



Market Information

Introduction

This Paper has been prepared to assist extension officers to advise how best farmers may use market information. In order to do this it is necessary for extension officers to understand:

- Why farmers need information and how they can use it.
- What the available sources of information are.
- Why prices change, both in the short-term and the long-term.
- Where to find prices.
- How to interpret market prices.
- How to calculate marketing costs between the farmer and the market.

The Paper looks at practical ways in which extension officers can assist farmers. Emphasis is both on using current information for short-term marketing decisions and longer-term, or historical, information for decisions about what and when to produce.

Market-oriented production

Visual aid 1

As a result of recent political changes and deregulation in the agricultural sector¹ emerging farmers now find themselves having to be market oriented and having to make individual decisions about what, when and how to market. Farmers now have to take greater responsibility for marketing their agricultural products. At the same time, they also have the opportunity to supply a wider range of products. Whether they are seeking to sell their traditional products or to market new ones they need to have information about markets and prices. The types of information they need can be summarized as:

- **Who and where the buyers are**, how they can be contacted, what their conditions of business are, what their preferences for varieties, packaging and delivery are, etc.
- **Immediate, or current, prices (and supply)**, help farmers to decide whether to sell their products on a particular day or wait in the hope that the price will rise, or which enable them to decide if the price offered by the local trader, “speculator” or processor is a reasonable one.
- **Longer-term, or historical, price data** over a number of years, which helps them to decide, for example, whether it would be profitable to start growing new crops or rearing animals, to grow existing crops out of season or to seek to produce higher quality crops.

Assisting farmers to obtain information on how to sell and who to sell to will only be briefly considered in this Paper² The main emphasis here is on how extension officers can assist farmers to use the available information and where that information can be found.

Extension services have traditionally concentrated on providing only production advice to farmers. However, as farmers become more market oriented, so must the extension officers because:

- **The aim of agricultural extension should be to help farmers maximize their production potential and, hence, incomes.**
- **If farmers cannot sell what they produce then all the extension advice on production techniques will have been wasted.**

¹ See Paper No. 1 in this series “Marketing Extension.”

² See other Papers in this series

Extension officers can help farmers to make use of market information to ...

Reduce the risks associated with marketing

Knowing prices helps farmers decide whether it is worth sending their produce to the market. For example, if tomato farmers have production costs of R100 per 100 kg and marketing costs of R70 per 100 kg, their total costs are R170. So:

- If the market price is R200 they will cover all their costs and make a profit. They will clearly send their tomatoes to market.
- If the market price is R140 they will lose money. However, they will still send their tomatoes to market because they will cover their marketing costs and get back at least some of their production costs.
- If the market price is R60 sensible farmers will not send their tomatoes to market because not only will they lose all the money they spent on production but they will also lose some of their marketing costs. It would be better to delay harvest until prices improved (assuming that harvest can be delayed). In the worst-case situation it may be necessary to let the tomatoes just rot in the fields.

Decide where to sell

It is important that the farmer should be able to sell his or her produce at a convenient place. In some cases farmers have several options. They could:

- sell directly to consumers in the locality,
- sell at farm gate to traders or speculators,
- sell at a local market,
- consign produce to a National Fresh Produce Market agent directly,
- take or consign products or animals to an auction,
- sell to processors such as maize mills, abattoirs or fruit canners,
- sell to companies with whom they have an agreement or “contract” to buy the crop,
- sell directly to urban consumers.

The further along the marketing chain³ the farmers go, the higher the price they will normally get. However, a high selling price may not mean that farmers will maximize their income. This depends on the costs involved when farmers decide to sell closer to the final consumer. It can be much more costly for a farmer to transport small quantities over a long distance than for a trader to transport large quantities over the same distance.

Check on the prices they are getting

Checking prices is particularly important for farmers who send their produce “on consignment” to agents or wholesalers in National Fresh Produce Markets. Farmers have no advance knowledge of the prices they will receive and depend on their agents to get the best prices for them. These arrangements require that the farmers trust their agents to get the best price possible. Even where such trust exists, however, it is still useful if farmers can compare the prices they receive with the reported market prices. Checking on prices is also important when farmers sell by auction. Are their animals getting better than the average price, the same, or worse?

Decide whether or not to store

Farmers producing grain crops such as maize, or crops such as onions, potatoes and apples, are able to store them in expectation of higher prices later, always assuming that they have suitable stores. Where market information about seasonal price trends is available farmers, guided by extension officers, can get an idea about the seasonal pattern of prices. However, the exact pattern in any year depends on the size of the harvest. Where there is a good harvest prices may not rise by very much over the year and storage may not be very profitable. On the other hand, when the harvest is poor, prices may go up a lot and farmers who store may do well.

