# USAGE AND IMPORTANT

# ATTRIBUTES OF INFORMATION

# SOURCES EMPLOYED IN

# FORMULATING TOMATO PRICE

# EXPECTATIONS

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# INFORMATION SOURCES

# EMPLOYED IN FORMULATING TOMATO PRICE EXPECTATION

Supply responses in agriculture are believed to be largely determined by the price expectations of rural producers. This article reports on part of a study which investigated the price expectation formulation behaviour of 40 Queensland tomato growers during the spring 1986 tomato season.

The full study (Whybrow, 1988) has three major concerns: first, with demonstrating that tomato growers actively formulate price expectations and that these expectations are important determinants of production and marketing decisions; secondly, with modelling the price expectation formulation behaviour of growers and investigating how this process changes during the growing season; and thirdly, with the nature and sources of information used by growers both to formulate price expectations initially and then to revise their expectations during the season. This present article takes as its primary focus the last of these three aspects.

## INTRODUCTION

Agricultural economists have traditionally investigated price expectations for incorporation into supply response analysis. As well, this analysis is typically based on aggregative time series data which does not allow for modification of price expectations during a production period.

However, it is contended that, even if short-term changes in price expectations are incorporated into model structures, the result cannot be considered as a complete statement on supply response. Price expectations themselves are a product of an individual's perceptions of the information he or she receives and thus, to fully understand how these expectations are formulated, one should attempt to understand those things which influence perceptions. Two factors which are considered important by most horticultural growers, in particular tomato growers, are their perceptions of the relative importance of information sources available to

Data of this analysis were collected by means of field surveys in July and September, 1986. Forty growers were studied, half of whom lived in Redland Shire, a traditional Queensland tomato growing area. The other 20 growers were from Bundaberg, a relatively new but rapidly expanding tomato producing district. A subsidiary objective of the investigation was to compare the price expectation behaviour in these two districts.

## THEORETICAL CONDITIONS

The theory of personal constructs as developed by the clinical psychologist, George A. Kelly (1955), was used to investigate tomato growers' perceptions of both the relative importance of information sources available to them in formulating their price expectations throughout a season and the perceived necessary attributes of those sources. Kellyian theory is based on the assumption that all people behave as personal scientists and, as such, each has developed his own system of hypotheses, or constructs, about life's events which have been derived from his own experiences. Each perceives the world uniquely. These hypotheses are organised in personal construct systems which are used to interpret and anticipate events and provide a basis on which to act.

Kelly's theory is based on a philosophic assumption of constructive alternativism which argues that no one view of the world is every complete. Kelly (ibid., p.46) then derived from this position a fundamental postulate which stated that:

> A person's processes are psychologically channelised by the ways in which he anticipates events.

This statement was loosely supported by 11 elaborative corollaries, all of which are purported to have a significant bearing on the way events are construed by people. In the present research on tomato growers' perceptions, all 11 corollaries were relevant since they defined how a particular set of people, that is, tomato growers, perceived or construed the event of information provided by various sources in relation to price expectation formulation purposes. For example, the construction corollary states:

> A person anticipates events by construing their replication. (ibid., p50)

As pointed out by Bannister (1962,p.105), "the basic argument is that the recurrence of events gives rise to perceived similarities and per se differences". Thus the repeat.. experience of obtaining information enables the grower to categorise this information and its sources into recognisable groups; for example, these sources which provide timely information while others do not, or these sources can be trusted while others cannot be and so on.

Other corollaries which were of particular interest to the project are the dichotomy, the choice, the experience, and the commonality corollaries and they are discussed below. The first of these gave rise to Kelly's precise definition of a construct as:

> A way in which at least 2 elements are similar and contrast with a third. (ibid.,p.61)

The argument is that at least three elements are required for an individual to form a construct. Two of these supply the replicative aspect which defines a similarity pole and one, the non-replicative aspect which defines the contrast pole.

The choice corollary states:

> A person chooses for himself that alternative in a dichotomised construct through which he anticipates the greater possibility for extension and definition of his system. (ibid.,p.64)

Thus, in choosing between the two poles of any particular construct, the grower will choose that one which favours his successful anticipation of the future. As Salmon (1980,p.29) pointed out, he is moving "in those directions which seem to make the most sense to him".

