

National Diploma Plant Marketing Plant Production

Handout 10 Field Crop Marketing

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Introduction

The aim of this paper is to help the understanding of field crop marketing in South Africa. Emphasis is placed on the marketing of maize.

Deregulation and liberalisation

The problems of agriculture after the Great Depression and the political power of commercial farmers resulted in the passage of the Marketing Act in 1937. This Act was reintroduced in 1968 and together with other specific legislation, put in place a range of schemes affecting most of the agricultural industry. Since the early 1980's factors, such as globalization, the move to democracy and a shift of political power from the commercial farmers to the consumers, have contributed towards relaxation of stringent interventionist measures.

The main differences between the previous Marketing Act of 1968 and the Marketing of Agricultural Products Act of 1996 are summarised in Table 1:

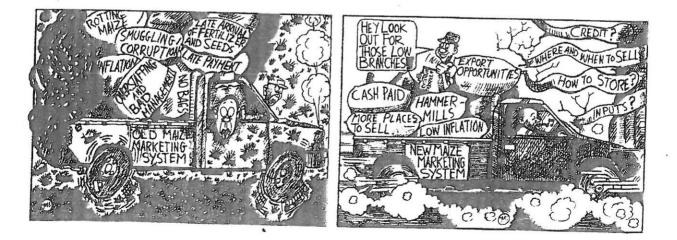
Table 1: Differences between marketing acts of 1968 and 1996

1968 Inherently interventionist	1996 Minimum intervention
Increased production.	Increased marketing efficiency.
Reduction of marketing margins.	Optimum export earnings.
Increased consumption and food self-sufficiency.	Food security at household level.
Maximum commercial producers on land.	More accent on small-scale farmers.
Economic farming units; minimum farm size.	Increased sustainability of agriculture.
Non-participation and bureaucratic intervention.	Participating, transparent and all inclusive.
Stabilising product prices.	Producers must themselves stabilise income.
Intervention inclusive of single channel; pools, surplus removal, fixed prices, quotas, price support; promotion; general and special levies, registration, records and returns, marketing subsidies.	Intervention limited to levies, export control, pools, registration, records and returns. No subsidies.
Consultation not always necessary although certain quantified producer support required.	Consultation process prescribed by Act inclusive of all directly affected groups.
No political process to approve levies apart from Minister.	Levies need to be approved by both portfolio committees and the Minister.
No maximum period and no interim testing of intervention.	All statutory measures to be introduced for fixed period and tested at least every two years.

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The present field crop industry arrangements can be depicted as reflected in the following diagram.

Previous	New	
MAIZE BOARD	 Technical Advisory Forum Maize Trust South African Grains Information Services (SAGIS) 	Free market, producers negotiate spot, contract or future prices, according to market forces. Phytosanitary requirements and PPECB certificate needed for exports.
WHEAT BOARD	 Wheat Forum Winter Cereal General Trust Winter Cereal Research and Development Trust SAGIS, SA Grain Laboratory 	Free market, prices determined by market forces. Phytosanitary requirements and PPECB certificate needed for exports.
OILSEEDS BOARD	 Oilseeds Forums: SA Sunflower Seed Forum, SA Groundnut Forum and SA Soya Bean Forum Oil and Protein Development Trust National Oil and Protein Seed Producers' Organisation (NOPO) SAGIS 	Free market, prices determined by market forces. Import tariff 0,65c/kg for soya beans and 10 % for sunflower-seed. Phytosanitary requirements and PPECB certificate needed for exports.
COTTON BOARD	 Cotton SA (Section 21 Co.) Cotton Trust 	Free market, prices determined by market forces. Import tariff of R1,60/kg which may be rebated.
SORGHUM BOARD	Sorghum Forum Sorghum Trust SAGIS	Free market, prices determined by market forces. Import tariff 3 % ad valorem, Phytosanitary requirements and PPECB certificate needed for exports.



The overall impact of the marketing reform has been a significant private sector response:

- The establishment of an Agricultural Markets Division (AMD) of the South African Futures Exchange
- Farmers are becoming more involved in managing their risks by means of storage (especially in the case of maize) and by forcing the cooperatives which own the vast majority of grain silos to become more commercially orientated, and by forward contracts and diversification.
- There has been an acceleration in the establishment of new enterprises in the food and agricultural

Price formation in the field crop industry

The small-scale farmer is just as much exposed to varying prices as is the commercial producer except when he uses his crop for own consumption or to feed animals. In such a case, the income that the small-scale farmer makes (by not selling his product) is equal to the expenditure which he/she would make if he/she had to purchase the crop in the open market.

For both small-scale farmers who want to expand and become commercial producers, as well as those who are satisfied to just subsist, it is important to have a good understanding of the markets in which they compete. Understanding price formation is one of the fundamental requirements in order to do successful marketing planning.

The domestic price of field crops is determined by several interlinked factors, these factors are discussed in the subsequent sections of this chapter.

