



# TOMATO TOPICS



Know-how for Horticulture™

NEWS and INFORMATION  
FOR THE PROCESSING TOMATO INDUSTRY

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## The 2007/08 Season

This season has yet again presented a whole set of new challenges. In August irrigation allocations on the Goulburn system were again similar to the 2006/07 season. This resulted in a number of growers opting out of the industry due to the lack of available water and high temporary water prices. As a result expected tonnages for the industry were low from the beginning.

As the season progressed temporary water prices reached above \$1,100/ML. Just prior to Christmas much of the processing tomato crop in Northern Victoria was hit with heavy rain, with the majority of Decembers rainfall occurring at once. This greatly affected a number of crops and impacted upon fruit size and number. In January another heavy rainfall event occurred, with some crops being under water for a long period of time. This rain killed some plants while others remained green although fruit failed to size. The combination of these two heavy rainfall events coupled with low irrigation allocations has resulted in the lowest tonnes being processed in the industry since prior to 1990/91.

Growers across the industry have been significantly impacted upon by this season. Heavy rains must occur in the catchments over the coming months to ensure irrigation allocations improve for next season. With the possibility of a similar low irrigation allocation again next year, coupled with an increase in the cost of inputs and high world prices for alternative crops, many

growers are currently uncertain about their plans for the coming season. The coming months will be critical as growers make decisions and determine their winter cropping program.

The current seasonal conditions have also impacted upon the industry's research and development program. A number of the industry cultivar evaluation programs and nutrition trials were affected by the heavy December and January rains. As a result limited information has been gathered from this years trials. As a result of

*(Continued on page 2)*

## Inside This Issue

|   | <b>Page</b> |
|---|-------------|
| Early season variety trials in NSW                      | 2           |
| Historical Rainfall Data From Echuca                    | 3           |
| Benefits from organic matter or: Black magic works      | 4           |
| Upcoming Events   | 5           |
| World Processing Tomato Crop Update                     | 5           |
| Australian Processing Tomato Consumption and Production | 6           |
| Recommended Effective Lives for Water Assets            | 7           |
| Future Focus  | 8           |

## Early season variety trials in NSW

During the 2007/08 season, four early season variety trials were established in NSW. There were two types of trials including “small plot” and “large plot” trials. The “small plot” trials were measured from hand cuts taken out of 7m plots while the “large plot” trials were harvested from 200m of bed. All four trials were replicated and direct seeded onto 1.8m beds and furrow irrigated. The trials were sown from early to mid September and harvested from late January to early February.

The “large plot” trials were harvested and weighed using Cendenco’s harvesting equipment. Sub samples of 5kg were collected from every plot during the harvest operation for TSS testing. From these sub samples, the percentage of red, green, rotten and small fruit was also calculated. The marketable

yield was calculated from the yield of red fruit only.

The NSW trials evaluated only early types with Hz 3002, ENP 113 and Hz 7204 used as standards. There were a total of eight new varieties being evaluated with TOP 421, TOP 5053 and TOP 4519 previously being identified as superior lines and included in the machine harvest trials.

Average results across the four trials showed that the commercial variety of Hz 7204 gave the highest yield of TSS with 4.16 t/ha, but had the lowest percentage TSS of the three commercial varieties. TOP 5053 had the highest average yield of the new varieties with 76.9 t/ha of fruit and 3.89 t/ha of TSS.

Table 1: Individual results of the four variety trials.