With regard to the experience corollary, Kelly explained that constructs at any point in time are working hypotheses or living enterprises which are put to the test of experience. As time unfolds, these hypotheses will be revised according to the individual's experience and thus his construct system will change. This implies that conclusions drawn from static investigations of construct systems are limited in that

over which these conclusions could be considered useful for interpretative purposes is therefore very much determined by the rate at which construct systems alter because of experience. In the tomato growing industry project, the limited number of information sources available to tomato growers to formulate price expectations and the high rate at which individual sources are assessed for information indicated that the constructs being considered would not alter greatly over time, unless dramatic changes occurred in the industry. Thus the findings from this investigation should remain relevant, at least, in the medium term.

The commonality corollary provided the key to realising one of the objectives of the study, which is to examine the similarity with which tomato growers construe information sources both within the Bundaberg district and the Redland Shire and between these districts. The corollary states:

> To the extent that one person employs a construction of events which
> is similar to that employed by another his psychological processes are
> similar to those of the other person.(ibid.,p.90)

This means that all tomato growers do not have to experience the same events to have the same construction of experience. Bannister and Mair (1968,p.23) summarised this corollary aptly by pointing out that, while groups may have encountered different sets of circumstances, and what worked out their ideas about what these circumstances were all about, they have come to similar conclusions. As "birds of a feather", they construe together.

In order to define constructs operationally, Kelly developed a technique which he called "Repertory Grid Testing". His primary interest or focus of convenience was clinical psychology and in his original work he used significant others or people known to his clients in order to elicit constructs about the matter being investigated. In accordance with his definition of constructs, these people were grouped as elements in triads and the subject was asked:

> In what important way are 2 of these people like and, at the same
> time, essentially different from the third. (ibid.,p.228)

From their replies the required constructs were elicited. In describing the nature of the grid Kelly (1965,p.291) writes:

> It may be more precise ... to say it is a man's observations and his constraints that are woven into the fabric of experience - - the one ascribing meaning to the other and the other lending palpability to the one. And in this more phenomenological sense the grid might better be characterised as a "repertory grid", since it expresses one's own finite system of cross references between personal observation he has made and the personal constructs he has erected.

This original grid evolved into what is now known as the Role Construct Repertory Test (REP Grid or repertory grid) with the essential development being that the subject is now required also to rank or rate all elements (for example, people) as either possessing or not possessing the construct named or to what degree it is possessed.

In its early days the repertory grid was used solely for clinical, psychological analysis. However, since then it has also been used to investigate many areas of human endeavour including industry, education and training and business. Steward and Stewart (1981) gave numerous examples of how the repertory grid can be and has been used in industry. These include market research, quality control, questionnaire design, motivation at work, organisational climate and managerial effectiveness, evaluation of training and counselling. Also, Childs and Salmon (1978) used the repertory grid in an investigation into rural management and Briggs (1985) used the technique in an attempt to identify the main factors underlying farmers choice of crops in central Sudan.

There are many instances of the repertory grid being used to evaluate education and training effectiveness. Diamond and Thompson (1985), for example, used it to demonstrate and measure how the perception of a group of midwives changed over a refresher course.

The technique was also used by Howieson (1985) to investigate the perceived levels of importance which various investing groups attached to different information sources when making decision with respect to their current holdings of publicly listed shares. Bock (1976) used it to investigate farmers' attitudes as to sources of market information in general and to identify those attitudes which were most relevant in determining source use. Munro and Fisher (1982) were more specific and used it to study the role of information sources in the formulation of price expectations of wool growers.

Each of the investigations discussed above used the repertory grid basically to determine the attitudes or constructed interpretations people have in regard to certain events or objects and to ascertain whether and why those constructs influence peoples' behaviour. Amongst other things, the tomato industry study examined both the perceived attitudes of tomato growers to the sources of information they use in formulating their price expectations and the importance they place on these sources for this purpose.

## DESIGN OF THE TOMATO GROWER'S REPERTORY GRID

The Repertory Grid consists of a matrix usually with elements along the top axis and constructs down the side. The elements are a set of observations which are personally important to the elicitee and which relate to the topic under investigation. They provide a basis on which the elicitee is able to express his perception of the world around him. They represent the "universe of discourse". Since the principle aim of administering the grid in this project was to understand how and why tomato growers use various information sources in deriving their price expectations, the elements assembled consisted of the sources of information which growers use for this purpose.