Export and import parity

South Africa is only a small producer compared to other countries and is thus a price taker (meaning that we can not influence world prices). Because of this our local prices can only be between import and export parity. This is clearly illustrated in Figure 1. An import parity price is defined as the price which a buyer will pay to buy the product on the world market. This price will include all the costs incurred to get the product delivered at the buyer's destination. An export parity price is defined as the price that a local seller could get by selling his product on the world market e.g. excluding the export costs. The price which the seller gets is based on the condition that he deliver the product at the nearest export point (usually a harbour) at his own expense. World prices for field crops are usually quoted in US Dollars.

Import and export parity prices are published by the South African Grain Information Service (SAGIS) in order to help producers in their marketing planning.

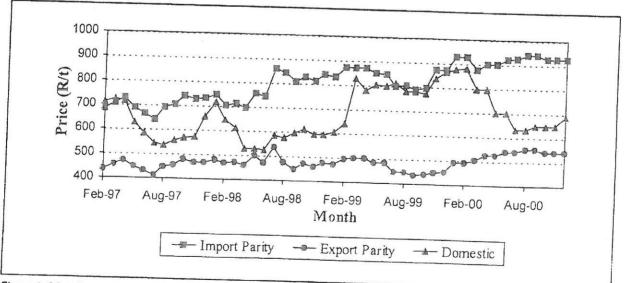


Figure 1: SA yellow maize prices (1997 to 2000)

See Appendix A for the calculation of import and export parity. Source: SAGIS and SARB, 2000.

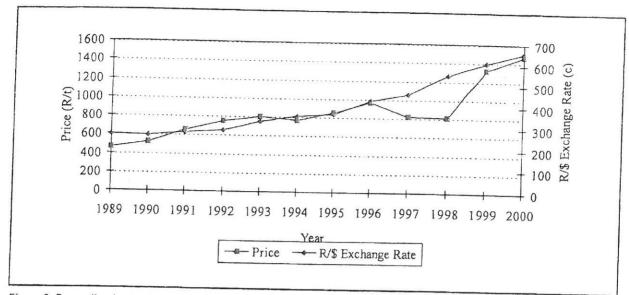


Figure 2: Domestic wheat prices compared with the R/\$ exchange rate (1989 to 2000). Source: NDA, 1999; SARB, 1999.

The following advantages of understanding import and export parity prices are:

- The producer price (the price that the small-scale farmer will receive on his farm) can be estimated from it.
- · Cyclical and seasonal movements in these prices could be used in marketing planning.
- With these prices as background knowledge, it is easier to follow discussions on price movements.
- With these prices in mind it is easier to negotiate a good price with possible buyers.

Exchange rate

As mentioned earlier, domestic grain prices are largely derived from international grain prices. Changes in the exchange rate are of particular importance to domestic grain producers since devaluation in the exchange rate will benefit domestic grain producers. In other words, if the Rand exchange rate loses value against the Dollar it is more expensive to import grains, thereby putting upward pressure on domestic prices. Figure 2 depicts the relation between domestic wheat prices and exchange rates.

When looking at international prices of oilseeds it is not the oilseed price that is important, but rather oilcake and oil prices. The **price that an oilseed processor is willing to pay** (to any producer) for oilseed should therefore **be derived from the import parity price of oilcake and oil.** The prices that domestic producers receive for their oilseeds are thus directly influenced by the world market prices for oilcake and natural oil. Again it should be stressed that the Rand-Dollar exchange rate has a huge impact here. World prices for **oilseeds have decreased in recent years** which could be ascribed to continuous bumper harvests in major producing countries. The depreciation of the rand has to a certain extent shielded South African producers against this price decline. Although world prices for soya-bean oil and soya-bean oilcake have decreased in the last three years the import parity prices of these products have moved slightly upwards.

Supply and demand

Although world field crop prices determine the South African prices, domestic supply and demand still determine whether the domestic price approaches the import or export parity price. In theory, when prices go up there will be a fall in demand and an increase in supply. In time, the amount supplied at a particular price will come to equal the amount demanded

Summary of quantity supplied and quantity demanded

G	luantity supplied	Quantity den	nanded
•	Prices of substitutes Price of the product usually produced Weather conditions	 Prices of s Changes in preference Price and c 	ubstitutes n tastes, is and income quality produced
	Access to market channels Access to inputs Access to storage facilities	Different m	arkets

In order to obtain a thorough understanding of the supply and demand it is necessary to understand the following:

Quantity supplied

Prices of substitutes

If a farmer who usually produces maize is of the opinion that the price of, for example, sunflower seed will increase substantially in the next season he/she will rather plant sunflowers than maize, thus reducing the amount of maize produced. This could have a significant impact on maize production if a lot of farmers have the same opinion of the market.

Price of the product usually produced

Farmers production decisions are also a function of the price of the commodity they would like to produce, i.e. a farmer that wants to produce maize will take into account the previous season's price, as well as the price he/she is expecting to get for the coming season. If price expectations are favourable the chance is very good that such a farmer will produce maize, especially if this is the crop that he/she is used to planting. However, if price expectations are negative this farmer could decide to plant something else.