³ See the Papers on specific products for marketing channel diagrams

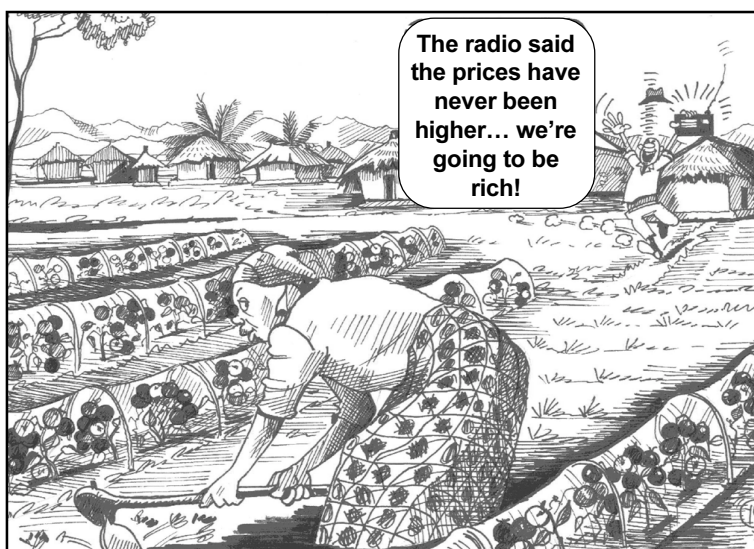
Decide whether to grow “out-of-season” produce

With modern farming techniques and new varieties it is now often possible to extend the harvest season and produce crops both before and after most other farmers. Seasonal price data can give farmers a good idea of the prices they are likely to get from out-of-season production. However, the fact that they will almost certainly get higher prices doesn't mean they should immediately plan to produce out of season.

Out-of-season production generally involves:

- higher investment costs (for example, for plastic tunnels),
- higher production costs (for example, for pest-control chemicals) and
- may well result in lower yields.

Extension officers therefore need to be able to help farmers to calculate their likely production costs and relate these to expected selling prices.



Market information can help identify profitable production opportunities

Decide whether to grow different crops

Deregulation may mean that those farmers living in areas where marketing costs are high find that the return on some products no longer justifies the costs. Such farmers need, with assistance from extension officers, to be able to calculate whether growing other crops may be more profitable. Information on past market prices is essential for them to make such decisions.

Obtaining market information

Visual aid 3

Possible sources of market information for extension officers are ...

The Government

South Africa does not have a national Government-run market information service which collects prices and disseminates these immediately to farmers. Although longer term price information is available from a variety of sources, including the National Department of Agriculture through the quarterly **Crops and Markets**, there is no agency which systematically aims to provide information for emerging farmers to enable them to make short-term decisions about when, where, or whether to market their produce.

More up-to-date information on prices is available from the Directorate on Statistical Information, NDA by phone, fax or e-mail. Contact details are provided in the **Agricultural Digest of South Africa**, an excellent resource document which all extension officers should have.

Associations

A considerable amount of market information is provided by trade associations or industry organisations. Some of these are considered here; others are referred to in the relevant Papers in this series. Unfortunately, much of this information is immediately obtainable only through Internet sites. In the short term this is unlikely to be easily available to extension officers but there are plans for many to be connected to the Web. If access does become available this will place a great responsibility on extension officers to advise farmers of prices and other market information as there are few other sources available for emerging farmers.

- **Cape Wools**

The Cape Wools website provides up-to-date auction information⁴ at:
<http://www.capewools.co.za/>

⁴ See Paper No. 8 in this series, “Wool and Mohair Marketing” for details of grades and classifications.

- **Mohair SA**
Mohair SA likewise provides information on sales on an auction-by-auction basis at:
<http://www.mohair.co.za/frbuyers.asp>
- **Red Meat Abattoir Association**
Information on abattoir auction prices is available at:
<http://www.rvav.co.za/default.asp> (A password is required.)
- **Grain-SA**
Market information published monthly in the “Pula” and “Mvula” newsletters.
- **South African Meat Industry Company**
Market information is also provided in the magazine *SA Meat*.

Fresh Produce Markets

Prices of produce on a daily basis, generally with monthly averages as well as wholesale prices and can be collected by fax or phone from the fresh produce markets. These are the basic information used in the MIS covering local farm produce prices.

Private organisations

Agritel

The best source of information about National Fresh Produce Markets is provided by Agritel. This is a subscription service available over the Internet at:

<http://www.agritel.co.za/agritel/home.asp>

Information on all products sold at all markets is available on a daily basis for R114 a month (December 2000 price). Normally producers select the markets and products they are interested in, so as to be not overwhelmed with information. A fax service is also available.

An example of the information available is presented in figure 1.

Individual producers can also use Agritel to monitor their own sales for an additional R75 a month per market.

SAFEX

The South African Futures Exchange trades in grain and sunflower seed futures:

<http://www.safex.co.za/>

The daily SAFEX price can be used as an approximation of the prevailing market price and local prices can be calculated with reference to transport cost differentials between the silo or point of delivery and Randfontein (see, for example, <http://www.absa.co.za/> Search: Farming tools-Grain Trading-Silo Differentials). Unfortunately, there is no reliable source of up-to-date information regarding silo and cooperative buying prices, although it is hoped that SAGIS will eventually be able to provide this.

First National Bank

Information which appears in *Farmers Weekly* is supplied by the First National Bank and is also available on that bank's website in an expanded form. It can be found at:

<http://www.fnb.co.za> follow the links Menu: Specialised Products: FNB First National (Rural): Agri-weekly.

FNB also makes available for a fee attractive Outlook Reports for a wide range of commodities. These are primarily concerned with world markets, however.

