



Updated Briefing on Current Natural Disasters Impacting Horticulture – Fire, Flood, Heat-Stroke, Drought, etc.

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The Bigger Picture

Horticulture is intensive, and generally irrigated, agriculture; worth \$9bn per annum to the national economy (farm-gate value). It is the second-largest and fastest-growing agricultural sector (larger than Dairy and Wool combined), employing approximately one-third of all agricultural workers.

Horticulture's environmental 'footprint' is negligible compared to other forms of agriculture; and the industry's world best practice water use efficiency, 'clean and green' farm-management practices, many thousands of square hectares of permanent planting canopies, urban green spaces, and effective management of soil carbon contribute significantly to the nation's environmental (as well as physical, social and mental) health.

The recovery and reinvigoration of the industry from the series of natural disasters currently impacting large areas of horticultural production is vital not only to growers, but also to the rural communities dependant on them. This assistance will help rural communities continue to thrive, pay taxes and rates, and provide employment in these regional centres. The multiplier effect from a failed horticulture industry - in Victoria alone x a factor of 6 - will have a major impact on areas such as Mildura, Swan Hill/Robinvale, Shepparton and the Yarra Valley, whose economies rely on expenditure by growers.

The horticulture industry is a significant employer within these rural communities for both permanent and casual labour. Without a sustainable horticulture industry, unemployment in these communities could rise.

Bushfires

The recent bushfires in Victoria (combined with the heatwave across southern Australia), have seen unprecedented damage to fruit, vegetables, vines, nuts and bees across the south-east. From bushfire in Victoria alone, growers have lost 1888ha of orchards, vines and vegetable production¹.

There is ongoing market failure in the insurance sector, as growers are not able to insure their crops in the field for anything other than hail (and sometimes not even this). Available hail insurance is extremely cost prohibitive for most growers; many growers have not been able to fund self insurance, due to continued drought conditions over the past several years with some growers receiving minimal, to no, income after expenses.

¹ DPI Statewide Agency Sitrep 20090313

The horticulture industry is unique, and different from other commodities - when permanent plantings are lost it can take many years before a commercial crop can be produced. This is also dependent on there being “mother” stock available. Growers will often not have any income at all for up to 7 years. This excludes growers from taking up loan opportunities provided by government for drought and bushfire recovery, such as the recent loan for up to \$200K for bushfire recovery managed by Rural Finance Corporation, as growers are not able to service repayments for a loan until a commercial crop comes on line.

Current Situation

- ◆ Growers have been impacted in the majority of rural/regional (non-suburban) areas.
- ◆ The extent of loss of life is still unclear.
- ◆ The areas worst affected by the bushfires are still closed by the authorities (residents have only recently been allowed to return to Kinglake and Marysville); areas of property/stock damage reported to date include:
 - Permanent plantings burnt (including orchards and vineyards (wine grapes));
 - Trees and produce suffering from heat and/or smoke damage;
 - Loss of annual/ground crops (eg potatoes, range of salad greens, berries, tomatoes, chillies, hydroponic and greenhouse crops, brassicas, etc.);
 - Damage to property/infrastructure (houses lost; sheds, packing-houses burnt; irrigation infrastructure destroyed; machinery & equipment lost); several properties across Victoria suffered significant damage from the bushfires (including structures, equipment, orchards and netting):
 - Arthur’s Creek – singeing damage of trees; cool store damaged – hiring generator at \$550 p/d for generator;
 - Wandin North – lost machinery shed, equipment, 12 tractors, bikes etc.; also lost about \$500K in trees and vines. Insurance on equipment etc, but not on trees; also not insured for the clearing up or burning of wind breaks.
 - Labertouche – lost 2 houses and main cool store. Also lost orchard and hail netting - no insurance for orchard;
 - Stanley – no direct impact but because of road closures can’t get pickers through to pick his crop of raspberries;
 - Kinglake – 3 seed potato properties lost. This will have an impact on the seed potatoes available to industry next season. One grower lost house, sheds, harvester, forklift, grader etc.;
 - Kinglake – 1 cut flower property lost; complete flower production on this property has been lost.
 - Kinglake – one farm lost 9000 blueberry bushes (100% crop) + 50% blackberry crop, and 100% raspberry and red current crops (4.5ha in total); plus packing shed, cool-room, workshop, machinery shed, 3.5ha of bird netting. Irrigation approx \$25-30,000 - 100% damage;
 - Moondarra – ash and debris damage to 3.1ha of blueberries – estimated \$100K
 - Narbethong – 1 property suffered significant damage;
 - Narbethong – 4 acres of blueberries, house and irrigation and bird netting – estimated at \$300K;