It is important to note that from a small-scale farmer's point of view maize is important in terms of household food security, as well as feeding animals. Even if prices may not be favourable for the coming season farmers may still decide to plant maize, but may also produce a crop like sunflower that can be marketed for cash. Thus, it is important that the extension officer does not only gain knowledge on the marketing of one crop.

Weather conditions

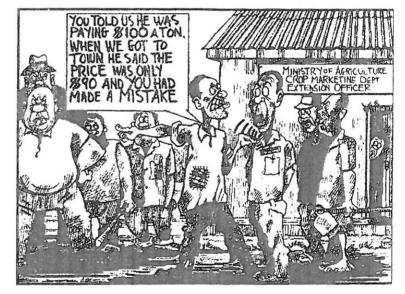
With the unpredictable weather patterns in South Africa it is not strange that record planting of a specific crop could result in lower than average crop. Weather conditions also have a profound impact on the quality of the crop.

Access to marketing channels

Access to marketing channels could have an impact on the quantity supplied in a specific period. For instance, if farmers are situated far away from markets it could happen that most of their crop will never be actually delivered to the major markets. To obtain a reference price for these farmers if they want to sell

their product (for instance to a neighbour) is very important. SAFEX could be contacted in order to get a reference price in this situation.

It is important that the transport differential is taken into account when calculating the price in a specific area. For example, if the transport cost from Randfontein (this is where Safex prices are quoted) to Mafikeng is R80 per ton for maize and the SAFEX price is R700 per ton then the going price for maize will be approximately R620 per ton in Mafikeng. Other transaction cost, such as delivery to the buyer, packaging, etc. must also be deducted.



Access to inputs

The financial position of a producer at the beginning of the production season may have a significant impact on his/her planting intentions. The more difficult it is to access production loans the less will be planted in that specific production season.

A further restricting aspect is the availability of inputs such as fertiliser, pesticides, herbicides, seed, fuel and labour. It is important to note that these inputs will always be available if one is prepared to pay the price. If these inputs become too expensive in a certain region it would be advisable to consider an alternative crop which requires less inputs.

To compare the profits of different crops it would be necessary to obtain enterprise budgets for the crops. Cooperatives usually have enterprise budgets for the different crops grown in different regions.

Hence, the extension officer could greatly assist producers in determining whether planting a specific crop is profitable or not.

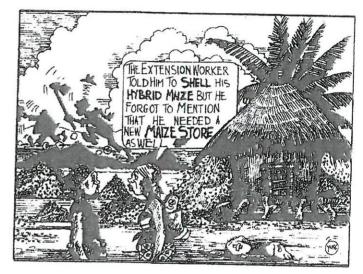
Access to storage facilities

If a farmer don't have access to storage facilities it will mean that he/she will have to sell all of his/her crop at the time of harvest. Usually this is the time of the year when the prices are at their lowest (June/July for maize, March for sunflower, April for soya beans, June/July for sorghum, November for wheat). Helping farmers to identify storage facilities in their region could help them do more effective marketing. Most of the cooperatives in field crop production areas do have facilities.

The cost of storing should always be evaluated against the benefits of storing. For example, if a

producer would like to store his/her maize until December he/she should determine the price at which maize could be sold in December (again the Safex price could be used as barometer). Also, the producer should find out the storage cost until December. If the storage cost is deducted from the December price and the price is still higher than the price at harvesting then it could be worthwhile to store the maize until December.

It should be noted that the producer should take into account the cost of transporting the crop to the storage facility and fetching it again. Selling the crop whilst it is still at the storage facility is preferable.



Quantity demanded

Prices of substitutes

The price of the product determines the quantity demanded of that product. The reason for this is that consumers could switch their demand between different commodities. If the price of maize meal increases drastically due to a shortage of maize consumers would rather buy bread or rice. It is also true that the demand for most agricultural commodities is relatively price inelastic. This entails that the demand for a product does not change very much in response to price changes. Because of taste and preferences consumers do not easily change their staple food. This is, however, sometimes forced onto them by financial constraints.

Changes in tastes, preferences and income

This is a factor which develops over time and it is not that evident in a specific year. In South Africa there is for instance a tendency for **consumers in the urban areas to consume more bread and rice and less maize meal**. Urbanisation also leads to a larger demand for bread than maize meal. With a higher income in urban areas than in rural areas it is also easier to change between different food items.

If the per capita income in South Africa increases it will mean that people can afford more luxurious foods and, accordingly, they will consume less of the traditional staple foods.

Price and quality produced

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In South Africa there exist good grading standards for all the field crops. These standards relates to moisture content, damaged kernels, protein content and foreign-matter content. Note should be taken of the fact that traders and millers are very aware of quality.



There exists a distinct price difference between different grades of field crops. In a shortage year the price gap between low and high-grade products decreases. This is because millers don't have any option other than to make use of low-grade products. This can, however, only be done to a certain extent or the end product will become undesirable for the consumer.

