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Impact of drought and other adverse seasonal conditions on major users of irrigated water (06-07 growing/milking season)

Perspective of vegetable, dairy, poppy, pyrethrum and seed processing sector

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Introduction:

The purpose of this report is to provide timely information to the Tasmanian Government on the value of water for agricultural industries in Tasmania and an estimate of the cost of the drought for this current growing/milking season for some of TAPG's member organizations.

TAPG believes water access is the key to growth in agriculture in Tasmania, and is essential for ensuring reliability of agricultural supply that has always been a key strength for Tasmanian producers and processors. This report highlights the need for the sustainable development of water storage and distribution systems in Tasmania.

This report does not cover the wide spectrum of impacts from a season such as this. It does not cover the social and environmental consequences of the drought, nor does it quantify the economic impact for many of TAPG's members especially for those companies that provide services to agriculture. This information can be collected and collated at a future date by TAPG if there is support from Government that this information can be used as part of a policy response to adverse seasonal conditions.

The Department of Primary Industry and Water has been supportive of TAPG's intention to collect this information. Gross value of agricultural production is data collected and used by DPIW. However, there is a long lag time between the current growing season and the collection of information through the ABS agricultural census (eg 06/07 production data will not be available until September 2008). In a year such as this, the Government wants to know the impact of adverse seasonal conditions as soon as possible.

NOTE: Irrigation is used for other industries for which information on the impact of the drought has not been collected. Other industries that use water for irrigation include: perennial fruits and nuts (eg cherries, apples, apricots, walnuts), intensive lettuce production, viticulture, irrigated lamb and beef, fodder and canola crops.

Background:

The Tasmanian Agricultural Productivity Group (TAPG) is the only single body in the State representing intensive agriculture, the fresh and processed food producers and associated industries. See appendix 1 for list of TAPG members.

The TAPG is a self-funded organisation which works with Government, government instrumentalities, statutory authorities, industry groups and individuals to:

- Ensure the ongoing productivity and growth of Tasmanian agriculture, forestry, food and related industries.
- Provide a co-operative forum for the promotion and increased recognition of all sectors of Tasmania's agriculture, forestry, food and related industries.
- Reinforce public confidence in the safety and quality of produce.
- Ensure the application of safe, efficient, sustainable and appropriate environmental practices.
- Provide a multi-sector approach to issues affecting the Tasmanian agriculture, forestry, food and related industries.

TAPG has identified access to water for agricultural use as its highest priority issue. This current dry season has highlighted the importance of irrigation to maintain supply of product to the processing sector. Reliability of supply is a critical factor that attracts and keeps processors in Tasmania. That reliability has been a strength that Tasmanian farmers have been able to trade on. Water, from both rainfall and stored supplies allows growers to deliver the quality and quantity of product specified in contracts with processors.

That reliability of supply of produce has been tested this year, due to below average rainfall and high demand for irrigated water. TAPG wishes to emphasise that its interest in water relates to security of supply for processors as well as potential for growth in the longer term.

Methodology

As a means of understanding the value of water to processors, TAPG has sought information from its member organisations regarding production losses, foregone payments to growers and estimates of extra cost to farmers from adverse seasonal conditions this year. The major impact has been through reduced rainfall and inadequate or relatively highly priced irrigation water (premium water prices up to \$300/ML paid this year). Heavy frosts last Spring have also added to farmers difficulties this season.

Information has been collected from the following organizations: Roberts and Serve-Ag(cereals and seeds), Tasmanian Alkaloids, Glaxo–Smithkline (poppies), Simplot, McCain Foods (fresh and frozen potatoes and frozen vegetables), Fonterra, Cadbury and National Foods (dairy), Harvest Moon, Premium Fresh, Webster Fresh, Perfecta and Glen Moore, Scottsdale (fresh vegetables) and Botanical Resources Australia (pyrethrum).

Estimates have been provided to the researcher from each organization. These estimates have been aggregated for each industry to maintain confidentiality amongst competitors.

These estimates will need to be reviewed at the end of the growing/milking season to provide a more accurate assessment of loss of production and total costs for buying extra water and feed. Most companies have a good knowledge of these extra costs for their suppliers as well as the foregone payments that suppliers will not receive.

The following information was requested:

Vegetable and poppies: lost production due to reduced yield, lost production due to not planting (tonnes/kgs or as a %) and a dollar value for this. Also what are your expectations regarding contracts for next year will they be reduced, remain static or expand? (ie will you be looking for more water, the same or less).