Agrimark Trends

Agrimark Trends Pty (Ltd.) is a South African based company that specialises in the analysis and forecasting of South African, as well as regional agricultural industry and market information through timely and well prepared market trend analysis. Information on most commodities is provided, but for a fee, at:

<http://www.agrimark.co.za>

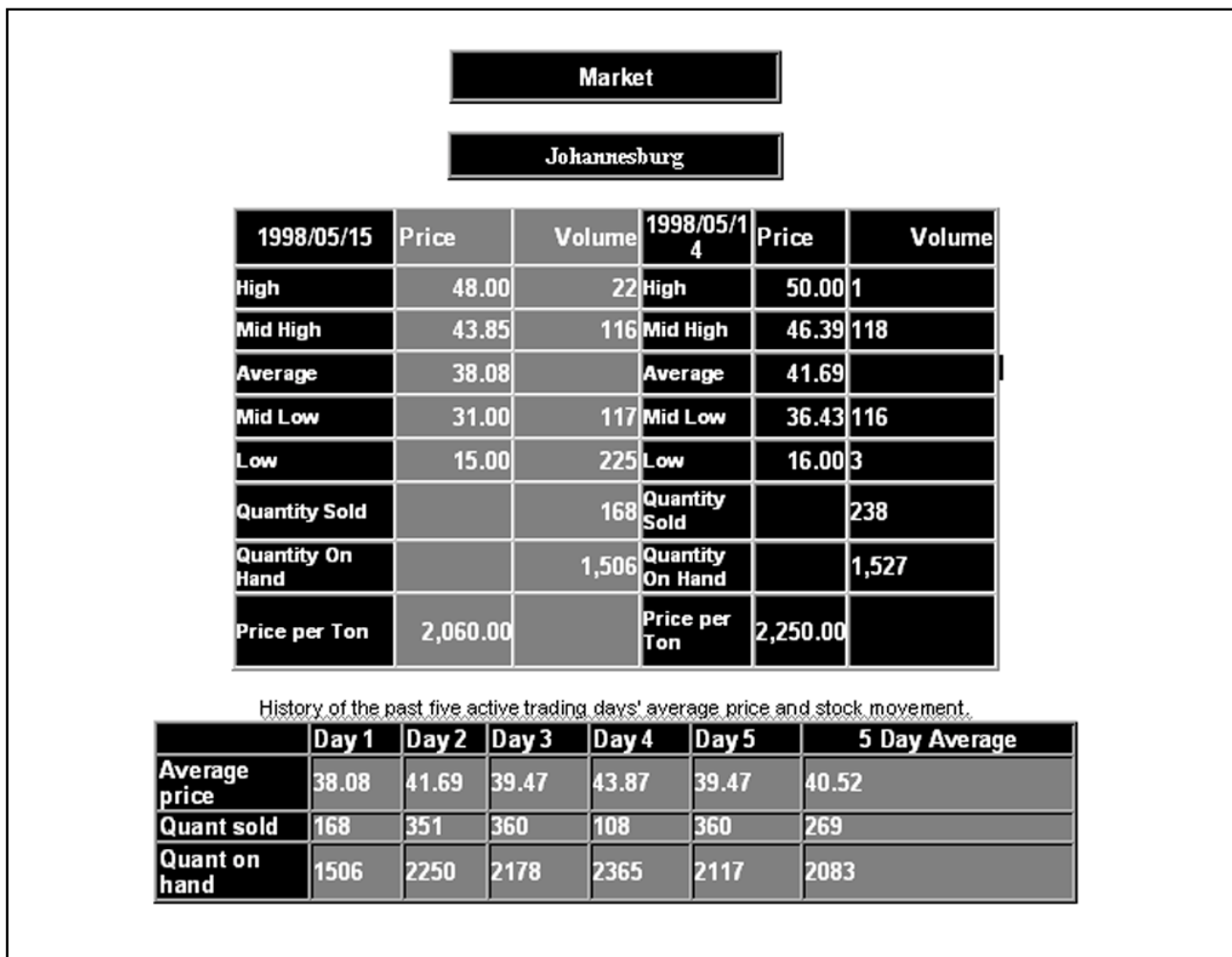


Figure 1: Example of information available on the website of Agritel

Information available to farmers ...

The media

Some market information is broadcasted on a variety of radio stations and publicised in daily and weekly newspapers. While some of this is in local languages, much is in Afrikaans and aimed at the commercial sector. (E.g. *Beeld* in Gauteng and *Volksblad* in Free State.) *Farmers Weekly* provides weekly information on grains, meat, wool and oilseeds. It gives an indication of trends but may not be sufficiently detailed for most farmers.

Daily newspapers can also be valuable sources of information. *The Citizen* comments on fresh produce prices, *Business Day* and *The Star* on SAFEX prices of grains and the *Sowetan* on economic indicators. Weekend newspapers include *City Press and The World*, *Sunday Times* and *Sunday Independence* which publish information on economic indicators and SAFEX Grains.

South Africa FM broadcasts some prices. Some local radio stations broadcast programmes aimed at farmers but they do not appear to provide price information. Stations with farmers' programmes include Thobela FM, Liqwalaqwela FM and Motswading FM.

Unfortunately, radio stations increasingly look upon market information as something similar to advertisements and want to charge for MIS broadcasts. They do not realise that if farmers listen to such programmes their listeners will increase and they will be able to charge more for adverts!

Community radio stations can become an important channel for market information and agricultural news. Active participation of Provincial Departments and local extension services should play an important role by persuading radio stations to carry market information as part of their news programmes and, if necessary, by providing them with the necessary information ready for broadcast on a daily basis.