Different markets

The quantity demanded of a commodity is also determined by the availability of the commodity in a specific market. For instance, if there is a shortage of yellow maize in South Africa the animal feed industry will start to include white maize in the feed rations. This will increase the quantity of white maize demanded.



Price movements

As was already mentioned prices for grain products are usually the lowest during harvest, whilst they will increase steadily as the season progresses. Note that the lowest and highest prices from year to year do not necessarily coincide due to various factors that include, amongst others, weather conditions before planting, during the pollination process and during harvesting; stock position domestically and internationally; production intentions of domestic and overseas producers, tariff policy and demand conditions. Nevertheless, we can identify periods where prices are typically lower and higher during a particular season.

More specifically, factors which can affect the seasonal price patterns of grain are:

- Farmers may decide to sell some of their crop to raise cash immediately after harvest. They will try to sell at least as much of their crop to raise enough cash to meet their financial obligations, such as cooperative input accounts.
- World stocks and world prices for commodities have a great impact on domestic prices. This is because of liberalisation in agricultural markets in South Africa.
- It also happens frequently that large traders feel that the price of a product may go up in which case they may try to buy the product cheaply at the beginning of the season and store it until the price goes up enough for them to sell at a profit. There are at least five major traders who could have a profound impact on domestic prices.
- If farmers feel that the price of the product will go up they may decide to store it and wait for higher prices. It is common for producers to store their product at the nearest cooperative silo at a predetermined fee.
- The extent to which information is available has an important influence on prices. This tendency is best
 illustrated if one look at crop estimates. If the crop estimate in a specific month changes drastically from the
 month before there is a sudden and severe price movement for that commodity.

Price barometer

All the above mentioned factors are reflected in an SAFEX price for a product. This is because SAFEX traders are very well informed and react immediately on new information. SAFEX is a futures market where a producer with a minimum of 100 tons of maize can sell his crop today for a specified price and deliver the crop at a specified date in future (typically in harvesting season). By using this marketing alternative it is possible to fix a price at a certain level. This decreases the risk of being exposed to fluctuating prices. The following field crops trade on SAFEX:

- White maize
- Yellow maize
- Wheat
- Sunflower seed

SAFEX is typically used as the price indicator by buyers and sellers of these products. Derived prices in the different regions of South Africa differ due to transport costs from the SAFEX reference point, which is Randfontein.



Most producers only sell up to 30 percent of their crop on SAFEX. These arrangements are all legally fixed in futures contracts. It should be noted here that futures contracts are standardised. These contracts are only available for first grade products and the minimum quantity specified is 50 tons for wheat and 100 tons for maize and sunflower seed. The only way in which small-scale farmers could make use of these contracts is when they produce more than the minimum required quantity of first grade products. Producers make use of brokers to market their products on SAFEX.

Transaction cost

Over and above the factors which influence South African prices for field crops, there are some additional factors which have to be taken into account in determining the price which producers will receive. These include all the costs that occur in the transaction process and have to be paid by the producer. Transaction costs could include some or all of the following aspects:

- Transport cost to the delivery points such as the nearest silo.
- Commissions.
- Losses in quality before delivery.
- Handling costs up to delivery.

Procedures to follow when trading on SAFEX



- Produce more than minimum required quantity of first grade product.
- The producer must have enough money in reserve to pay in when the prices decrease.
- Find out what future prices are forecast at harvesting time (this information could also be obtained from the broker).
- Contact a broker.
- If satisfied that price for available contracts is high enough sign contract with broker. The price should at least be higher than production costs.
- The specified quantity in the contract is now sold with the contract. This contract could be sold at any time up to delivery date.
- An initial margin and commission fees are payable when the contract is signed.

It is important that producers take note of these factors in order to do financial planning for the next season.

Grading of maize

The current quality regulations and requirements are set forth in Agriculture Product Standards Act no. 119 of 1990. A government notice released in August 1998 publicized all maize standards in "Regulations Relating to the Grading, Packing, and Marking of Maize Intended for Sale in the Republic of South Africa." The regulations set forth strict standards regarding maize quality. Three classes of maize are:

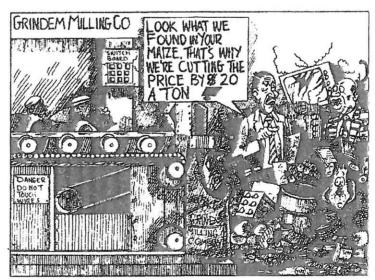
- white maize,
- vellow maize, and
- other maize.

Within white and yellow maize classes there are grades 1, 2, and 3. There are several minimum requirements for maize to be graded. These include:

- free from musty odours,
- free from dung,
- free from insects, and
- free from large stones.

Maize should not have more than fourteen percent moisture.

There are also strict standards for the actual grading process and packaging requirements. Maize of different grades must be packaged separately and rebelled with the specific grade.



Processes for determining harmful substances and sampling are defined. Foreign matter, defective kernels, other coloured kernels and pink coloured maize kernels are all factors that determine the specific grade for white and yellow maize. The processes for determining these factors are also precise.