| Variety         | Small plot trials |         |              |         | Machine harvest trials |         |              |         |
|-----------------|-------------------|---------|--------------|---------|------------------------|---------|--------------|---------|
|                 | Yield (t/ha)      | TSS (%) | Yield (t/ha) | TSS (%) | Yield (t/ha)           | TSS (%) | Yield (t/ha) | TSS (%) |
| <b>HZ 3002</b>  | 61.9              | 5.80    | 98.6         | 5.03    | 49.9                   | 5.4     | 78.7         | 4.9     |
| <b>ENP 113</b>  | 61.2              | 5.81    | 94.1         | 5.02    | 50.6                   | 5.4     | 92.0         | 5.2     |
| <b>HZ 7204</b>  | 62.9              | 5.68    | 119.3        | 5.04    | 45.3                   | 5.3     | 95.4         | 4.6     |
| <b>TOP 421</b>  | 59.7              | 5.38    | 106.4        | 4.78    | 43.9                   | 5.3     | 82.8         | 4.3     |
| <b>TOP 5053</b> | 59.8              | 5.17    | 104.5        | 4.80    | 52.1                   | 5.6     | 91.0         | 4.7     |
| <b>TOP 4519</b> | 63.4              | 5.78    | 96.3         | 5.11    | 32.2                   | 5.9     |              |         |

Note: TOP 4519 was not included in the last machine harvest trial due to the lack of seed.

Table 2: Average results from all four trials.

| Variety         | Yield (t/ha) | TSS (%)     | TSS (t/ha)  |
|-----------------|--------------|-------------|-------------|
| <b>HZ 3002</b>  | 72.3         | 5.28        | 3.82        |
| <b>ENP 113</b>  | 74.5         | 5.36        | 3.99        |
| <b>HZ 7204</b>  | <b>80.7</b>  | 5.16        | <b>4.16</b> |
| <b>TOP 421</b>  | 73.2         | 4.94        | 3.62        |
| <b>TOP 5053</b> | 76.9         | 5.07        | 3.89        |
| <b>TOP 4519</b> | 64.0         | <b>5.60</b> | 3.58        |