Traders

Information available to rural traders on provincial or urban market prices are likely to be up-to-date. Not only do traders regularly visit these markets and so find out the price for themselves, but they also learn about market conditions from other traders. Increasingly, traders are now in direct contact with markets by cellphone.

Clearly, traders or speculators want to make a profit. One way to do this, is to ensure there is a big difference between the price they pay farmers and the price they get when they sell the product. This difference must certainly cover all their marketing costs. They will probably negotiate with farmers by claiming that market prices are lower than they actually are. Even if South Africa had a good market information service which provided information on a daily basis, traders could still argue that their sources of information were more up-to-date than those of the MIS. Farmers who may not be able to afford a radio, let alone a cellphone, are in no position to argue.

Processors

Processors include mills, fruit and vegetable canners, dairies, and abattoirs. Reputable companies will usually buy from farmers on a contract basis or, at least, announce their buying prices and apply the same prices for the same quality to all farmers. Sometimes they may pay higher prices per kilogram or ton for larger quantities, as the costs involved in buying from one farmer are normally similar whether they buy one ton or one hundred tons.

The problem facing the emerging farmer is how to find out what a processor's buying prices are before he or she arrives at the factory. Where phones are available locally this is a relatively simple matter. Extension officers can assist by compiling a list of processors in the area with their phone numbers. Sometimes, they may be asked to help the farmer to make the call, particularly when the farmer only speaks his or her local language.

Other farmers

Other farmers can be an important source of market information, particularly about local markets. At the same time, it should not be assumed that information from farmers is always reliable. Reasons for this include:

- Farmers will remember the total price they received, but may not have known the exact weight that they sold (particularly when selling animals or using nonstandard containers), and thus cannot provide reliable information on the price per kilogram.
- Farmers may tend to exaggerate the prices they receive. They may want other farmers to think that they are either:
 - very good at negotiating with traders or
 - producers of top-quality products which get the best prices.

Extension officers

A good extension officer should be able to identify local buyers for various crops, and find out what prices they are paying and their terms and conditions. If the provincial extension service has marketing specialists at headquarters then the extension officer can get in touch with them to get information about markets further away. In the long term, extension officers can keep records of prices and plot them on graphs so that farmers can visit their offices and see the seasonal fluctuations. In the short term, extension officers can help farmers understand the available price information.

The Annex to this Paper presents a questionnaire which can be used by extension officers to carry out a resource audit of farmers' information sources.

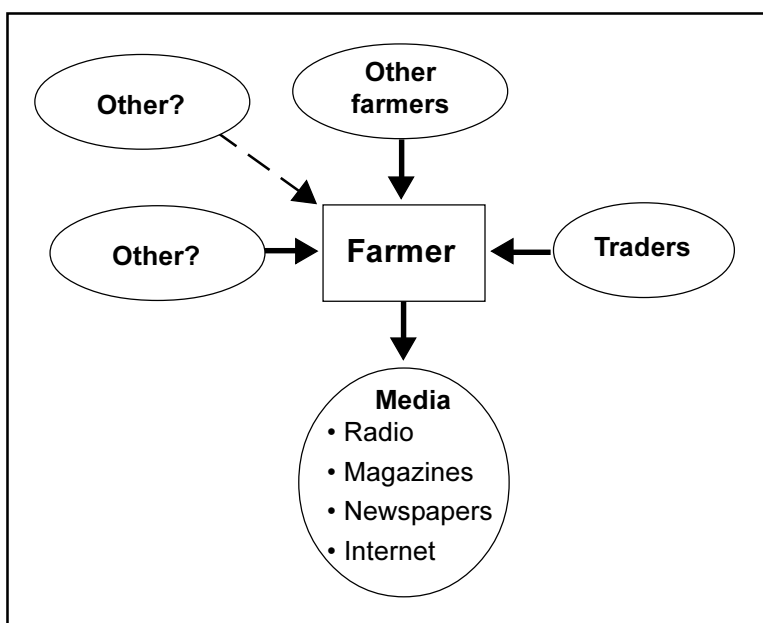


Figure 2: Sources of information available to the farmer

Why prices change

Overall, prices depend on ...

In a market-oriented system the price of a product is determined by **supply and demand**. Basically, a balance is achieved between what people are prepared to supply at a price and what people want to buy. As the price of a product rises the quantity which will be supplied also rises and the quantity demanded falls, or vice versa. The market price will rise or fall until the quantity supplied or demanded is the same, or in "equilibrium". It is important to note that:

- **Supply** is what people are prepared to sell at a certain price. While supply is influenced by production it is not always the same as production. For example, as noted earlier, farmers may sometimes grow perishable crops and not harvest them because the price is too low to cover the marketing costs. For less perishable crops, farmers or traders may decide to store them in the hope that prices will rise, rather than sell them immediately. When prices do rise they may take the products out of store to sell. At this time supply is equal to production harvested for immediate sale plus products taken out of store.
- **Demand** is not how much people would like to buy or what they should buy for a healthy diet. It is how much they are prepared to buy at the market price.

Short-term price fluctuations can be caused by ...