Maize is graded several times throughout the marketing process. It is graded when it is delivered to and sold from the silo, by consumers, by the PPECB (a government agency), and by any possible exporters. Any person within the marketing chain can appeal against the specific grade.

Marketing channels

Small-scale farmers can be divided into those that produce grain for household and marketing purposes, and those that produce grain only for household purposes. The latter group will seldom get involved in the marketing of grain since they would rather feed it to their cattle or sell it to neighbours.

The former group are those farmers who are able to produce grain in excess of their household needs, i.e. human and livestock consumption. The surplus grain is used to improve their cash flow situation by selling grain to willing buyers that extend the borders of the communal villages.

Before ways in which grain can be marketed are discussed it is important to take note of the following:

- Knowledge of extension officers on the way grain marketing is done in South Africa is extremely limited. This is due to the fact that extension officers have had little exposure to practical on-the-groundmarketing actions.
- It is common that farmers are guided as to how to market their grain, but they do not take action.
 This is mainly due to the fact that marketing of grain in most cases requires a certain degree of
 organisational ability. Experience of organisations working with small-scale producers as far as marketing
 of grain are concerned show that once a farmer has completed the whole process he or she is much
 more willing to take over responsibility for marketing.
- Grain South Africa (GSA) established an Agricultural Development Office (ADO) that, amongst others, focuses on assisting small-scale farmers to market their produce. This service involves linking sellers

with buyers in different regions, providing advice on the marketing tools available and information on grain prices and market conditions, as well as guiding producers from the beginning of the marketing process until the farmer receives payment. A hands-on approach is followed to assist small-scale farmers as far as possible.

Information on market conditions and marketing is distributed through various channels, namely radio (Motsweding FM), newsletters (the Pula Newsletter in South-Sotho, North-Sotho and Twana, the Imvula Newsletter in Zulu, Swazi, Xhosa and Ndebele) and through enquiries. Contact details are included at the end of this document.

- I wish I had listened before I sold my grain too cheaply!
- Note should be taken of the fact that small-scale producers do use Safex as a marketing tool, although at present on a limited scale, either on an individual basis or as groups. GSA also actively promotes the use of SAFEX amongst small-scale producers.
- Lastly, before discussing the different types of marketing channels that could be used by small-scale producers it is important to take note that for extension officers to be successful in terms of assisting small-scale farmers need to:
 - have knowledge on how marketing of grain works,
 - know how the different marketing options work,
 - gain practical experience of marketing,
 - have contact numbers ready when any problems are experienced, and
 - get involved in study groups.



Different types of marketing channels

The available direct marketing channels for the South African grain and oilseed producer are as follows:

- Cash market sales.
- Storage.
- Forward contracts.
- Future Exchange contracts.

Producers can also market their grains and oilseeds indirectly through their own intensive livestock production systems.

Direct marketing channels

Various ways exist to market grain. In order to understand the ways grain can be marketed, one needs to first know the different channels that can be used and also how to make use of them. For this reason, the direct marketing channels are divided into Non-futures exchange and Futures exchange marketing channels.

Non-futures exchange marketing channels

Extension officers could be of great help when it comes to the marketing of grain by small-scale farmers. Before we get to the different marketing alternatives, farmers need to be informed about some issues before marketing, or even planting, could take place.

The extension officer could assist the small-scale farmer as following:

· Identify the demand for the different types of grain

The extension officer must contact buyers and find out what their demand is. This involves quantity and quality requirements, delivery dates, whether transport is available, prices offered, and how payment will be made. Also note that buyers include cooperatives, traders, millers, feedlots, other farmers, etc.

The extension service needs to compile a list with contact details of all potential buyers in a region. Such a list could then be distributed amongst extension officers in different regions to enable marketing over regional borders. Another valuable source of information is the Agricultural Development Office (ADO) of GSA. GSA is also involved in small-scale farmer study groups in order to assist and educate them with regard to the production and marketing of grains.

Provide information on quantity and quality restrictions It could be of concern since the demand for different grades differs within and between marketing seasons. Hence, extension officers should make sure that they source the necessary information from buyers.

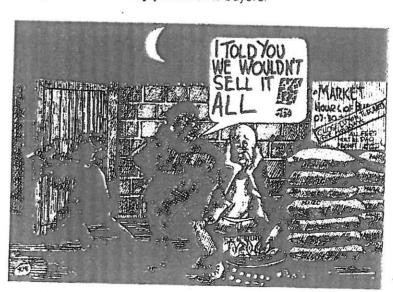
The trading hours of the different buyers need to be documented

Farmers must plan their transport accordingly. Transport plays a critically important role in the marketing of grain. For this reason the extension officer should make absolutely sure that farmers or groups of farmers have the ability to organise transport of grain to assembly points or to buyers.

It is essential that delivery take place as arranged, otherwise buyers will lose faith in the farmers. Transport can be contracted where necessary, farmers can use their own vehicles or buyers could provide transport. Extension officers should encourage farmers to plan transport in advance.