To facilitate the comparison of responses and analyses within districts and between districts (that is, Redland Shire and the Bundaberg district) it was necessary to use a list of common elements for all growers. Two methods were considered with regard to the actual selection of these elements. The first was to approach Queensland Department of Primary Industries horticultural field officers as experts to provide a list of sources of information, while the second was to ask each grower in the sample and then to collate all of this information into one list. The first option was rejected because of the possible exclusion of important sources. One of the chief claims made in using the grid relates to gains in validity.

Seventeen sources of information were identified and included as elements in the repertory grid. A further and self-referential element (that is, "Self") was included in order to elicit those sources of information which the elicitee associates most closely with himself, given his construings (that is, his continually developing perceptions or hypotheses relating to the world around him). These associations were used to indicate the relative importance of each source of information first to each grower, and then to each group of growers. At the commencement of each grid interview, "Self" was defined as "the grower himself as a provider/collector/interpreter of market information for the purpose of predicting prices".

To increase the understanding of the requirements of the grid, the elements were presented, where possible, as groups of similar sources of information. For example, mass media sources were grouped together, as were organisations providing services to growers and sources closely associated to the grower personally.

Space was made available to elicit 9 original constructs and also 1 construct (i.e., "most useful/least useful") was supplied. From the association between this construct and the other constructs, it was possible to infer the criteria which make a source of information "most useful" or "least useful".

Following Kelly, Shaw (1980,p.9) defined a construct functionally as "a bipolar dimension which to some degree is an attitude or property of each element". This definition provides for what Shaw (ibid.,p.10) calls "the three card trick" or the triadic method of eliciting constructs.

Three elements (triads) are randomly selected and the elicitee is asked to state in what way any two of these elements are alike (the Construct Emergent Pole) and why they are unlike the third (the Construct Implicit Pole). While these elicited poles define the required construct, they do no demonstrate precisely how the construct is used. This is achieved by recognising that each construct constitutes, in fact, a continuum stretching between the poles and that this continuum can be represented by a rating scale. This scale is then used to rate all elements according to that particular construct. This assumes that all constructs can be applied to all elements. However, this assumption is not always valid because of differences in the nature of elements. In the current project, a rating scale of 1 to 5 was used and a rating of 3 was given to those elements when they lay outside the range of applicability of any elicited construct.

The instructions which were read to the growers during the repertory grid interviews and the actual grid forms employed to elicit the required number of constructs are given in Figures 1 and 2.

Repertory Grid Analysis Techniques

Steward and Stewart (1981,p.46) cited 5 techniques which can be used to analyse the repertory grid: frequency counts; content analysis; visual focusing; principal-component analysis; and cluster analysis. The first three of these techniques involved the simple tabulation of elements and constructs and/or further manual manipulation of data. Given the complexity of the analysis required, these were considered inappropriate for the task.

The fundamental principle of principal-component analysis is that the element and/or constructs provided by an elicitee can be grouped according to their degree of correlation and that these groups describe discrete independent dimensions (components) on which all elements and constructs can be measured. The complex output from this method is normally in the form of a two dimensional graph. Each axis represents the two components with the largest number of highly correlated constructs forming one axis and the group with the second largest number of highly correlated constructs forming the other. Each construct and element associated with each axis is printed on the graph, thus allowing ease of interpretation by both the elicitor and the elicitee.

Cluster analysis compares element and construct responses to obtain patterns within each element set and each construct set with the major criteria for clustering being the minimisation of the difference between all adjacent paris of rows and columns. The measure of similarity or difference is normally expressed in the form of a matrix from which trees demonstrating these degrees of similarity (i.e., clusters) are drawn. These are more easily understood by the interviewee who can readily assist in the interpretation process.

Practitioners of the repertory grid have hotly debated the advantages and the disadvantages of both the cluster analysis and principal-component techniques in recent years (e.g., Rump (1974), Slater (1974)). Cluster analysis was chosen for this investigation for three main reasons:

(i)    It allows the comparison of two or more grids without the necessity of holding both elements and constructs constant. With one of the prime aims of the project being to compare the behaviour and attitudes of tomato growers in two districts, it was necessary to develop mode grids which portray the majority of attitudes (constructs) in each district. This facilitated the selection of individual grids either most like (star) or least like (isolate) the mode grid for in-depth case study purposes. In the principal-component technique, the constructs as well as the elements would have to be held constant, thus reducing the flexibility and scope of the analysis.

