment of the cooperative principle of 'concern for the community'. Here are some ways that cooperatives may choose to fulfil that principle:

- To sell inputs to non-members at the same price or a slightly higher price,

but still lower compared to other traders. However, this will depend on the availability of the inputs and the efficiency of the operations of the cooperative supply service.

- To deal with inputs that have no negative impact on the environment; such inputs might indirectly even positively impact business purposes. A better environment with healthier people promotes productivity.
- To allocate some of the surplus of the supply service to offer social services, such as construction of health facilities, schools and paying schools fees to orphans and other disadvantaged groups.

Sales to members

Although supply service caters for the members of a cooperative, often private suppliers are also conducting their business within the same locality and the members are very much aware of the services provided by these suppliers. For this reason, the cooperative has to convince members of the uniqueness of its products, services and the terms of its supply service. This is where the importance of sales management comes in.

The management of a cooperative needs to make choices on pricing and has to put in place selling procedures that are convenient for the members, while ensuring good customer service. The management also needs to decide what the best way of selling is:

- Direct selling: The cooperative is directly selling to its members.
- Selling through sales agents: The cooperative hires sales agents that are paid a salary or a commission (% of sales).
- Selling through retailers.

Selling procedures

Accessibility of inputs

Ideally farm inputs should be available at the shortest distance from the cooperative members' farms so that the members do not have to travel far to access services. If this is not the case, for most of its members, some practical arrangements could be made to bring supplies to their proximity. This could be provided as part of the input supply services or provided as optional additional

services. In the first case, the costs will be included in the price of the products; in the latter case, clients could opt for the service and will pay separately. A cooperative could set up distribution/selling posts or appoint local distribution agents to serve the localities that are far away from the cooperative's main distribution centre. Naturally, this will have cost implications.

Credit arrangement

Sales could be made in cash; however some farmers might not always be able to pay in cash. A cooperative could also consider selling to its members on credit under special arrangements. Such credit arrangements are an important factor for clients decide whether to purchase inputs or not. Several forms of credit could be considered to facilitate access to inputs. Important components of financial services include:

- costs in terms of interest;
- moment of repayment;
- conditions of repayment;
- degree of default risk;
- sanctions in case of non-compliance with the conditions;
- maximum credit;
- need for and type of collateral.

Credit always involves risks both to the cooperative and the member. In order for a member to get input supply on credit the member should have adequate collateral. In cases where the cooperative is also involved in the marketing of the products, the collateral may be based on the amount of crops the member sells through the cooperative. The loan could be deducted from the member's deposit of products. Another way to reduce risks could be by handing out a group loan (to a group of members). In this case the group is responsible for paying back the individual group loan.

Self-assignment 3.1

Does your cooperative sell its inputs on cash or credit? In the case of credit: What arrangement does your cooperative use? How do you ensure members pay?

Provision of additional services

Farmers might need additional services to be able to access input supply services and to be able to apply the inputs in a proper way. These services could be provided either by the cooperative or other service providers, including the private sector, government agencies, research organizations, and NGOs. Many cooperatives involved in input supply also provide additional services to their members. In Module 2, a number of these services are already mentioned. Services directly related to input supply include:

- distribution of inputs to producers;
- technical services: information, training and extension;
- financial services (see payment arrangements).

Additional services could bind members and other customers but at the same time imply additional costs for the cooperative and thus for the buyers of products. Cooperative management need to make decisions whether to provide the additional services or not, who should be able to benefit from these services and who will pay the costs.

Information, training and extension can contribute to the appropriateness of the input supply services. Additional skills, capacities and/or knowledge are needed to apply the inputs in a proper way and to optimize the benefits of the input supply. These are also additional services that might attract new members. Information, training and extension services could be related to the application of the input, and could, for example, concern safety measures and cultivation practices amongst other things.

Selling to non-members

In the selling procedures a distinction can be made between members and non-members: a cooperative could also decide to sell inputs to non-members. In that case, a cooperative should consider different selling terms for members and non-members so that there is a clear incentive in being or becoming a member. For example, the cooperative could decide to sell inputs to non-members at a different price. If there is a shortage of inputs, members should be given first priority in getting inputs. There are also procedures on administration. The cooperative could decide to acknowledge the receipt of money paid for goods by issuing a cash sale to the customer and the same will be sent to the store keeper for issuance of goods. Obviously good communication on procedures to members and other customers is important.