Grain crop estimates

Extension officers must also make an estimate of the potential grain crop in the specific region. This could be of great help to buyers and producers when it comes to the collection and transport of bulk quantities.



Determining the price

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Prices offered by buyers must be in line with supply and demand conditions. Extension officers must constantly be aware of the factors affecting prices in each region, as well as how the prices are derived. In

the case of maize, wheat and oilseeds, prices are derived from the Futures Exchange prices. Variation in the futures prices, as well as fundamental aspects in a region, must be taken into consideration when local prices are considered.

Build a network with potential grain buyers and sellers

A complete record-keeping system should be developed (quantity bought/ sold, quality sold and quality required, transport cost, distance between potential buyers and sellers, prices paid for different grades, etc.).

Buyers need to be informed of production activities in the rural areas. E.g. sorghum processors buy large quantities from small-scale farmers due to the good quality produced. (Only specific cultivars.)



Networking between sellers and buyers with the assistance of extension officers is also a way to expose small-scale farmers to other marketing possibilities and to start to commercialise grain production in rural areas. This will also provide a basis for hands-on experience for extension officers. Note that the ADO is also a valuable contact to get potential buyers and seller in contact with each other. The main advantage of ADO's is that they are involved from the beginning of the marketing process until payment to the producer. **Close cooperation between extension officers and the ADO** during the marketing process could significantly enhance extension officers' knowledge and ability to assist grain producers in the marketing of their produce.

Consider inviting potential buyers to the production region

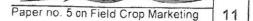
This may enhance the relationship between buyers and sellers, and also provide the buyers with an understanding of the difficulties small-scale producers face.

Cash market sales

- For all grain types, the cash market is all the possible places where grain can be marketed for cash, directly after harvest, without having signed a contract. This could be a neighbour, a local miller, a cooperative, a grain trader or anybody else who wants to buy grain. The challenge is to identify potential buyers, as discussed above.
- Selling of grains and oilseeds takes place in an unprocessed form to buyers in the region where the commodity is produced.
 - The extension officer or the farmer must determine if there is a demand for, e.g. white maize. (The buyers inventory compiled by the extension officers should be used).
 - It must then be determined in what units the potential buyers want to purchase the maize, i.e. bags of 25 kg or 50 kg or bulk. (This information should be established during the initial contact with buyers.)
 - Buyers will usually indicate how delivery must take place. (This can be negotiated.)

The farmer could also mill the maize before selling it. This is not an uncommon practice. Examples exist where small-scale farmers contract local millers to mill their maize and package it according to the needs of the farmers. Obviously this comes at a cost that should be negotiated with the miller. The farmer could then sell the maize meal at existing market prices (e.g. maize meal in stores can be used as an indication). The farmer could also sell everything to the miller.

If such milling facilities do not exist a farmer or a group of farmers could purchase a second-hand hammer mill. By milling the maize before selling it the producer can offer a wider spectrum of value-added products. Payment occurs normally when physical delivery takes place.



- Prices are determined on a supply and demand basis in a specific region and can vary on a daily basis. It
 is very important that extension officers should have good networks in place to source such information on
 a regional basis. This information could then also be distributed to other extension officers in other regions.
- In the case of maize and wheat, prices are reported in the daily newspapers, depending on the region and province, as well as on radio and in GSA newsletters (Pula and Imvula Newsletters). Sorghum prices are also reported in the same newsletters.
- In the case of sorghum, buyers buy the surplus production in the rural areas. Small-scale farmers produce good quality sorghum due to the fact that it is hand-harvested. Extension officers need to be aware of the cultivars available on the market. Certain buyers require certain sorghum cultivars.

Storage

- · Storage forms part of the marketing strategy a farmer can follow.
- Grains and oilseeds can be stored on the farm if storage facilities are available or it can be stored somewhere
 else, normally at a cooperative, but storage costs are charged.
- In times of low prices in the cash market, stock can be stored to be sold at a later stage when prices are higher.
- Extension officers need to be informed of the crop estimates and the direction / forecasts for prices. This could influence the decision by the farmers whether to sell in the cash market or to store the grain. The storage costs should be taken into consideration.
- Extension officers therefore need to find out about the storage capacity in the region and the associated costs and the conditions (grade, moisture, packaging, etc.) having to be met to put grain into hired storage facilities. This will influence the feasibility of storage.
- Storage facilities need to be considered since small-scale farmers could benefit from sufficient storage space.

Forward contracts

- When the crops are still maturing on the land, farmers can sell their produce by means of forward contracts. Contracts are made available on an ad hoc basis by buyers in order to secure certain quantities. Small-scale farmers in the Rustenburg and Mafikeng areas are, for example, already making use of forward contract to market their maize.
- Buyers such as millers, cooperatives, feedlot owners and also exporters make forward contracts available. Extension officers can help farmers to identify possible buyers in their region.