(ii)   All the details of relationships between elements/constructs are represented in the visual output or dendograms, while large amounts of detail can be sacrificed in the principal-component analysis. It is possible that important relationships can be completely omitted in the latter if the variance not accounted for by the two axis is large (i.e., above, say 15 per cent).

(iii)   While the output from the principal-component analysis is not always easy to understand, it is extremely difficult to explain the logic of the method to the case study elicitees who would be expected as generators of the grids to assist in the interpretation. Concern was felt that, if the elicitees had problems in understanding how the output was developed, their interest in the interpretation process may have been jeopardised. They may have viewed the exercise as being mainly academic, with little practical relevance to themselves or to the industry.

Analytical Procedure

Shaw's (1980) multivariate cluster analysis computer program, Focus, was used to analyse each of the tomato growers' grids. This program produced a two way cluster analysis for each grower. Rows of constructs and the column of elements were re-ordered to give a "focused" grid in which there was least variation between adjacent constructs and adjacent elements. These variations or distances were measured using the City Block Metric method where:

> ... the distances between elements or constructs ... are functions of the
> number of constructs or elements respectively in the grid, together
> with the rating scale used. These are therefore scaled to give
> "percentage matching scores. (Shaw ibid.,p.33).

The score ranges from +100 for a perfect match, through 0 for complete dissimilarity, to -100 for a perfect but reversed match.

Matrices of construct and element scores were produced and the re-ordering of construct rows and element columns was achieved by comparing highest matching scores. For example, in Table 1, the highest match is between constructs 10 and 9 at 80 per cent followed by matches between 9 and 1 and 10 and 5 at 75 per cent. The re-ordering of these constructs is clearly shown in Figure 3. This figure also demonstrates how relationships were displayed as tree diagrams for both the constructs and elements.

Based on Kelly's commonality corollary, Shaw (ibid.) also developed the computer program, Sociogrids, which produces a mode grid from a group of grids. Given a set of common elements meaningful to all members of the group, this program computes the measure of similarity (based on the matching scores) between each pair of constructs from all constructs provided by the group to produce a continuum ranging from those which were most shared (mode constructs) to those which were least common or isolated. The most highly matched constructs from this continuum make up the mode grid but with each construct actually being obtained from one individual in the group. The cut-off point for inclusion in the mode grid depends on the purpose of the exercise at hand. Shaw (ibid.,p.92) points out that this mode grid:

> ... is not a consensus grid which averages out the individualities to produce a pale imitation of the group, but is strongly weighted towards the commonality or intersection of construing within the group. Due to this format, the constructs tend to be highly clustered in the mode grid, and generally these clusters display a high degree of both literal and conceptual similarity in the construct labels ...

The program then uses the mode grid as a common referent for the group and compares each grid with it. The extent of shared construing with the mode grid is printed out so that the grid most like the mode (star grid) through to that least like the mode (isolated grid) can be easily identified. In the tomato industry project, representative case studies were made of the growers with the star and isolate grids in each of the two tomato growing districts to indicate the attitudes to, and the importance of, the various sources of information in the formulation of price expectations. Each of these demonstrably salient growers were approached to assist in the interpretation of their focused grids and to provide explanations of clusters (higher order constructs).

# SUMMARY OF ANALYSIS

Inferences about the relative level of importance of information sources to growers in each district were made by observing the level of match between the self-referential element "Self" and the other elements (that is, sources of information) in the mode grids and the respective star grids. This analysis revealed that growers from both districts perceive their agents/merchants as the single most important source of information. In the Bundaberg district, this was followed by the ABC market report which is used as the principal check on the accuracy of the agents/merchants. In Redland Shire, on the other hand, past prices received for tomatoes achieved prominence over the ABC market report. Past prices was considered by the Bundaberg district growers as a relatively unimportant source.

These differences were probably due to the level of dissatisfaction of Redland Shire growers with the way the wholesale market prices stated in the ABC market report are collected by the market reporting service in the metropolitan markets (that is, market reporters asking the agents/merchants for the prices they are receiving on the day). While growers in both districts indicated discontentment with the service, dissatisfaction was more pronounced in Redland Shire. A considerable number of growers in this district felt that the agents/merchants are under-quoting prices for either their own gain or to impress certain growers by continually selling their product at higher than market quoted prices. Greater reliance is therefore placed on near past prices received for tomatoes than on the market reports as a valid/reliable indicator of near future expected prices.