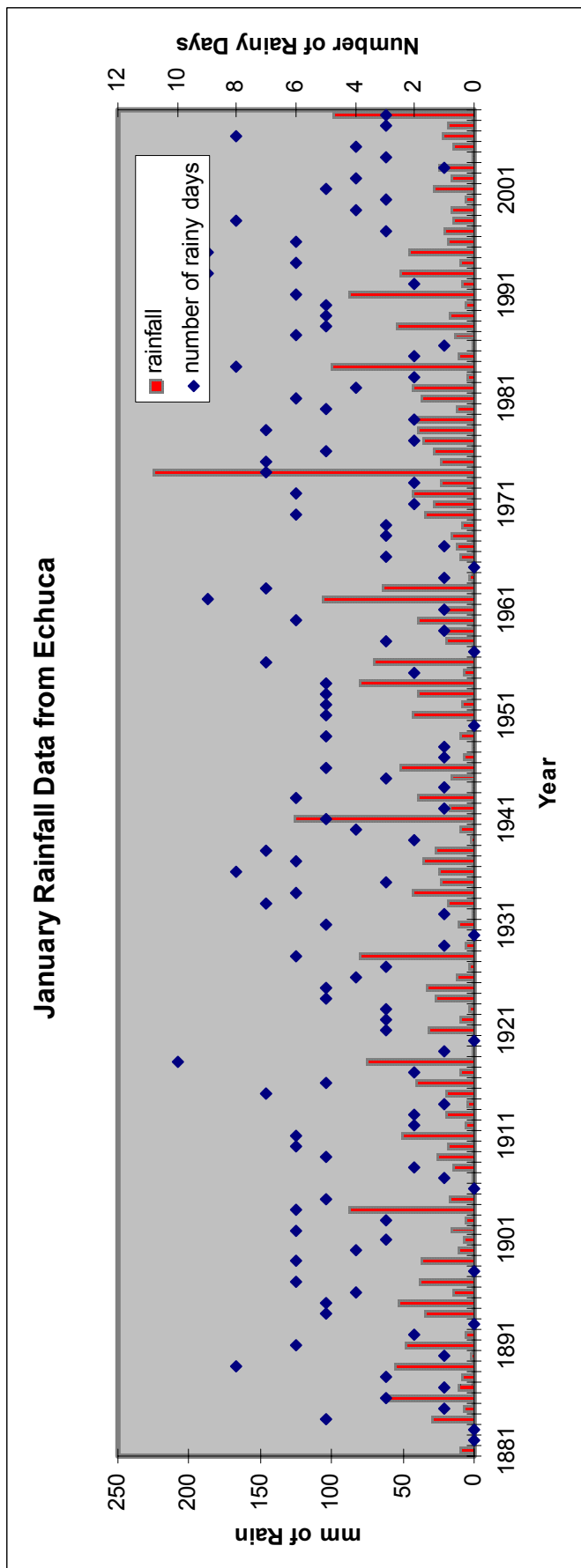
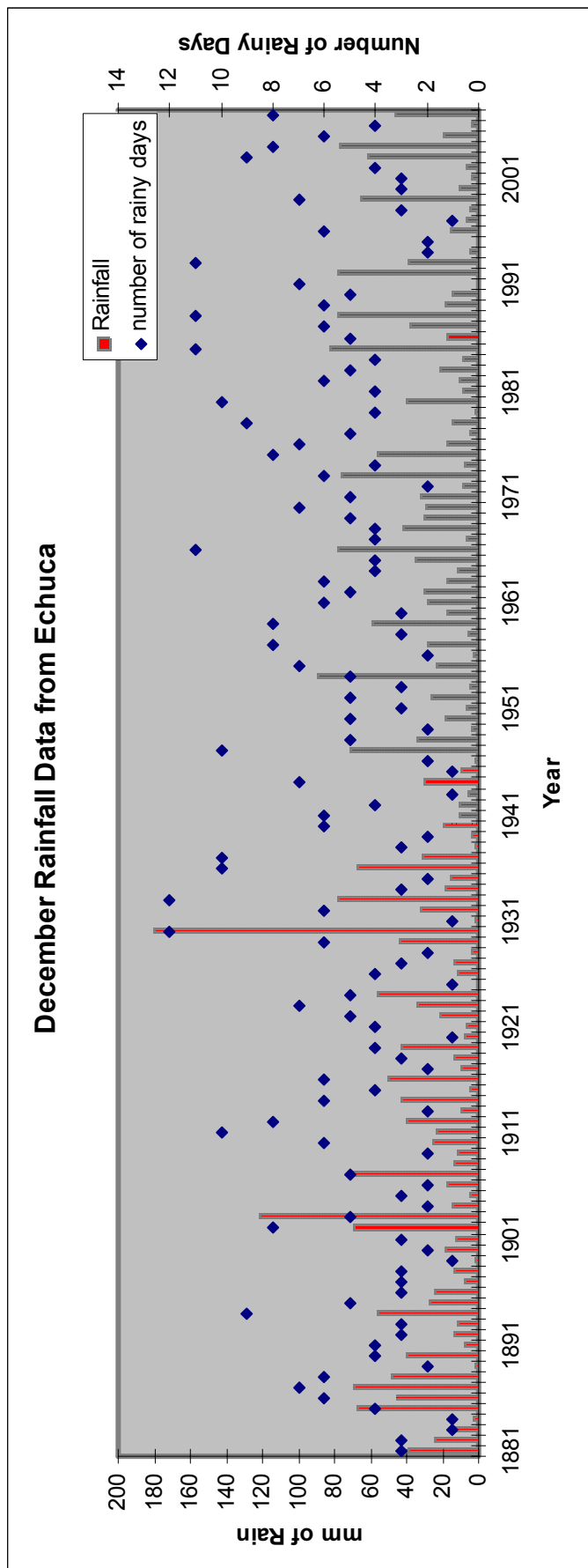


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the reduction in processed tonnes the total R & D levy for next year has been reduced. The Victorian State Government through the Drought Initiative “Providing Support to Industry Development Organisations” has provided the Processing Tomato Industry with \$37,000. This will be used to support the industries technology transfer project and also cover the cost of the calcium fertigation trial conducted this season in conjunction with SS Farms.

The full impact of the reduction in R & D levy will not be felt until next season. At this stage it is envisaged the industry cultivar evaluation program will be put on hold during the 2008/09 season due to lack of available APTRC funds. Some cultivar evaluation trials will be incorporated into the technology transfer project during this time, but this will also be at a minimum level.