Pricing policy

Price setting

While the cooperative wants to provide good services in a cost-effective manner, customers want low prices in order to get high value for money. Price setting has an impact on both the supplier (cooperative) and the customer (member and non-member).

Pricing is the process of determining what a cooperative will receive in exchange for its products and services. The motive of the cooperative is not profit maximization but rather provision of good quality services to its members. In this respect the price to be charged on the farm inputs should be affordable to members but enough to recover all costs and to make a surplus. The price affects the business in terms of sales (volume and revenue), competitive position, profitability, customer satisfaction and cooperative image.

Setting cost-effective prices for the products that target members' needs should contribute to the following benefits:

- members' satisfaction;
- increased sales, sales revenue and surplus;
- members' retention and enrolment of new members;
- good cooperative image;
- increase of working capital through increasing surplus.

Self-assignment 3.2

A cooperative needs to satisfy members' needs, providing quality services for affordable prices for inputs. Think of an input your cooperative is providing to members: How did you establish the price you are charging? What factors influenced the price and what pricing policy should be applied?

The pricing policy could follow the steps below:

- Define your pricing objectives.
- Choose a price strategy.
- Fine tune and adapt pricing policy.

Defining pricing objectives

Before setting a price the cooperative first needs to define its objective. Is the objective to sell as much as possible or to increase revenue? A cooperative could also strive to improve its competitive position and opt for a temporary low price. The following objectives can be distinguished: sales volume, sales revenue, market share, competitive position, cooperative image and profitability. A combination of objectives is also possible. The pricing policy objective also takes into consideration factors that will influence price, such as, cost, demand, competition, experience, customer perception and the cooperative's surplus goal. Following is a table of pricing objectives:

Table 3.2: Pricing objectives

Increase sales volume	Sales volume is highly affected by the price you charge. This implies that the higher the price the lower the sales volume and the lower the price the higher the sales volume. People will tend to buy more when prices are low and buy less when prices are higher, depending on the elasticity of demand of the products.
Increase sales revenue	Sales revenue refers to the total revenues from sales of the product and depends on sales volume and the price. Price affects the value of sales a cooperative can generate. Price can cause increase or decrease of sales revenue. In formulating the price policy it is desirable to set the target for the sales revenue required so as to set a price that will facilitate achieving the target. Usually the percentage increase of price will cause the same percentage decrease of sales revenue. The cooperative needs to arrive at the optimal price, acceptable to members (i.e. lower than the price at other suppliers), but still leading to sufficient sales volumes and revenues to cover costs and make a surplus.
Increase market share	Cooperatives operate in a competitive market where there are other suppliers offering the same inputs. In this regard, the cooperative should establish its pricing policy to target a proportion of the market share, and therefore, the price to be set should motivate the capturing of a larger market share. To a larger extent the price will determine the market share. If the market share of the cooperative increases, other suppliers might be forced to lower their selling price. This will affect the incentive for members of buying at the cooperative which can have severe impact on the sales revenues and surplus of the cooperative.
Competitive position	The price may influence the competitive edge of the product in the market. Price can affect the market position, and therefore, in setting the price, the cooperative should establish prices charged by other competitors in the market so that it can set a price that is competitive. In some markets a high price is associated with high quality. The cooperative should take into consideration the target sales market.
Cooperative image	The price a cooperative can charge will create a certain image among the members and non-members; if you charge a high price your image to the members is surplus maximization or surplus-driven. If you charge a reasonable price the image you create for the members is that you are targeting members' satisfaction. Your pricing policy should establish the image that the cooperative wants to create.
Profitability	The profitability of the cooperative is affected by the prices of the products. A high price could give a high surplus and a lower price could give low surplus. High prices could also imply lower sale volumes, leading to lower surplus. Similarly, lower prices could lead to higher sales volumes and increase surplus. When formulating a pricing policy, the cooperative management needs to strike a balance between members' satisfaction in a cost-effective manner and profit-making.