For dairy: estimate of lost production so far this season, estimate for remainder of season (in ML's of milk) and dollar value for this. Also, estimate cost to farmer to maintain production and hold condition of cows through supplementary feeding. Also what are your expectations regarding contracts for next year, will they be reduced, remain static or expand? (ie will you be looking for more water, the same or less).

For cereals and seeds and pyrethrum: estimate of lost production, and dollar value for this. Also estimate of extra cost for growers to buy extra water to finish off crops. Also what are your expectations regarding contracts for next year, will they be reduced, remain static or expand? (i.e. will you be looking for more water, the same or less).

Also, general comments about the importance of water to each industry, the impact of the drought not just on this years performance but beyond, expectations for growth for each sector in the next 1-5 years, and volume of water to support this.

NOTE: the estimates for production loss relate to farm gate values. When considering total impact on the Tasmanian economy, it is important to consider the multiplier effect relating to value adding by processing sector (this amount varies between products, an average multiplier is generally considered to be between two and three times farm gate value).

Results:

1. Foregone payments to farmers:

1.1 Vegetables (fresh and frozen) This figure is made up of decreased yield and crops not planted. Total value of foregone payments to growers: **\$ 29Million**
This includes losses from potato, peas, beans, cauliflower, broccoli, carrot, onion, kabocha and swede crops.

1.2 Dairy (fresh and processed)
Total value of foregone payments to farmers: **\$ 7.75 Million**

1.3 Seeds and cereals and pyrethrum
Total value of foregone payments to farmers: **\$ 15 Million**
This includes losses from grass, clover, cereal, pulse, specialty grain and Brassica seeds. It also includes losses from a small amount of irrigated grain crops.

1.4 Poppies
Foregone payments to farmers: **\$ 4.2 Million**

1.5 **TOTAL foregone payments for poppies, vegetables, dairy and seed/cereals/pyrethrum**

\$55.95 MILLION (estimate up to April 07)

Total value of production for these industries for 04/05 is \$417 Million (ABS total value of production 04/05). **The estimate for % of loss this season is 13% of total production.**

Comments:

Vegetables: The effect of the dry season has been variable for individual growers. Many farmers just did not plant crops because they did not have confidence that they had sufficient water to finish off their crops. Some crops eg onions, have not been as badly affected, indeed the quality of onions has been good, although total yield has been down and onion size will have an impact on marketing.

Comment was made that it is too early in the season to analyse the impact on carrot production, (quality and yield). Will have to look at impact on carrots later in season.

Some farmers have been able to get their crops through to harvest with minimal impact because they have had adequate stored water to deliver on their contracts. Others have not had this additional water and relied more heavily on rainfall. Heat, wind and frost have also had an impact on farmers ability to meet required contracts.

Processors worked hard from the beginning of the season to make up quantity by readjusting where and from whom they sourced product. To some extent this has meant that impacts for them have been minimised. However, major shortfalls have occurred for potatoes, either through not planting or reduced yields. This accounts for much of the total for forgone payments to growers. This is a critical issue for some processors.

The fear amongst processors is that the dry will continue, water storages will not be replenished and the planting of crops will be delayed or deferred, compounding the impact for both growers and processors. This issue will need to be closely monitored in the coming months. If rain does not come, it will be disastrous for many businesses who have struggled to get by this year.

Extra costs to farmers for buying stored water and increased pumping costs is estimated to be between **\$500 - \$800 per ha.**

Dairy: The effect of the drought has been felt by both processors and growers. There was an overall industry goal to increase milk production this year (June 06-July 07) beyond last years production of 622 ML (622 million litres). Figures to last December indicate that this was on target. However the dry conditions have started to impact on production for the second half of the season. Figures for total milk production will need to be analysed after July.

Farmers have been able to maintain production and cow condition but at a high cost (estimates of up to an extra 25% - see below). Instead of relying of less expensive food for cows ie pasture, farmers have had to supplement cows with high cost grain, hay, silage and fodder crops. Due to the drought on the mainland and here, grain, hay and silage prices have been very high (up to \$400/tonne for grain). Processors have given good incentives for farmers to do this by increasing c/L paid for milk because it is very important to them to maintain quality and quantity of product in to the market. Making sure cows go into the next breeding/milking season in good condition is also essential for next years production.