Historical Rainfall Data From Echuca



## Benefits from organic matter or: Black magic works

Increasing the amount of organic matter in the soil boosts soil carbon levels and microbial activity, resulting in improved soil structure and ‘overall healthier’ soils. The organic carbon percentage reported in your soil test multiplied by two, gives an estimate of the organic matter level in the soil. Increasing organic matter leads to increased nutrient availability, improved drainage, water holding capacity and root growth. Organic matter enhances long term productivity and ease of management.

### More organic carbon, better soil structure

You can improve organic carbon levels and though it soil structure with rotations that include crops which grow lots of fine roots, leave crop residues that can be incorporated or include green crops (e.g. mustards) and pasture breaks. If feasible, organic matter can be imported as manure. Even small changes in rotation and soil management, can increase soil organic carbon levels and thus improve soil structure if they are maintained over several years. Adding calcium to the soil as lime, gypsum or with other fertilisers will enhance the effect of adding organic matter.

### How to check soil structure

You can assess the stability of the aggregates as an indicator for soil structure by dropping a small lump of soil into a jar of water. If the lump remains intact it contains a high percentage of water stable aggregates, indicating good structure. If it collapses the aggregates and thus soil structure are unstable. Well structured soil with good organic matter levels is easily dug up with a spade, feels bouncy when walked on, even several weeks after working, keeps moisture well after rain without remaining wet and

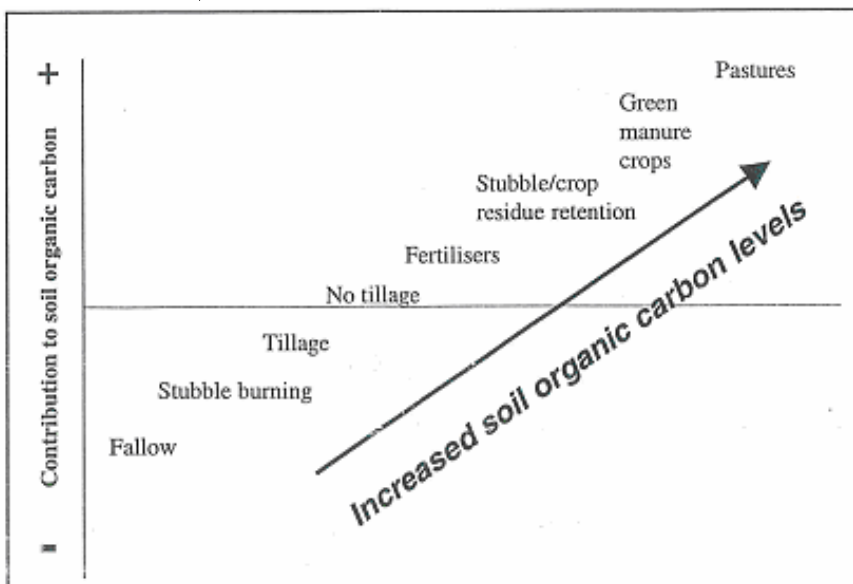
has a nice earthy smell.

### How much organic carbon?

Scientific studies suggest soil structure improves markedly when organic carbon level reaches approximately 2%. To increase the organic carbon level by 1 %, about 40 tonnes of dry matter are required. Increasing organic carbon levels is a long term process. It is best to avoid losing organic carbon in the first place. Every time the soil is worked, carbon is lost.

### How to increase organic carbon efficiently

- Soil critters and microbes live off organic matter. Feed them and they will work for you, improving structure, nutrient availability and crop resilience.
- Bare fallows contribute most to organic matter decline (no carbon credits to get there)



| GOOD SOIL STRUCTURE<br>through optimum organic carbon  | POOR SOIL STRUCTURE<br>through low / depleted organic carbon                |
|--|---|
| No compaction  | Soil easily compacted, soil surface crusts                                  |
| Less diesel required for working   | More power needed to achieve fine tilth                                     |
| Good root development  | Restricted root growth, more attention to water and nutrition required      |
| Good water holding capacity  | Poor water holding capacity, more frequent irrigation required              |
| Good nutrient holding capacity and access to nutrients via roots   | Reduced nutrient holding capacity   |
| Good drainage after rain   | Risk of water logging after rain  |
| Better crop resilience, especially if salinity or sodicity are present   | Poor crop resilience, sodicity or salinity may have a major effect on crops |
| Good level of critters and microbial population that aerate the soil and stabilise it (microorganisms glue soil particles to form stable aggregates) | Low or imbalanced amount of critters and microbial population               |
| Reduced weed and disease pressure  | Reduced weed and disease pressure   |