- The amount of produce on sale in the market on a particular day and the quantities sold in the previous few days.
- Short-term demand changes as a result in the change in consumption patterns. E.g. the South African dairy industry experiences a drop in consumption of milk during school holidays.
- The effect on demand of competing products. People have a choice between buying maize meal, potatoes, sweet potato or rice. If the price of one of those drops, people are more likely to buy it, reducing the demand for others and dragging down their price.

Longer-term price fluctuations depend on...

- Supply.
- Demand.
- Time of the year.

While the quantities available in a market on a particular day may lead to short-term price fluctuations, other factors influence the long-term price trend. In the case of perishable produce which cannot be stored for any length of time, or for which there is no suitable storage, the main impact on prices is seasonally of production. Thus, for a crop such as tomatoes the price trend will depend primarily on when the crop reaches maturity in the main producing areas.

In the case of staple foods such as or maize, and other crops which can be stored for lengthy periods, the market price is not so much related to what is supplied to markets on a daily basis as to what is produced in a season or year.

Supply to the South African market can be influenced by:

- *How much was planted.*
- *The weather.*
- *The price.*
- *Imports or exports.*
- *Time of the year or season.*

Demand is influenced by:

- *The price.*

If the market price is high consumers will reduce their purchases. However, for staples such as maize, roots and tubers it is fairly difficult to make significant reductions in the quantities consumed. If prices go up people may eat slightly less, and they may also be more careful about how much they cook in order to waste less. They may also continue to buy the same quantities but buy a cheaper brand. They may also buy other products which they see as being of better value, if such products exist.

If the market price is low consumers will probably increase their consumption, buy better quality and, if they can afford to, be less careful about avoiding waste. But a person can only eat so much maize, so consumers who can already afford adequate quantities will not increase their consumption by much. Instead, they are likely to use the money saved on staple foods to buy larger quantities of fruits and vegetables than they would normally consume.

Interpreting market information and using it to get better prices

Calculating farmgate prices... and negotiating with traders

Although South Africa has no national market information service, farmers and extension officers are in one respect more fortunate than those of other countries because the information that is available, however difficult to obtain, is reliable and clear.

In other countries market information services (MIS) may broadcast market prices without it being clear whether the prices are retail prices, wholesale buying prices, wholesale selling prices or whatever. This is not a problem in South Africa where prices are usually auction or NFPM selling prices. In other countries, market prices are broadcast with very little indication of the quality of product referred to. In South Africa, full details of quality and the applicable prices are given. Furthermore, in South Africa all transactions are reported whereas in many countries the MIS reports prices prevailing for a brief period when the price collector visits the market.

It is thus relatively easy for farmers who supply auctions and markets directly and their extension officers to relate the information which is available, if they can get it, to their own circumstances. Basically, they need to be able to calculate the marketing costs between the farm and the auction or market.⁵ Applicable marketing costs could include (working backwards from the point of sale):

- Agents' fees in the auction or market.
- Handling fees for produce or animals.
- Feed for animals en route to or at the auction.
- Transport costs.
- If the farm are not accessible by vehicle, the cost of getting the product to the vehicle.

Farmers who sell to traders, hawkers or speculators face greater problems in working out what can be considered "reasonable" prices. However, extension officers should try to calculate traders' marketing costs in order to advise farmers how to relate auction or market prices to what they could expect to make at farm gate. Do not forget that traders need to obtain a realistic profit or else they will not go to rural areas on bad roads to buy from emerging farmers.

Detailed advice on marketing cost calculations is provided elsewhere.⁶ One problem in doing these calculations is that the information available often refers to different markets than those which traders sell to. For example, consignments to National Fresh Produce Markets are nearly always direct from the farmer, and traders rarely, if ever, buy from farmers and then deliver to the produce markets. Instead they operate through other channels, either selling to hawkers, to retail shops or direct to consumers. However, the only price information available comes from the produce markets. Thus the calculations should be based on, e.g., the price in Johannesburg market and the costs deducted to get back to the farmgate price should be those incurred to get the produce to the Johannesburg area, but not the costs incurred by the trader after he reaches that area (e.g. in selling to consumers).

Unfortunately, it is often not possible to make very detailed estimates of marketing costs and margins. It may be possible to develop a general idea of a trader's probable costs, but it must always be remembered that these costs can change rapidly. For example, the major cost is nearly always transport. But transport costs are very dependent on how much is being transported. If a trader has to go to the market with a half-empty truck, the transport cost per kilogram will be double the cost if the truck is full. Thus, when produce is in short supply and market prices are going up, it may also be the case that marketing costs are going up, and *vice versa*.

⁵ See Paper No 1 "Marketing Extension" for a description of the main marketing costs. For more detail refer to "A Guide to Marketing Costs and how to calculate them" by Andrew W. Shepherd, Marketing and Rural Finance Service, FAO, Viale delle Terme di Caracalla, Rome, Italy (copies are free of charge).

⁶ See Note 5

Nevertheless, a farmer who knows the market price and has an approximate idea of the marketing costs of the trader is in a much better position to negotiate than one who has no idea of either. Extension officers can help farmers by indicating the likely margin that the trader requires and by updating this information whenever possible.

Checking the farmer's performance...

Farmers who send their produce directly to an NFP market or to an auction can use the price reports to check that the prices they are receiving are in line with those in the market as a whole. If that is not the case they need to find out why and ask the wholesale agent or auctioneer for an explanation. On a daily basis there may be sizeable variations between prices the individual farmers get and the average market prices. However, over a few weeks these variations should even themselves out so that, *on average*, a farmer should expect to get the same price as the average.