- The applicable prices attached to the forward contracts can also vary on a daily basis, depending on what
- The holder of the forward contract can sell his/her produce for the applicable contract price, regardless of the prevailing price in the market at the day of harvest.
- · Forward contracts exist for maize, wheat, beans and sorghum. Extension officers need to be aware of the contract specifications as these specifications differ between buyers. If extension officers do not have the capacity to interpret the conditions of such contracts they should make contact with ADO.
- The following need to be considered when dealing with forward contracts:
 - The underlying price as specified in the contract.

 - The quantity related to the specific contract, as well as the quality.
 - Price premiums exist for better quality grain.
 - The date and place of delivery, as well as the method of payment.
 - Farmers must be able to meet the contract specifications.
 - If the farmer could not deliver according to the contract specifications on the day of harvest, what are the conditions? These conditions differ between buyers as well as the compensation applicable.

Marketing costs

- Transport is one of the largest marketing costs and varies due to distance, form of transport and the
- Prices for grain are normally quoted as ex-silo prices, meaning that the farmer needs to pay the silo costs. The table 1 shows the applicable costs:

Item	Costs in Rand per ton	
Silo certificate	R1.00	
Cash sales	No marketing costs	
Storage per day	R27/t and 23c/day	
Storage per season	R50.00	

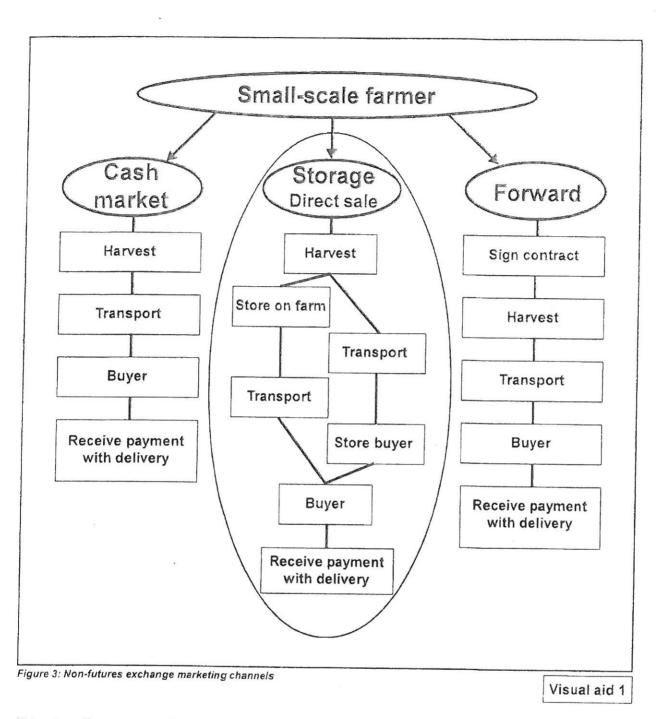
Table 1: Marketing costs applicable to non-futures exchange marketing

- The following aspects should be taken into consideration as far as marketing costs are concerned: - The distance to the place of delivery. The price offered for grain could look very attractive, but the transport costs could change the whole scenario.
 - Transport conditions are also of importance. Extension officers need to inform farmers of the different forms of transport available in the region, as well as the costs.
 - Bulk transportation is much cheaper compared with small loads. Farmers need to consider collective transport, also depending on the transport capacity available.
 - The payment conditions of the transport must also be known. This varies between transporters. Extension officers need to be aware of the loading, payment and insurance conditions of all the transport providers in the region and make the information available to the farmers.
 - In many cases the buyers of grain can also provide the transport. Transport costs are then subtracted from the prices paid to farmers and therefore no additional cash is needed to pay a third party.
- Grain can be transported in bulk or in bags. Bags lead to additional costs, but are much easier to handle, depending on the size of the bag. Buyers prefer 50 kg bags, because they are much easier to handle than 80 kg bags. The availability of bags is therefore of importance.
- Figure 3 illustrates the logical steps in which marketing takes place. The marketing costs associated with the process are described in the previous paragraph.

Futures exchange marketing channels

As was mentioned, although SAFEX is not at present a major marketing tool for small-scale farmers, it is currently widely promoted by, amongst others, the ADO of GSA. Hence, the concept of SAFEX cannot be neglected. Role players in the grain industry acknowledge SAFEX as a reliable price-making system. Making use of the futures market enables the producer to minimize price risk. On the other hand, selling or buying contracts on the futures exchange is capital intensive and one needs to have the knowledge to utilize this unique risk-minimizing tool.

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Extension officers and small-scale farmers must understand the process in order to understand the functioning of not only the South African grain market, but also the global grain market which has a significant impact on domestic prices. Extension officers and producers should contact ADO to assist them to make use of SAFEX and to determine if this marketing tool could be used in their specific situation.

Futures contracts (SAFEX)

- A short (to sell) futures contract is the right and the obligation to sell grain of a specific quality and quantity on a specific date in the future.
- Role players anticipate what the value of grain may be in the future.
- · Prices are determined on a willing-buyer: willing-seller basis, given certain available information.
- Taking an opposite position on the futures market could terminate contracts. (If you sell a contract, you can buy it back again, relieving yourself from any obligations.)
- Only white and yellow maize, wheat and sunflower can be sold on the futures market in South Africa.