## UPCOMING EVENTS

### Annual Processing Tomato R & D Forum

Friday 9<sup>th</sup> May 2008

Quality Inn Port of Echuca

Dinner to follow

### Irrigation Australia 2008 Conference and Exhibition

Melbourne, 20<sup>th</sup>-22<sup>nd</sup> May 2008

[www.irrigationaustralia.com.au](http://www.irrigationaustralia.com.au)

### 8<sup>th</sup> World Congress and 11<sup>th</sup> ISHS Symposium on the Processing Tomato

8<sup>th</sup> - 13<sup>th</sup> June 2008, Toronto, Canada

[www.worldtomatocongress.com](http://www.worldtomatocongress.com)

Financial assistance is available for current processing tomato industry levy payers to attend this congress. Please contact Liz Mann for further information.



## World Processing Tomato Crop Update (from WPTC 31/3/08)

### Greece

Contracts have not yet been signed. Current indication of 700 000 tonnes to be processed in 2008, more than last year but the increase is due to an expected increase in yield and not increased surfaces (which were c. 10 000 hectares in 2007). Price should be in the order of 80 euros/tonne delivered.

### Italy

The reference price negotiated for the north of Italy is 79.5 euros/tonne ex-field + 1 euro/tonne for the PO services. Transport costs are on average 10-12 euros/tonne. Coupled aid will be around 1300 euros/ha. There has been limited rain in the last two months and growers hope for some more but the water situation is quite normal. Transplanting will start at the beginning of April.

Contracting is still ongoing in the south but the price of round tomatoes (paste) will be around 85-90 euros/tonne ex-field and of long tomatoes (wholepeel) 100-110 euros/tonne which is very high. The surface planted should be similar to last year. The water situation is getting better with some rains lately, but still drier than normal.

### France

Average price should be 70 euros/tonne ex-field, with 10-15 euros/tonne for transport (sometimes more). The volume expected is around 120 000 tonnes for a surface of 1600 hectares. Transplanting will begin early April and continue until 10 June. General conditions are good, despite a lack of rain. The expected coupled subsidy per hectare is c. 2 500 euros/hectare.

### Portugal

The expected subsidy is 1 250 euros/ha. The total crop should be slightly lower than last year at about 1 million tonnes processed in Portugal. The price should be just under 80 euros/tonne delivered for 5.4 ° brix.

### Spain

Estimated coupled subsidy of c. 1 100 euros/hectare (government figure, confirmed by AGRUCON estimates). The contract price is c. 75 euros/tonne ex-field in Extremadura, with a cost of transport of 5-6 euro/tonne. There have been little rain this winter but water availability is not a problem in this region.