Where a farmer's prices are consistently below the average price, the wholesaler may give several explanations. Perhaps the farmer's produce arrives late in the day and is either sold in the evening when prices are lower or on the following morning when fresher produce has arrived to compete (the example given earlier of the information provided by Agritel shows clearly that there is daily carryover of unsold produce in Johannesburg market).

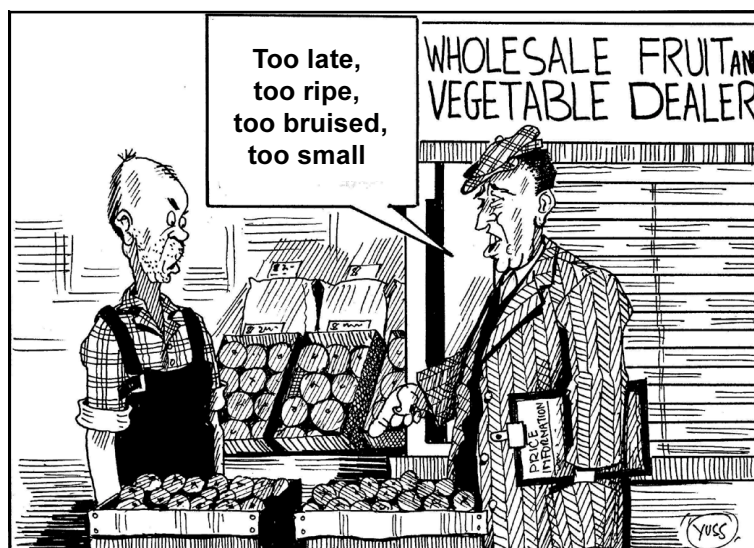
Perhaps the variety is one which normally gets a lower price. Perhaps the quality is not good or the farmer has not graded correctly. Perhaps the produce was damaged in transit and the farmer really needs to improve the quality of his or her packaging. It is, of course, also possible that the wholesale agent is not doing a good job in selling the farmer's produce. However, a farmer cannot really form an opinion on this without visiting the market or auction, assessing the condition of his or her product when it arrives there, seeing how and when the product is sold and comparing his or her product with that sent by other farmers.

Following price trends

Local extension services can perhaps assist farmers by monitoring local market prices on a daily basis and posting the prices on a notice board at the entrance to the market. Although such activities clearly involve too much work for an individual extension officer, a district headquarters could consider assisting in this way.



Transport costs can make a big difference between the market price and the farmgate price.



There may be reasons why the farmer doesn't get the average market price... the farmer needs to investigate these.

Using market information for production planning

Activities which extension officers can carry out ...

While many farmers could make use of market information to negotiate with traders few, if any, small farmers are able to make the calculations necessary to decide whether or not they should plant different crops or rear different animals, plant existing crops at a different time or go into an entirely new venture. For this they require assistance from extension officers. Some of the calculations may even be too complex even for extension officers and are best done by the head office of the provincial extension service.

Charting price movements

Extension officers can assist farmers by plotting price movements of the various products grown or reared in their areas. This can be done weekly, using prices from the sources discussed above. A less satisfactory alternative at present is the publication "***Crops and Markets***" from the National Department of Agriculture. Although this presents information on prices, these are given as monthly averages which, particularly for fruits and vegetables, is not adequate to get an idea of seasonal trends.

As a result of the increased availability of computers, charts or graphs of price trends can be easily prepared. However, it may be some years before computers are available in the offices of all extension officers. Thus, more traditional ways of preparing charts may have to be used. Plotting price movements on graph paper is relatively simple and can be used to illustrate price trends to farmers so that they can see how prices behaved in earlier years, as well as how they are behaving in the present year.

For farmers who are interested in seasonal price movements it can be useful if prices for several years are plotted on the same graph. This can best be done using different colours for each year in order to avoid confusion when lines cross each other. Farmers may hope that, occasionally, because of unusual factors, they will make much more money than they expected. But their planning has to be done on the basis of a normal year. However, when discussing with farmers annual prices plotted on a chart, extension officers should not fail to draw attention to those years which were clearly unusual and not representative of normal price trends, so that the farmers understand the risks they may face, for example, as a result of unusual weather or other abnormal factors.

Controlling for inflation

South Africa's inflation rate is much lower than in many other countries. Nevertheless a product which sold for R1 per kilogram in 1995 would now sell for R1.50 per kilogram without being any more expensive in real terms. Prices can be controlled for inflation by using the monthly Consumer Price Index for food information provided in the NDA's "***Crops and Markets***."

Advising farmers on production

Providing farmers with accurate long-term market price information is important to enable them to make decisions about what to produce, when to harvest and whether to store. However, all this information will be wasted if the farmers don't also have available information about:

- how to grow or rear new products which may offer good market prices,
- the cost of production for these products,
- where to buy, for example, day-old-chicks or seeds for new crops and new varieties,
- techniques required for, and the additional costs of, off-season production,
- costs of constructing and operating stores, hen houses, etc.,
- post-harvest handling and packaging for new crops,
- in the case of products with limited demand, an idea of how much can be sold.