Choosing pricing strategy

The price strategy is used by cooperatives to set the price. There are many price strategies that are used by various types of businesses but the cooperative can opt for the following:

Penetration pricing

The price charged for products and services is set artificially low in order to gain market share. Once this is achieved, the price is increased. This is very much applicable when you introduce a new product or when you enter the market for the first time.

Economy pricing

This means adopting a reasonably low price. The costs of marketing and manufacturing are kept at a minimum in order to charge members a reasonable price.

Same price

In this strategy the cooperative charges the same price that is charged by the competitors. However, there should be clear advantages to purchase at the cooperative. For example, the incentive for members to buy at the cooperative could be related to the expected surplus for the cooperative and additional services, such as information and extension, transport, amongst other things. Also favourable paying arrangements could be motivating members (and non-members) to buy at the cooperative.

Full cost pricing

This pricing strategy includes all costs of the product and adds a flat rate of surplus margin to ensure generation of small surpluses to be used to develop the cooperative and is sometimes shared among members.[7]

Fine tuning and adapting the pricing policy

This is the last stage of the pricing policy that involves fine-tuning the policy to be ready for use. A sustainable price is one that ensures the recovery of all the costs involved in procuring and selling the goods. Setting a sustainable price is not a simple task; it involves critical thinking, innovation, wise decision-making and interaction with stakeholders. In order to set a sustainable price you should

7 http://smbtn.com/books/gb52.pdf (accessed 17 Oct. 2011)

bear in mind the following:

- In order to guarantee income, a cooperative sets a higher selling price then was the cost price. This margin is used to cover the costs including storage, transport, and time. It is important to realize that a uniform percentage should be added to all products. A cooperative could decide to add 10 per cent of the cost price to tractor hiring as the members that do hire are financially capable and add only 2 per cent to inputs. It depends on the importance to members and the competition in the market.
- The cooperative needs to earn a surplus that can be used for developing its enterprise. When the cooperative increases the price, the outcome is a decrease in sales and poor service to members.
- When you decrease price the result is increased sales and good service to the members, but reduced surplus. So in order to set a sustainable price, you need to balance members' satisfaction and surplus.

Factors that influence pricing

Both internal and external factors influence the pricing of products and the cooperative should consider various factors that influence pricing. In setting a sustainable price you should consider the following factors that influence on the price:[8]

8 *Entrepreneur's guidebook* (Patsula Media, 2001)

Table 3.3: Factors influencing price

Cost	This is the first item to consider in pricing. The cooperative needs to take into account both variable and fixed cost. Variable costs include the cost of acquiring the product and transport costs while fixed costs include: wages, insurance, storage, rent, security, stationary and other administrative costs.
Demand for the product	The cooperative has to set the price according to the demand for the product. The cooperative can attach a high price tag to the products with high demand and a low one to the products with low demand.
Competition	The cooperative supply service does not operate in isolation; it operates in a competitive market. In this regard, the cooperative has to price its products according to the prices charged by the competitors.
Industry average	The price will take into account the standards and regulations in the industry of the product concerned.
Legal concern	Pricing should adhere to existing local and national regulations and laws of the respective country.
Customer expectations	Price the products and services according to the expectations of customers. Some customers are price-conscious.
Experience	Price products according to what people were willing to pay in the past.

Income statement

In order to measure the financial health or financial performance of the supply service, the financial report will be prepared at the end of the year. This financial statement will be prepared to measure the profitability of the supply service. The income statement of the supply service is divided into two parts:

- trading account;
- surplus and loss account.

Trading account

Trading account is a comparison of the sales revenue and variable trading cost to determine gross surplus or gross loss. Variable trading costs are those expenses that vary with the volume of the business, such as purchase of goods, transport, and stock balance at the beginning and at the end of the year.

Surplus and loss account

The surplus and loss account is the financial statement that compares the gross surplus and other administrative costs or fixed costs, which does not vary with the volume of the business (such as salaries, rent, stationary, allowance for board members, advertisement, casual labourers and insurance). The gross surplus realized in the trading account does not include administrative costs, and therefore, in the surplus and loss account these costs are deducted in order to realize net surplus or net loss. If gross surplus is greater than administrative costs, the result is net surplus and if gross surplus is less than administrative costs, the result is net loss.