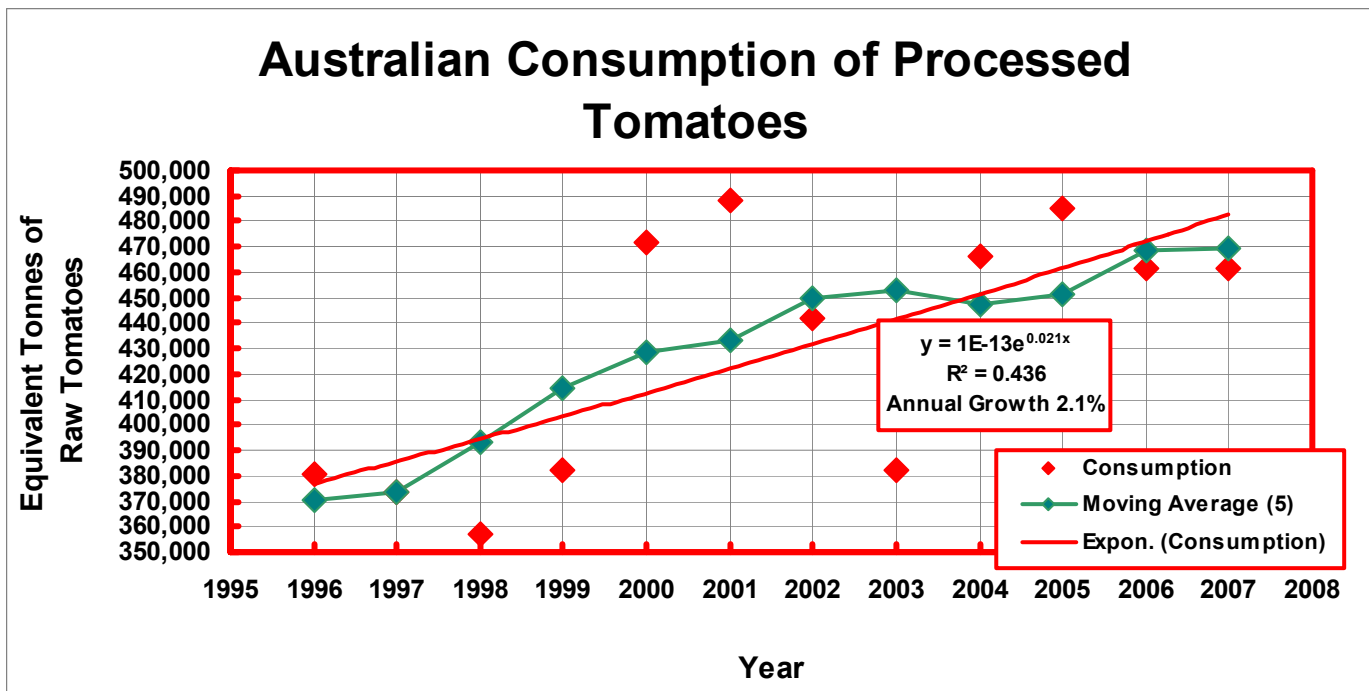
Discussions are still ongoing in the Ebro valley with prices expected close to 80 euros/tonne + higher transport costs than in Extremadura. There is a serious lack of water. In Andalusia, production forecast has been reduced due to the limited water availability, and negotiations are still ongoing with prices not clear yet (60 to 72 euros/tonne?).

### Turkey

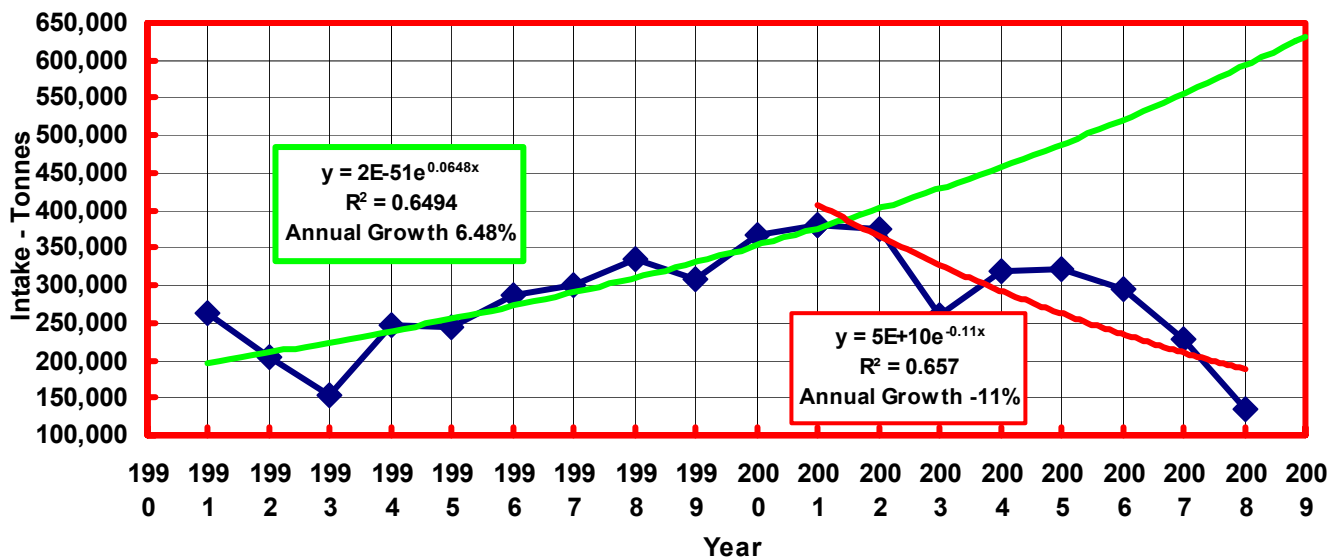
surfaces planted should be 20-25% higher than last year as conditions are good to 35 000 hectares. Production will depend on the yield as they vary greatly depending on weather conditions but 2.1 million tonnes is expected. Price of 70-72 euros/tonne ex-field + 15% for transport. No stocks should remain at the end of the season.