Helping farmers plan to grow new crops

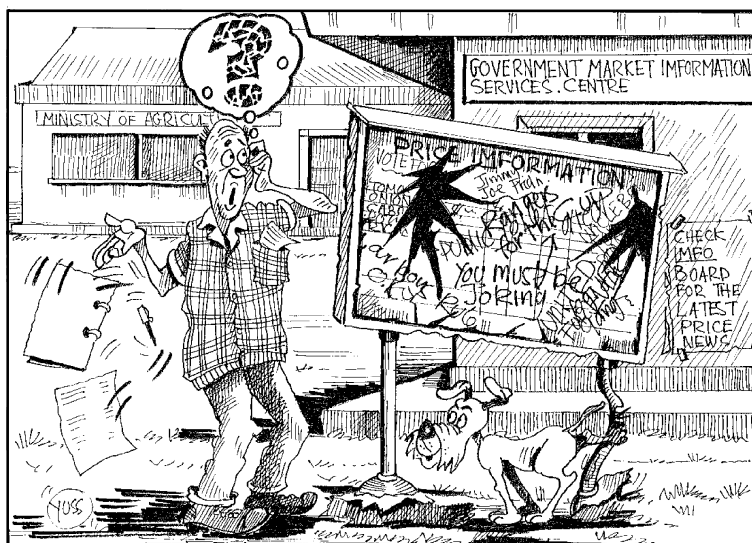
Farmers may find the income they are getting from their existing products to be unsatisfactory. This may be because of deregulation which means that production is no longer subsidized. It may be because too many

⁷ More details on controlling for inflation can be found in "Understanding and Using Market Information" by Andrew W. Shepherd, FAO Marketing Extension Guide No. 2 (copies available free of charge by writing to the author at AGSM, FAO, Viale delle Terme di Caracalla, 00100, Rome, Italy) or Andrew.Shepherd@fao.org

other farmers, particularly commercial farmers, have been growing the crop or rearing the animal and prices are falling. It may be because of environmental factors such as declining soil fertility or changing climate, which mean a crop can no longer be grown economically. More probably, farmers may simply want to improve the position of their families by earning more and therefore want to find crops that can give them better returns.

With assistance from extension officers, farmers can identify crops which are suitable for their area. They then need to work out their production costs. By referring to information on market prices in previous years they can estimate what they are likely to be able to sell the new crops for. They can then compare these prices with the production costs and see whether it would be more profitable to grow new crops or continue to grow their existing crops.

One problem with this approach is that if farmers are thinking of growing products which have not previously been grown in their area they will have little information with which to estimate marketing costs. A bigger problem is that if products have not previously been grown there may not be any traders willing to purchase them. Here extension officers can play an important role, by getting in touch with traders; either those who buy the products in other areas or buyers of existing crops who may be interested in buying new ones. Otherwise, farmers could find that they have no one to sell the new products to.



Price boards are a good way of giving information to farmers... but be careful!

Helping farmers with off-season production

Producing crops out of season is only really viable when they cannot be stored. There is little point in trying to produce staple crops such as maize at a different time to other farmers because those products are available throughout the year. Thus out-of-season production is normally for horticultural produce.

Farmers planning out-of-season production need to look at seasonal price trends over the last few years. Extension services could make available this information as discussed above, possibly by averaging monthly deflated prices over a 3-5 year period. This should give farmers an indication of the average seasonal movement of prices. However, care needs to be taken that price patterns are not changing significantly because, for example, large numbers of other farmers are starting to go into out-of-season production.

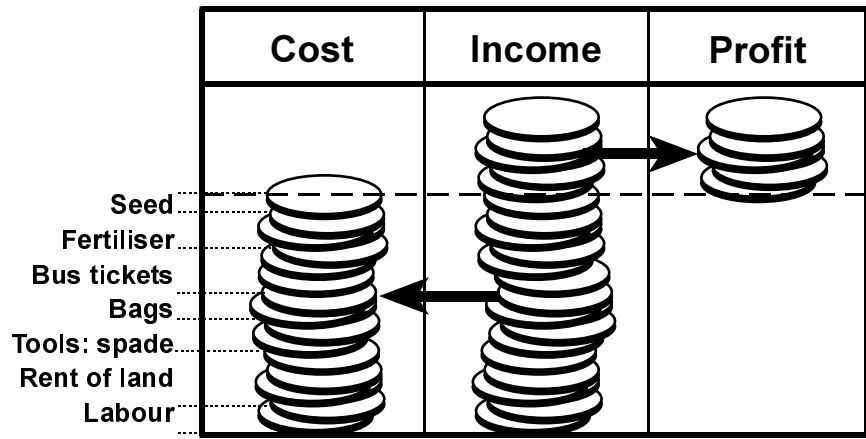
Farmers then need to decide what harvest time they will aim for. This decision could be based on when prices appear most attractive but they also need to consider other factors. These could include:

- Does the climate (and accompanying pests and diseases) make it just too difficult to grow crops for harvest at that time?
- Will the planned harvest time coincide with the harvest of other crops?
- Will the planned harvest time coincide with a time of significant social and family obligations?

Once the farmers have decided the harvest time they want to aim for they must then obtain information on likely production costs. They know how much it costs to grow the crop in the main season but don't know how much it costs out-of-season. Costs will be higher because:

- yields may be lower,
- capital investment in, for example, plastic tunnels or irrigation may be required,
- labour requirements for land preparation or weeding, for example, may be higher,
- additional inputs such as pesticides and herbicides may be required.