In addition, Redland Shire growers have a feeling of price insecurity owing to the relatively recent expansion of tomato growing in the Bundaberg district. The Queensland Department of Primary Industries is perceived as the least, or one of the least, important sources of information for price expectation formulation purposes. While the market reporting service conducted by that Department and reported through the ABC radio was excluded from the Department as a source, a number of growers did not realise that these reports originated from the Department until they were so informed.

The analysis of necessary attributes of sources of information was undertaken by observing the matching scores of elicited constructs with the supplied construct "most useful/least useful" in the mode grid for each district and the related star grids. The star grid respondents were also approached to assist with interpretation. This analysis revealed that the Bundaberg district growers were more interested in sources which provide short-term or current market information, while Redland Shire growers were more interested in sources which indicate plantings in other districts and potential future supply to all markets. These observations reinforce similar findings of Whybrow (1987,p.100-105) with regard to the economic factors considered by this sample of growers. This analysis showed that in addition to the price they expected to receive for tomatoes, the Bundaberg district growers were mainly concerned with their ability to finance the coming crop. The Redland Shire growers, on the other hand, were generally more interested in past and expected prices of tomatoes and other commodities which the producer could grow instead of tomatoes. This difference between the two districts reflects, to a large extent, a greater degree of marketing flexibility in the Bundaberg district.

## CONCLUSIONS

Tomato growers, like most horticultural producers, consider price expectations as a significant component of their market supply decisions. The weight which is given to these price expectations is largely determined by the perceived relative importance of information sources available to them and the perceived necessary attributes that make these sources important. Repertory grid analysis as developed from Kelly's theory of personal constructs is an ideal method to identify and measure these perceptions.

The analysis clearly demonstrated differences in perception between Redland Bay and Bundaberg growers of two important sources of information (that is, past prices received for tomatoes and the ABC market reports.). However, regardless of a degree of dissatisfaction with the ABC market reports, districts perceive the service as critical. This strongly supports the finding of Whybrow and Longworth (1989,p.19) that an accurate (and trusted) market reporting service is critical in generating significant positive economic externalities by facilitating a more socially efficient industry wide supply response.

The difference in perception of importance of sources was also reflected in the attributes to these sources. Bundaberg district growers considered those sources which provide short term or current data as critical, while Redland Shire growers concentrated on sources which they perceived as providing them with longer term supply data.

TABLE 1

Construct Matching Scores[1]: Star Grid, Bundaberg District.

| *   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|------|----|----|----|----|----|----|----|----|----|----|
| 1 *  |    | 61 | 47 | 55 | 47 | 66 | 38 | 22 | 75 | 72 |
| 2 *  | 16 |    | 58 | 66 | 36 | 61 | 38 | 22 | 52 | 61 |
| 3 *  | 13 | -8 |    | 58 | 38 | 58 | 30 | 2  | 50 | 58 |
| 4 *  | 5  | 0  | -8 |    | 63 | 55 | 55 | 5  | 63 | 66 |
| 5 *  | 19 | 19 | 11 | 8  |    | 41 | 63 | 8  | 61 | 75 |
| 6 *  | 11 | 5  | -2 | 5  | 19 |    | 38 | 16 | 63 | 66 |
| 7 *  | 22 | 22 | 19 | 16 | 13 | 16 |    | 0  | 52 | 61 |
| 8 *  | 38 | 44 | 41 | 61 | 63 | 38 | 72 |    | 2  | 22 |
| 9 *  | 8  | 13 | 5  | -2 | 11 | 2  | 13 | 58 |    | 80 |
| 10 * | 27 | 27 | 13 | 16 | 25 | 22 | 27 | 66 | 19 |    |

(1) The upper right half shows the matching scores while the lower left half shows the matching scores when the column of constructs is reversed.

FIGURE 1

# EVALUATION OF MARKET INFORMATION SOURCES USED IN FORMULATING PRICE EXPECTATIONS

## ELICITING CONSTRUCTS

I would like to use some of the details you and other tomato growers provided me during the last survey to look at how you see the various sources of market information helping you in deriving your price expectations for tomatoes. There are no right or wrong answers to this exercise – I am only interested in your personal views.