*(Continued on page 6)*

# Australian Processing Tomato Consumption and Production



### Australian Processing Tomato Intake - Tonnes per Year



The annual growth of imports to match the increase in consumption and decrease in production is around 8.7%. At the same time the annual reduction in exports is around 10%. (Above data obtained from ABS)



(Continued from page 5)

**Canada**

The 2008 forecast stands at 520,000 metric tonnes. Prices reduced by 2% from 2007 (driven by changes in currency exchange rates). Planting scheduled to begin in early May.

**California**

Feedback from growers, seed companies and processors indicate a 10% acreage reduction. If you use a 40 ton yield and 265000 acres production would be 10.6 million short tons.

CTGA is surveying growers and will have a firmer number in April. Until this number is available, the official forecast remains the CASS January figure of 11.8 million short tons (10.7 million metric tonnes).

**China**

They estimate the production will increase to 5.6 million metric tonnes.

(Continued on page 7)

## Recommended Effective Lives for Water Assets (ATO)

| ASSET   | LIFE (YEARS) | REVIEWED | DATE OF AP-<br>PLICATION |
|---|--------------|----------|--------------------------|
| Water assets:   |              |          |                          |
| Bores   | 30           | *        | 1 Jul 2008               |
| Dams (including earth or rock fill and turkey nests)            | 40           | *        | 1 Jul 2008               |
| Dam liners and covers   | 20           | *        | 1 Jul 2008               |
| Irrigation assets:  |              |          |                          |
| Drip, micro spray or min sprinkler systems                      |              |          |                          |
| Above ground polyethylene pipes                                 | 10           | *        | 1 Jul 2008               |
| Drippers, micro-sprays and mini sprinklers                      | 5            | *        | 1 Jul 2008               |
| Control systems   | 10           | *        | 1 Jul 2008               |
| Filtration systems  | 15           | *        | 1 Jul 2008               |
| Pumps   | 12           | *        | 1 Jul 2008               |
| Variable speed drives   | 15           | *        | 1 Jul 2008               |
| Irrigation channels earth                                       | 40           | *        | 1 Jul 2008               |
| Irrigators (including centre pivot, lateral and travelling gun) |              |          |                          |
| Fresh water   | 20           | *        | 1 Jul 2008               |
| Pumps:  |              |          |                          |
| Bore pumps, effluent and manure pumps                           | 7            | *        | 1 Jul 2008               |
| Other   | 12           | *        | 1 Jul 2008               |
| Water mains:  |              |          |                          |
| Aluminium   | 20           | *        | 1 Jul 2008               |
| Galvanised steel  | 25           | *        | 1 Jul 2008               |
| Polyethylene  | 20           | *        | 1 Jul 2008               |
| PVC   | 30           | *        | 1 Jul 2008               |
| Water tanks   |              |          |                          |
| Concrete  | 30           | *        | 1 Jul 2008               |
| Galvanised steel  | 25           | *        | 1 Jul 2008               |
| Polyethylene  | 20           | *        | 1 Jul 2008               |

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### South Africa

The harvest should be about 150 000 tonnes. The crop in the South is currently half way while the harvesting of the crop in the North will start in April. Weather conditions are currently good and enough irrigation water is available. The price for tomatoes is between 80 & 105 USD (exchange of the Rand at R8/USD).