Key Learning Points

In this module we have presented the strategic decisions involved in input supply. First we reflected on the challenges with regard to procurement. We learnt that it is important to identify the needs of the members, in order not to over- or understock. Identifying needs involves also prioritizing needs. Such needs assessment should be done each time before procurement; it is important to realize that needs are subject to change. Many external factors (weather, market demand or price changes) are influential.

When selecting an input supplier, the key criteria are: affordability, accessibility, appropriateness and availability. For inputs management, decisions have to be made on: transport, centralized or decentralized stock, large or small stock. Should the cooperative have its own transport? How often should it buy inputs? A cost–benefit analysis helps in deciding whether a cooperative should supply an input itself, or whether it is more cost-efficient to outsource it.

Then there is the selling of the inputs to the members. Very often the cooperative is not the only supplier; it has to compete with others. However, providing the lowest price might not be cost-efficient for the cooperative; it could also consider providing additional services that make it worthwhile for the member to buy from the cooperative.

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ANNEX I
Example of Goods Received and Delivery Notes[9]

Goods Received Note

SOLIDARITY COOPERATIVE LTD
GOODS RECEIVED NOTE

No. ...*01*..... Date: ...*30/9/2012*.....

Received from ...*Prompt Traders*.....

Order No. ...*011*.....

Delivery Note No. ...*0015*.....

Particulars	Package	Quantity	Price		Value		Page Number of Stores ledger
			C$	Ct	C$	Ct	
DAP Fertilizer	*Bags*	*300*	*C$70*	*00*	C$21,000	*00*	*01*

I acknowledge the receipt of the above goods ..*In good condition*.....

Name of the store keeper: ..... **Name of the Driver:**

.....

Signature: ..... **Signature of the driver:**

.....

9 M. Harper: *Supply management, Material for cooperative management training in agricultural cooperatives* (MATCOM) (Geneva, ILO, 1980) and M. Harper: *Storage Management, Material for cooperative management training in agricultural cooperatives* (MATCOM) (Geneva, ILO, 1982).

Delivery Note

Trinity Agricultural Cooperative

DELIVERY NOTE

MS. ...*Sub Distribution Centre A*..... Date: ...*30/10/2012*...

Received from ...*Prompt Traders*.....

Order No. ...*011*.....

Delivery Note No. ...*0015*.....

Particulars	Quantity	Unit price	Amount
DAP Fertilizer	*100*	*C$70*	*C$7,000*
	Total		*C$7,000*

Issuing officer..... **Signature of receiver**.....

ANNEX II
Examples of Stocking forms and sheets[10]

Stores Ledger form

Stores ledger LEDGER

Unit of measure: ...*Bags of 50 kg*.....

Name of the item: ...*DAP Fertilizer*.....

RECEIPTS					ISSUES					BALANCE		
Date	Ref No.	Quantity	Price	Value	Date	Ref No.	Quantity	Price	Value	Quantity	Price	Value
30/9/07	*01*	*300*	*C$70*	*C$21.000*						*300*	*C$70*	*C$21.000*
					3/10/2012		*10*	*C$70*	*C$700*	*200*	*C$70*	*C$14.000*

10 M. Harper: *Supply management, Material for cooperative management training in agricultural cooperatives* (MATCOM) (Geneva, ILO, 1980) and M. Harper: *Storage Management, Material for cooperative management training in agricultural cooperatives* (MATCOM) (Geneva, ILO, 1982).

Stock taking sheet

Stores ledger LEDGER

Date: ...*31/10/2009*.....

Warehouse: ...*Main warehouse*.....

Name of input	Ledger Folio	Unit of measure	Unit price	Quantity		Difference		Explanation
				Balance in the ledger	Counted	Surplus	Shortage	
D*AP Fertilizer*	*1*	*Bags*	*C$70*	*200*	*198*		*2*	*To be reported to the board for more investigation*

Prepared by

Name: ....*Albert*.....
Designation: .....*stock counter* .....
Signature: ....*Albert*.....

Witness

Name: ....*Joseph Good luck* .....
Designation: ....*Store keeper* .....
Signature: .... *JGoodluck*.....

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