Cost of production		Income	Profit
Seed	R5	Tomatoes R120	
Fertiliser	R15	Carrots R80	
Bus tickets	R25		
Bags	R5		
Tools: spade	R45		
Rent of land	R40		
Labour	R20		
TOTAL	R155	R200	
PROFIT			R45

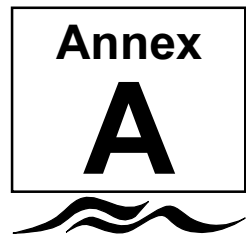


The profit and loss account of a vegetable farmer

Storing crops for higher prices

While out-of-season production is mainly for perishable horticultural crops, on-farm storage is used mainly for less perishable staple crops such as maize. Market information can be used to help farmers decide whether or not to store in any particular year. It can also be used to help them decide whether or not to invest in building a store if they do not presently have one. Storing crops without the correct storage facilities is usually a bad idea, as quantity and quality losses will mean the farmer will not be able to benefit from higher seasonal prices.

On the basis of information about seasonal price movements in previous years an estimate can be made of how much the price of the crop is likely to rise in an average year. However, a final decision to store must be based on knowledge about the harvest. In some years the crop may be so large that storage in hope of a higher price later in the season will not be justified. Moreover, a farmer who sells his crop immediately after it is ready could put the money in the bank and earn interest. In order to store it is necessary that more money can be earned by storing than by putting the money in the bank. This has to be taken into account in calculating storage profitability, as does the impact of inflation.



Questionnaire

Surveying farmers' information sources

Below is a questionnaire which can be used to carry out an audit of where farmers get information from and how they use it. The questionnaire looks at:

- sources of information,
- reliability of information provided by those sources, such as radio, TV, newspapers and magazines,
- the availability and use of information,
- and the general opinion of farmers about the information available.

Extension officers using this should then have a clearer picture of how farmers get and use information.

District:

Location:

Farmer name:

Products marketed:

1. Sources of information

Who/what does the **farmer** see as his or her main sources of market information regarding prices and other aspects of agricultural markets?

Rank in order of importance

Rank

Other farmers

Traders

Millers

Marketing boards

Cooperatives/associations

Newspapers

Magazines

Radio

TV

Notice boards in markets

Internet

Extension services

Personal visits

Other

.....

If the farmer markets more than one type of product does the importance attached to the different sources vary according to the product? How?

.....

2. Reliability of information provided by sources

What does the **farmer** think about the reliability of the market information provided by the sources?

Please indicate as: not reliable / reasonably reliable / reliable

Other farmers

Traders

Millers

Marketing boards

Cooperatives/associations

Newspapers

Magazines

Radio

TV

Notice boards in markets

Internet

Extension services

Personal visits

Other

3. Radio and Television

What radio or TV stations that broadcast market price information does the farmer listen to or watch?

Name of station:

Coverage (national or local? If local, which areas?):

Frequency of MIS broadcasts (daily, weekly, etc.):

Usefulness of information provided:

- are the languages used relevant to the farmer?
- does the farmer understand the information provided?
- is the information up to date?
- is it presented in a form which the farmer finds it to be useful?
- are the markets, auctions, etc. covered relevant to the farmer?
- is the product coverage adequate?
- does the farmer find the information provided to be accurate?
- is the organization responsible for collecting the information clearly discernible from the broadcasts?
- what improvements would farmers like to see to the information provided and the way it is provided?

4. Newspapers and/or magazines

Obtain information about those newspapers and/or magazines that contain market price information of which the farmer is aware. For **each** newspaper and/or magazine, list the following:

Name of newspaper or magazine:

Coverage (national or local? If local, which areas?):

Frequency of publication (daily, weekly, monthly, etc.):

Usefulness of information provided:

- are the languages used relevant to the farmer?

- does the farmer understand the information provided?
- is the information up to date?
- is it presented in a form which the farmer finds to be useful?
- are the markets, auctions, etc. covered relevant to the farmer?
- is the product coverage adequate?
- does the farmer find the information provided to be accurate?
- is the organization responsible for collecting the information clearly discernible ?
- what improvements would the farmer like to see to the information provided and the way it is provided?

Last but not least: Can the farmer read? Local language English Afrikaans

5. Other published sources

Briefly note any other published (i.e. not word of mouth) market information (e.g. notice boards in markets) used by the farmer.

.....

6. Availability

Does the farmer think that the availability of relevant market information improved or got worse over the last five years? Please explain the reasons for his or her opinion on this.

.....

7. Usage

How does the farmer use available market information?

- to negotiate with traders?
- to decide where to sell products?
- to decide when to harvest?
- to decide what to plant or rear?
- other?

8. General opinion

What is the general opinion of the farmer about the information available from all sources?

- can he use it to increase their incomes?
- does he need more information? If so, what?
- is the information sufficiently up-to-date for his purposes?
- can he rely on the information provided?
- what improvements would he like to see?

9. Benefits

Can the farmer give some examples of where he or other farmers or groups of farmers have benefited from the use of market information?

.....

10. Losses

Does the farmer know of any examples of where farmers have suffered losses as a result of using inaccurate or out-of-date information?

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