### Argentina

Argentina forecast for this season will be 350 000 tonnes, down from 390,000 tonnes because of rains during harvest time in Mendoza region.

### Chile

Yields especially on the 2nd half of the season have been affected due reduced water availability. Hence final tonnes are predicted to be around 510,000 tonnes down from 525,000 tonnes.

These draft lives are based on the consultation we have had to date with primary producers and manufacturers and suppliers of these assets. You are invited to provide feedback on both the list of assets and the draft effective lives. If you disagree with a draft effective life we have proposed, then please provide the reasons why a different effective life should be recommended.

Please submit any feedback by Thursday, 17 April 2008, to either:

Dave Henry OR Mike Doyle

Phone: 07 3213 5169 Phone: 07 3213 6045

Email: dave.henry@ato.gov.au Email

mike.doyle@ato.gov.au

**If the feedback from industry points to factors or evidence that we have not considered, then we will give consideration to amending our draft effective lives. Our final recommendations will be presented to the Effective Life Review Panel on Monday 21 April 2008 so that the new determinations of effective life for these water assets will have a date of application of 1 July 2008.**

## FutureFocus

The horticulture industry strategic plan is in full swing, with the project showing that the Australian horticulture industry will produce enough to feed another city the size of Melbourne by 2020.

### Introducing the base line

One of the most important outcomes of the first phase of FutureFocus was the development of the industry baseline.

The baseline is a 'business as usual' projection of key economic outcomes such as quantities, prices and profitability out to 2020. It paints a picture of likely outcomes if markets continue to follow current trends in key drivers.

For FutureFocus, the baseline allows us to create a point of comparison for potential strategic action plans. It represents what might reasonably occur if no action were taken.

It is important that the baseline covers all sectors within horticulture so that the strategic actions can be evaluated in a consistent way against a common metric. The benefits and costs of each strategic action will then be evaluated by comparing and ranking industry outcomes - on the basis of profitability - against the baseline.

The FutureFocus baseline found that the Australian horticulture industry will grow 28 per cent to \$10 billion by 2020. However, increasing exports provides the greatest opportunity to increase industry income above the baseline level. A full breakdown of baseline results is detailed below.

### Horticulture as it stands - baseline results

The base line model has been used to 'add up' the impacts of domestic demand, trade and production. The baseline out-

comes of each area are summarised below:

#### Domestic Demands

- Under the baseline, a steady increase in domestic demand - as a result of population and income growth - will continue to underpin demand for horticulture.
- Total demand is expected to increase by an average of 1.1 per cent per year for fresh products and 0.7 per cent for processed.
- Food service demand is expected to grow at approximately 2.5 per cent per year.

#### Trade

- Under the baseline, current restrictions on the import of fresh products will remain in place with annual growth of 2.7 per cent.
- Imports of processed products is projected to increase by an average of 6.8 per cent per annum out to 2020 - which is less than average import growth over the past 5 years.
- As a result of significant recent plantings, farm level exports are projected to grow at 3.5 per cent per annum, a faster rate than imports.

#### Production

- By 2020, the gross value of production of fresh horticulture, including amenity, will be \$10 billion or around 28 per cent higher than 2005-06.
- Across all horticulture farm level and processing industries, growth in gross value of production and profitability is projected to be below that for the economy as a whole.
- Given current trends, it is projected that the output of amenity horticulture will continue to fall. Gross value of production will steadily.

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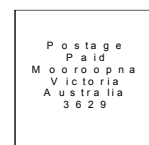
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