Many dairy farmers are highly geared, and the industry believes there is genuine hardship being experienced by a large number of producers. It has been estimated that additional feed for cows may have cost farmers somewhere between **\$18-21 Million dollars.** As mentioned, to some extent this has been offset by additional payment for milk from the processors, but farmers will be bearing the brunt of extra costs this year.

Poppies: Foregone payments to farmers this year due to adverse seasonal conditions need to be put in context. There were reduced hectares planted out for poppies this year,

due to global oversupply. It is expected that the area being grown for poppies will be back to 05/06 levels for this coming growing season.

Extra costs to farmers for additional water and pumping is estimated to be somewhere between **\$500-\$800** per ha of poppies (total ha for Tasmania is 9000ha for 06/07)

Seeds: The seed industry has expanded rapidly in Tasmania in the last 3-4 years, quadrupling in size in terms of farm gate value and volume of product. Virtually all seed crops rely on irrigation for at least part of their water needs.

Extra costs to farmers for additional water and pumping costs is estimated to be somewhere between **\$500-800** per ha.

Summary

Access to water is critical for the maintenance and growth of agriculture in Tasmania. Agriculture has the potential to expand in key industry areas including fresh and frozen vegetables, milk, poppies, specialty seeds, fruit, wine grapes and other products that use water. Gross value of production could increase to **\$334M** over the next 10 years (DPIW internal report 2006) if extra water is made available.

The adverse weather this season (predominantly low rainfall but also frosts) has had a devastating impact on producers and processors this year. The impact will be felt not just this year but for many years to come, even if rainfall returns to normal in the next 12 months.

Industry has estimated that **\$56 Million** will not be paid to farmers this season because of reduced production. On top of this, costs to farmers will have increased dramatically through money spent on buying extra water, pumping and purchase of extra feed. This could easily amount to another **\$30-50Million** that farmers will have to find from their reserves resulting in negative gross margins for many crops and enterprises this year.

For processors, reliability of supply is one of the key factors that attract processing companies to Tasmania. This season has tested that reliability. Should the next season result in lower than expected rainfall, consequences for producers, processors and the Tasmanian economy will be dire.

TAPG strongly recommend that a concerted effort is made by State and Federal Governments and industry to understand all possible options for increasing water supply to farmers in Tasmania. Developing those water storages and delivery systems should be seen as critical and proceed as soon as possible. Cutting red tape and costs for water development plans are critical to provide incentives for farmers wishing to expand on farm water storage.

DPIW estimate an extra **150,000ML** of extra water needs to be made available in the next 5 years for agriculture to grow and develop. Opportunities for expansion of key industries needs to be supported by extra water availability.

TAPG MEMBERSHIP 2007

Vegetable Processors:

McCain Foods (Australia) Pty. Ltd.
Simplot Australia Pty. Ltd.

Fresh Fruit & Vegetables:

Field Fresh
Elders Webster
Harvest Moon/Forth Farm Produce Pty. Ltd.
Premium Fresh Tasmania
Cherry Hill Coolstores
Bovill Brothers
Perfecta Exports Pty Ltd

Dairy Processing

Fonterra Ltd
National Foods Ltd
Cadbury Schweppes Pty Ltd

Industry Associations:

Agricultural Contractors Association of Tasmania
Agricultural Ground Sprayers Association
Tasmanian Women in Agriculture

Growers:

Tasmanian Farmers and Graziers Association

Government:

Department of Primary Industries, Water and Environment

Services to Agriculture:

Dobmac Agricultural Machinery
Hills Transplants Pty Ltd
Impact Fertilisers Pty. Ltd.
Incitec Pivot Ltd
Irrigation Tasmania
Roberts Ltd.
Serve-Ag Pty. Ltd.
Beechworth Spraying
Rural Development Services
Agronico
Tasmanian Quality Assured
Davey and Maynard
Agricultural Resource Management Consulting

Peracto

Other Agricultural Processors:

Botanical Resources Australia Pty. Ltd.
GlaxoSmithKline Australia Ltd.
Tasmanian Alkaloids Pty. Ltd.

Forestry:

Forest Enterprises Australia Pty. Ltd.
Forestry Tasmania
Gunns Limited
Private Forests Tasmania

Aerial Spray Operators

Air Spreaders Tasmania
Superair Tasmania
Tasmanian Helicopters Pty. Ltd
Osborne Aviation Service
Helispud Pty Ltd