I have a pack of 27 cards sorted into 9 sets of 3. Each card has a source of market information printed on it. I am going to lay each set of 3 cards in front of you and ask you to tell me ONE IMPORTANT WAY IN WHICH ANY TWO OF THE THREE SOURCES OF INFORMATION ARE ALIKE AND WHY THOSE PARTICULAR TWO ARE UNLIKE THE THIRD. They are probably alike or different in many ways but I would like you to compare them IN TERMS OF THEIR ROLES IN SUPPLYING YOU WITH INFORMATION TO HELP YOU IN DERIVING YOUR PRICE EXPECTATIONS.

I would also like you to try to give a different statement of similarity for each set of cards.

I am going to write your responses to each set of cards in this table (show table).

## RATING ON CONSTRUCTS

I would now like you to rank all the sources of information on a scale of 1 to 5 on this form I have been filling in. This ranking should be done by using a ranking of 1 for the source of market information you judge to be most like the "pair" description and 5 for the source you judge to be most like the description given to the single source (i.e. the opposite to the "pair").

FIGURE 2.

WAY DIFFERENT

least useful

| | Self | Family | Other farmers | Past prices received for tomatoes | Visit to markets | ABC market report | Radio other than ABC market report | Television | Local newspapers | COD's Fruit and Vegetable report | Your agent/purchant | Representatives from other agents/merchants | Chemical company representatives | Transport company representatives | Nurseries | Carton dealers | Local grower's associations | Department of Primary Industries |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | ( ) | | | | | ( ) | ( ) | ( ) | | | | | | | | |
| 2 | ( ) | | | ( ) | | ( ) | | | ( ) | | | ( ) | | ( ) | | | | |
| 3 | | | | ( ) | | | | | | | ( ) | | ( ) | | | ( ) | | |
| 4 | | | | | | | | | | | | | ( ) | | ( ) | ( ) | ( ) | |
| 5 | | | | | | | | | | | ( ) | ( ) | | | ( ) | ( ) | ( ) | |
| 6 | ( ) | ( ) | | | | | | | | | | | | | | | | |
| 7 | | | | | ( ) | ( ) | ( ) | ( ) | | | | | | | ( ) | | | |
| 8 | | | ( ) | | | | | | ( ) | ( ) | | | | | | | ( ) | ( ) |
| 9 | | ( ) | ( ) | | | | | | | ( ) | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

WAY ALIKE

Most useful

# An Example Grid[1]

Element tree:
% match

65
72
73
77
82
85
87
90
92

Construct tree:
% match

80   72   66   58   41

| | CLOSE TO WHAT IS HAPPENING ON THE BRISBANE MARKET | 7 | NO CONTACT ABOUT MARKETS |
| | SUPPLIES SOME MARKETING INFORMATION | 8 | POOR SUPPLIES OF MARKETING INFORMATION |
| | CURRENT MARKET SUPPLY ONE DAY OR NEXT DAY | 3 | DOES NOT GIVE CURRENT MARKET SUPPLY ON DAY |
| | USED FOR SHORT TERM MARKET STRATEGIES (PRE-SELL PRICES ON VARIOUS MARKETS) | 2 | NOT USED FOR SHORT-TERM STRATEGIES |
| | CONSTANTLY IN TOUCH WITH GROWERS | 4 | INFREQUENTLY IN TOUCH WITH GROWERS |
| | APPRECIATES INFORMATION REQUIREMENTS OF GROWERS | 5 | EXTREMELY SELF-CENTRED |
| | MOST USEFUL | 10 | LEAST USEFUL |
| | PROVIDES RELATIVE PRICES ON MARKETS | 9 | NO OPPORTUNITY TO PROVIDE RELATIVE PRICES |
| | REPORTS ON CURRENT CONDITIONS OF CROPS IN THIS AND OTHER AREAS (MARKET QUALITY AND EFFECTS OF DISEASE) | 1 | DOES NOT REPORT ON CURRENT CONDITION OF CROPS |
| | INDICATES PRODUCT PRESENTATION | 6 | DOES NOT HAVE ANYTHING TO DO WITH THIS DECISION |

Television
Nurseries
Department of Primary Industries
Family
Radio other than ABC market report
Local newspapers
Local growers' association
CGB's Fruit and Vegetable News
Past prices received for tomatoes
Representatives from other agents/merchants
Carton dealers
Chemical company representatives
ABC market report
Transport company representatives
Tour agent/merchant
Self
Other farmers

(1) This is the Bundaberg district star grower's grid

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