- Narbethong – total property 200 acres of trees, house and 4 sheds. 60 acres of walnuts have been fire affected, with a recovery period of over 4 years; 4 acres of raspberries; 2 acres of blueberries with a 6-7 year production turnaround - estimated value around \$750,000 lost;
 - VWIA reports 29 vineyards affected (in Yarra Valley and Heathcote regions), with 162ha burnt and 3 wineries destroyed or with infrastructure damaged. Approximately 5% of Yarra Valley vineyard area burnt.
 - Widespread smoke through vineyard regions inc Yarra Valley, Gippsland, Upper Goulburn, King Valley, Alpine Valleys, Beechworth, Heathcote and Bendigo. Testing for smoke taint effect has been provided by 3 labs including the Australian Wine Research Institute. No or low levels reported out of adjacent regions to date, as prevailing winds appeared to disperse smoke more rapidly than in 2007 when King and Alpine Valleys were badly affected. However some effect may still appear in later harvested reds – particularly in Yarra Valley and Yea areas. Only Casella Wines has indicated intention to take smoke affected fruit at this stage – as they did in 2007. Currently somewhat of a “buyers strike” in place amongst major wine companies for fear of taking affected fruit. Growers are reporting having fruit rejected with arbitrary and very low levels of active taint compounds – up to as much as 1/12th of the detectable levels in sensory evaluation testing conducted by AWRI. Growers also being expected to pay for testing at \$73 - \$115 per test.
 - approx. 500 beehives were lost in the fires - the biggest issue is the loss of floral resources for autumn feeding, which builds up hives and provides bees for spring pollination (many horticultural crops are up to 100% dependant on pollination).
- ◆ Some of the insurance ‘gaps’ already being identified are:
 - It is extremely difficult and/or cost prohibitive to insure trees and vines therefore there is often no insurance on growers’ main source of income
 - for example, in one grower’s case he has lost approx. \$500K in trees and vines. It was also necessary to hire heavy equipment to remove the wind break in case the fire re-ignited; the hire of the heavy equipment (at a cost of around \$20-\$30K) is also not covered by insurance;
 - many growers who have made a number of claims in the past few years as a result of extreme weather events have now been denied insurance.
 - ◆ Sadly, Flemings (at Taggerty), one of the largest supplier of breeding/root-stock for orchard trees, has lost more than 50% of its nursery and also up to half of the advanced tree nursery; This nursery, which supplies fruiting cultivar wholesale stock for orchards, has been significantly destroyed. These cultivars take about 2-3 years to regrow and will have a significant impact on the stock available to orchards. As well as the nursery, the orchard and other farming activities have been ruined. Damage to this property alone has been estimated at over \$3m
 - Destruction caused to the site will have a huge impact on:
 - ‘mother tree’ stock and thus sources of replacement/re-planting stock
 - trees being grown at Flemings are pre-ordered, so this could mean the next batch may be sold before a batch can be grown to replace burnt-out properties and fill the void of unfilled orders;

- Recovery time (could increase by up to 5 years)
- Loss of breeding stock also exposes industry to competitive pressures they were not anticipating (eg loss of markets; and for pome fruit, delayed implementation of the *Orchards 2012* initiative; pears may require fallow period or soil fumigation, or re-planting in 'virgin' soil)
 - the *Future Orchards 2012* program looks at modernising orchards to optimum density plantings, so that the combination of increased yield and cost-minimisation result in the maximum return per hectare. This includes the management of tree architecture so that vigour is minimised and fruit production maximised. The resultant smaller pedestrian trees use much less water per kilo of fruit grown and require a similarly lower volume of spray application. Because pedestrian trees can be accessed on foot labour costs for pruning, thinning and harvesting are also lower; as are OH&S incidents. This type of orchard modernisation is essential to the long term survival of the industry as we move to a more restrictive water and import competitive environment. Any loss of nursery stocks will set back the industry's ability to respond to changes.

Floods in North Queensland - Cyclone 'Ellie'

Current Situation

- ◆ There has been some significant damage reported by individual growers:
 - One grower in Palmerston North has reported that 60-80 per cent of his banana plantation has been damaged by wind;
 - Water-logging and muddy ground are causing further concern for other growers; in some cases, banana growers need to prop up their trees, but the real damage from the wind was to trees already bearing fruit.
- ◆ However, most north Queensland growers report that the impact on their properties of wind, rain and floodwater is less than the impacts of the hiatus in the transport of their produce to market, and subsequent losses
 - The most urgent issue was in terms of the produce itself:
 - over 200 tons of mangoes had to be "dumped"
 - there were 200-300,000 tons of produce (fragile tropical fruits such as bananas, paw paws and mangoes) "stranded" in storage
 - some of this has been affected by flood damage, or loss of power to maintain the cool chain - thus impacting the viability of the fruit
 - there are also question marks over quality issues with bananas yet to bunch, given the stress the plants have been under in recent weeks.

