VEGETABLE MARKETING LOSSES AND SUGGESTED REMEDIAL MEASURES.

(G.S. Jolly and R.D. Meaker).

It is becoming increasingly evident that vegetable growers are likely to be confronted with post-war problems which will be equally as serious, if not more so, than those they have had to face during the war years.

With a contracting local demand caused, inter alia, by the transfer of Allied Servicemen to Northern spheres, a weakening tendency in the value of vegetables has already become manifest. During recent years there have been recurring shortages of various classes of fruits and vegetables, and occasionally gluts. For the most part, however, the demand has exceeded the supply and the result of this has been that market prices have been considerably higher than in pre-war years. Remembering the relatively poor returns growers received for some years prior to the war, the incidence of droughts, floods, pests, diseases and the increased costs of labour and material since the war, there will be few who will grudge the primary producer higher returns than he received prior to the war.

A survey made by this Division reveals that growers can do more to enhance their own returns, and those who follow certain well-established practices have profited materially.

Official statistics show that during the six months ended 31st May, 1945, the quantity of vegetables condemned at the Sydney Municipal Markets totalled 265 tons compared with 217 tons in the previous corresponding period. Condemnations are based on certificates issued by Departmental Inspectors and City Council Authorities.

The principal losses this season have been for six classes of vegetables out of the fifteen for which condemnation certificates were issued and it is interesting to compare the figures for the two seasons in the case of these six lines:

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<th>Quantities condemned at City Municipal Markets</th>
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<td><strong>Six months ended May, 1944.</strong></td>
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<td>Peas</td>
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<td>Beans</td>
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<td>Tomatoes</td>
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<td>Carrots</td>
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<td>Parsnips</td>
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<td>Cabbages</td>
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<td><strong>Total</strong></td>
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Wastage in vegetables cannot be said to be usually worse at the end of a season or at the beginning for so much depends upon the vegetable concerned, the season and the method of transport, etc. For example, in the case of beans greatest losses occurred this season in January whereas last season the condemnations in March were far in excess of those of the previous three months. With regard to peas the losses in April and May this year were 4 and 6 tons compared with only 3 ton and 1½ tons, respectively, in the corresponding months of 1944. An analysis of the figures relating to tomatoes reveals an interesting position. The quantities condemned in December, January, February and March were approximately the same during each month in each period though the December figures were greatly in excess of those of January and the February and March figures were relatively small compared with those for December. In 1945 the April and May condemnations (13 and 16 tons) respectively were much heavier than in the corresponding months of 1944 (4 and 8 tons).

It is impracticable to determine accurately the quantity of vegetables arriving at the City Markets month by month and hence it is impossible to estimate the percentages condemned. Yet it is apparent that the loss of 265 tons of vegetables in six months constitutes a very serious loss to growers. The loss in tomatoes to North Coast growers alone has run into thousands of pounds. Immaturity and grub infestation resulted in many condemnations.

Apart altogether from the foregoing figures, the Commonwealth Department of Commerce and Agriculture has from time to time purchased at comparatively low rates considerable quantities of surplus vegetables to relieve the market during glut periods, while canneries have also operated on occasions when supplies of particular classes of canning vegetables have been more than sufficient to meet the market demand. Latterly low grade beans and carrots in excess supply have been sold for stock food. It is true that a portion of the waste which has occurred was caused by delays in transport and other causes over which the grower had no control but in many instances the loss was occasioned by faulty packing, immaturity of fruit, bad grading, incorrect harvesting and handling methods.

A disturbing feature of the forwarding to market of unsound or badly-graded or packed fruit or vegetables, is that sometimes the presence of even a relatively small percentage of such products has an adverse effect on the market generally and tends to bring about a decline in prices of the better lines.

The marketing of low grade or immature fruit and vegetables is not peculiar to the Sydney market, as is evidenced by the following extracts from the report of the Royal Commission which recently inquired into fruit and vegetable marketing in Queensland:
"One of the causes of glut is the arrival on the market of unsound, immature or low-quality fruit and vegetables or of commodities whose bad grading or topping inhibits sales. One of the matters which has particularly struck us throughout the hearings and in private conversations is that the arrival at the markets of such commodities is regarded as a great "bugbear" not only from the point of view of gluts but generally ........ In our opinion the Act and Regulations should be reviewed towards tightening up the standards and the law should be fully enforced. There seems to be no reason why packing, grading, quality and maturity standards should not apply to all types of fruit and vegetables and not only to some as at present. Early this year there was a period when the market was glutted with tomatoes. We saw large numbers of cases of tomatoes which arrived at the market leaking and at the same time there were in the market large numbers of obviously immature tomatoes. Apart from the glutting effect in the market their transport involved an economic loss in cases, packing, and freight. In a period of 14 days during this period 6,866 cases of these tomatoes were condemned after their arrival on the market. This number represented 9 per cent of the total reccivals.

"The grower who sends in badly graded or poor quality produce is directly injured ....... But not only the offending grower is injured. The presence on the market of defective packs has a tendency to depress the market generally".

Many growers build up a reputation for themselves by supplying quality goods, which are uniformly and attractively packed and they reap a reward in £.s.d. The produce of such growers usually creates an immediate demand and commands a premium on ordinary market rates.

Manufacturers of secondary products frequently spend large sums in advertising the quality of their lines, but a fruit and vegetable grower must become his own advertisement if he is to secure the best returns; expressed simply his name will sell his goods.

It may be that when conditions return to normal the producer who does not harvest and market his crop efficiently will find it most difficult to make his operations pay.