Example: The Meruti community farms in the Kroonstad region.

In November, they believe that prices can decrease further towards harvesting. They know they can sell their maize on SAFEX for delivery in July, for instance for R660/t, in 100 ton units.

This means that they can sell their maize in November for delivery in July by selling a July futures contract in November. The net farmer price can be derived as follows:

Net farmer price Gross sales price (Randfontein) R660 per ton Minus transport cost Kroonstad -R48 per ton Minus brokers fee -R2.60 per ton Minus handling cost at silo -R27 per ton Minus Silo certificate cost -R1 per ton Net farmer price (Kroonstad)

R581 per ton

If the July maize price on SAFEX decreases to R400/t Randfontein, they will still receive R660/t (gross) for their maize. If the price increase to R800/t (Randfontein), they still receive R660/t for their maize. The farmers do not need to deliver their maize on SAFEX, but they can terminate their position by buying back the same amount of contracts before they are obliged to deliver.

Buy back contract in July if prices decreased In November 2000 * Sell July 2001 contract @ R660/t In July 2001 * Buy July 2001 contract back @ R400/t Profit on transaction R260/t Deliver maize in cash market @R400/t Gross farmer price R660/t (R400/t plus profit of R260/t on transaction)*

In the above table it can be seen that the profit on the SAFEX transaction is added to the price received in the cash market for their maize which gives the farmers a gross price of R660/t. This is still their original selling price in November, but with no obligation to deliver their maize on a contract.

If the July price increased to R800/t on SAFEX, the following can be done:

Gross farmer price R660/t (R800/t minus loss of R140/t on transaction)*
Deliver maize in cash market @R800/t
Loss on transaction R140/t
Buy July 2001 contract back @ R800/t
In July 2001*
Sell July 2001 contract @ R660/t
In November 2000 *
Buy contract back in July

In the above example it can be seen that the farmers still received the original selling price of R660/t for their maize. These strategies "hedge" (protect) the farmers against price fluctuations and therefore minimise price and income risk.

* Randfontein prices

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Checklist for extension officers

ltem	Mark when completed
 Identification of potential grain buyers, their contact details and distance from sellers 	
 Identification of potential sellers of grain, their production capacity, location, and production history. 	
 Determine what type of transport is available and to what extent farmers can provide own transport 	
Establish network with all relevant roleplayers.	
Determine prices offered by different buyers.	
 Are the prices offered relevant and comparable with the prices offered in general in the region? 	
 Has the quality required by sellers been communicated to producers? (Extension officers must provide the necessary technical assistance.) 	
 What are their quality and quantity constraints and how can it be solved if there are problems? 	
 Is there a demand for value-added grain in the region? 	
What is the price premium paid for value adding?	
 In what form is the grain demanded? 	
 Inventory of information sources and distribution to other extension officers and farmers. 	
 What new sources of information are available and how relevant are the current ones? 	
 Are any production contracts and/or production programmes available for farmers in the region? 	
 Are any production and financial aid and support services available in the region? 	
 Do farmers have access to GSA newsletters? 	
Have I contacted ADO?	

SAFEX marketing costs

- Future-exchange related contracts have cash-flow complications. In the case of futures contracts, the buyer or seller need to deposit R70/t for white maize, R60/t for yellow maize, R60/t for wheat and R50/t for sunflower. This is called an initial margin. This deposit will be refunded when the transaction is terminated.
- Variation margins are also applicable to futures contracts. If the futures contract price moves against your position, you need to deposit a variation margin in order to maintain your position. If prices move R20/t against your position, you need to deposit the money within 24 hours.
- In the case of option contracts, you need to pay the premium. No variation margins are applicable to option contracts.
- Marketing costs could be as high as R120/t, including brokerage fees, interest, transport, handling costs, etc.

Market information

Since deregulation of the marketing boards, market information has become a sensitive issue. The following are of importance:

- The availability of information depends on the location and availability of communication technology.
- Since many small-scale farmers do not have access to communication technology, the extension
 officer plays a very important role in the distribution of information.
- Extension officers could get hold of price information in the daily newspapers and occasionally on radio. This information is based on commercial marketing.
- Cooperatives, traders and other grain buyers make prices available at their offices. Prices are sometimes published in local newspapers, not always. In cases where buyers have longer-term connections and collaboration agreements with small-scale farmers, prices are made available via newsletters specially designed for clients, as in the case of sorghum buyers.
- Extension officers must therefore be and stay in touch with the buyers of grain in the region and reveal the information to the small-scale farmers by means of radio announcements, local newspapers or even banners at local gathering places.
- Since GSA and other organizations have links with small-scale farmer study groups, production and marketing
 orientated, price information can be disseminated.
- The successful dissemination of information is directly proportionate to the availability of communication technology.