There have been numerous occasions in recent years when good quality lines of vegetables have reached, say, 10/- per unit (i.e., bushel or dozen) in the market, whereas inferior supplies have been practically unsaleable and have had to be sacrificed to clear.
To illustrate a grower's experience the story can be related where a Departmental Inspector launched a successful prosecution against a grower for a contravention of the tomato grading Regulations; the grower concerned was fined £15. He subsequently informed the Inspector that he had befriended him by instituting the proceedings, as since that time he had paid particular attention to grading and packing, with the result that he had more than made up for the amount of the fine in increased returns. He added that his agent had told him that his consignments now hardly "hit the stand" before they were sold.

A well-known and successful fruit-grower has a large sign in his packing house for the guidance of his packers. This reads: - "IF IN DOUBT THROW OUT". "Throw out" does not necessarily mean "destroy" but it does mean that where it is doubtful whether certain fruit is up to the standard required for a certain grade it should be graded down and, if necessary, withheld. This grower claims that adherence to this principle has paid good dividends.

While it is recognised that wastage does occur and will continue to do so through circumstances over which the grower has no control, it is felt that losses can be reduced by due regard being paid by growers to certain essentials in harvesting, packing and transporting their produce. Better marketing methods mean not only greater returns to the producer but also ensure that vital foodstuffs reach the consumer in good condition.

The forecasting of the market is beset with many difficulties and pitfalls but a number of men with wide marketing experience have expressed the opinion that gluts could, to a large degree, be avoided or at least reduced, if from 10% to 15% of the commodity concerned were withheld by growers at times when the market is glutted. They believe that generally quite a considerable proportion of this percentage would represent under-quality produce which would in any circumstances realise much less than good quality lines. This is only a point of view but there is no gainsaying the fact that quality is the prime consideration in stimulating demand and in effecting sales. It is perhaps not properly recognised that the housewife is discerning and that if she finds that she is served with faulty fruit or vegetables of a particular kind, it is likely that at least temporarily she will turn her attention to other lines. It is therefore in growers' own interests to concentrate on building up quality. The fact is not overlooked that it is not always economical or practicable for growers to market a first-class article as seasonal and other conditions play such a major part in primary production and it would be foolish to suggest that only the very best lines should be marketed. The objective, however, should be improvement of quality and careful handling and marketing.

In marketing, one of the first considerations is the avoidance of bruising and other injuries which accelerate deterioration and decay, at the same time prejudicing the appearance and value of the product.
The necessity for harvesting at the correct stage of maturity should need no emphasis, yet it is surprising how many growers still market their fruit and vegetables with obviously little attention having been given to this vital principle of correct marketing procedure. The actual stage of maturity at which these products are harvested should be related to the time elapsing between harvesting and sale and also to the prevailing temperature.

Grading is essential before packing to ensure that any losses due to wastage or inferior quality shall be reduced to a minimum. In grading, all diseased, insect-infested, damaged or over-ripe and misshapen produce should be removed. Correct grading is very important in establishing a reliable marketing reputation. Grading for size is necessary in packing standardised lines.

It is all very well in its way to point out deficiencies but it is another matter to suggest remedies. This Division has therefore felt that it has a responsibility in the direction of preparing suggestions for the guidance of growers and information has been compiled with the object of issuing a pamphlet when this can appropriately be arranged. Dealing with some of the more important vegetables concerned the following comments are made:

**Peas.**

1. The pods should be picked as soon as full but before any loss of colour occurs.

2. The inclusion of even a proportion of unfilled or diseased pods when packing for market reduces the value considerably.

3. During the hot weather picking, if practicable, should be carried out when conditions are coolest and the peas cooled down as much as possible. It is to the growers' advantage to spread the peas out in a cool spot before packing. Avoid if possible the packing of wet peas, especially in bags in warm, humid weather as they sweat badly in transit and deteriorate rapidly.

**Beans.**

1. Picking should commence as soon as the beans are sufficiently large and this operation should continue at frequent intervals.

2. Growers should aim at marketing beans while they are young, tender, snap readily and in which the seeds are not apparent. The inclusion of over-mature, curly or damaged, with otherwise good quality beans materially reduces the value.
3. Beans carrying soil should be washed in clean water and spread out to drain before packing.

4. Packing in cases is preferable to bags when transporting over long distances in hot weather though this may not be practicable or economical in some districts.

**Carrots.**

1. This vegetable should not be harvested when the soil is wet but under conditions which will enable clean roots to be marketed, with a minimum of handling.

2. If washed carrots are to be marketed, the use of ample supplies of clean water is essential. Washing should be carried out as soon as possible after harvesting as if the soil is allowed to dry on the roots it is difficult to remove and mechanical injury to the skin increased. Hosing is preferable to washing by hand.

3. Avoid leaving the carrots in the sun after harvesting. Exercise the greatest care in grading, bagging or crating so as to reduce injury to the smallest degree. Pack dry and in dry containers which afford adequate ventilation.

**Tomatoes.**

1. Successful marketing largely depends on careful grading for maturity (i.e., colour) and defects.

2. Picking for green packs should be carried out when the green colour of the skin has developed a slightly whitish tint and the pulp is suffused with pink. For coloured packs much depends on the distance and time elapsing between packing and marketing but growers should not include fruit which is well forward in maturity with those at the pinking stage (slight tinge of pink at blossom end). It is preferable to pack two or three colour grades than to market tomatoes of varying degrees of maturity.

3. Grading for size is essential to enable the fruit to be properly packed. Exclude all tomatoes which have not reached the necessary stage of maturity and those showing disease, pests, weather and mechanical injury when packing.