'Heat-Stroke' in NSW, SA & Victoria

Current Situation

Apart from the ongoing disaster in the southern MDB, this is by far the largest natural disaster facing us

- ◆ Estimates of damage from the worst-ever heat wave in southern Australia over the past few weeks vary between industries and regions, eg
 - 25 – 50% in pome fruit
 - 50% in grapes
- ◆ Damage varies from sunburnt/small (arrested development) in tree fruits, to “burnt to mush” in more fragile produce such as berries/tomatoes/grapes, and “stewed apples” hanging on trees
 - 50% of the Victorian apple crop is estimated not suitable for fresh fruit (some may be able to sell for juice at significantly reduced returns);
 - Negotiations with retailers arranged amendment of the normal size and quality specifications
 - but of the remaining fruit acceptable for fresh, there is a concern when large amounts may need to be put onto the market at the same time - affecting prices, and thus cash-flow, and raising viability issues (particularly in the ongoing environment of very low water allocations);
 - There is some concern in pome fruit that there may be internal damage to the structure of the fruit such that it may disintegrate in cool storage (impacting on the cash-flow and income of a significant number of growers);
 - It is too early to predict the affect of the heat on olive oil accumulation (just commencing) in olives;
 - We expect some sunburn in citrus, primarily in younger trees;
 - Vegetables - 25% losses over the season in fresh tomatoes due to heat/sunburn (the flowers were burnt, thus not producing fruit); zucchini and capsicums also burnt. Lost value to industry is approx \$37.5m;
 - Reports from table grapes and wine grapes is very worrying; the heat stroke with the affected fruit is taking the situation (current water allocations resulting in significant crop and permanent plantings loss) from ‘from bad to worse’;
 - heatwave damage through sunburn, dessicated berries, bunch stem necrosis, and general bunch weight loss estimated at approximately 300,000 tonnes across SE Australia. Estimated loss of revenue to growers of between \$150 – \$180 million; but combined with a general reduction in wine grape prices of 30% for vintage 2009 – the financial impact on wine grape grower viability is alarming
 - increasingly, there is a view in the Sunraysia that much the viticulture industry in the region may not be able to recover (from the combined effects of lower-than-survival water allocations over the past several seasons, plus the heat wave) from a production perspective; viticulture, citrus and other crops in the Sunraysia region may see similar exits (up to 50% of growers following this summer season) as we saw earlier this year in the Riverland;
 - Goulburn Valley - those processing tomato crops that were at harvest point suffered sunburn and breakdown during harvest, and in transit to the processing factory (3 hour road trip in bulk tubs) – totalling perhaps a 10% reduction in yield; tomato

- crops which were in the midst of flowering dropped buds, leading to reduced fruit set (these crops will not be harvested until late March to April, but we are forecasting a further yield reduction of approximately 5-10%);
- Bacchus Marsh – one vegetable farm is likely to close down in the coming weeks. This farm is laying off 40 workers out of 200, and other farms in the district are also laying off 30 and 20 employees. This is due mainly to their water allocation being used to save large vegetable crops during the extended heat wave, and no more water being available. Growers have also been advised they will have 0% at 1 July. The district urgently requires approx. 1000mgl in order to keep up production and retain employees;
- Strawberries - 60-80% of crops have been lost due to heat. Sunburn has decreased the quality of the fruit, and burnt flowers on the plants mean they will not develop into fruit - there was not enough water to undertake heat control measures;
- Bees and hives have also suffered in the heat; in Victoria alone:
 - North Central – about 500 tonnes of honey lost, 25% of commercial beekeepers affected
 - North West – approx 50 tonnes lost and 7 beekeepers affected
 - North East – Difficult to estimate damage and loss of bee hives
 - in total about 1000 tonnes (20% of total production) of honey lost.

Ongoing Crisis in Southern MDB – the ‘Irrigation Drought’

Current Situation

This remains the single largest natural disaster in this country since European settlement.

- ◆ **The Murray Darling Basin is Australia’s “Food Bowl”,** and this will have impacts on food security; as well as our export earnings and prices to consumers.
- ◆ **Unlike other agricultural commodities (livestock, grains, etc), when permanent plantings are lost it can take 4-10 years before a commercial crop can be produced** (depending on the tree or vine).
- ◆ **We cannot stress enough that many of the growers now forced out of business by an ongoing series of disasters (frost, hail, heat wave) compounding the Irrigation Drought, are not simply comprised of small (‘marginal’ or non-viable) growers – “blockies”** as they are sometimes referred to – whose farm size has been steadily becoming less sustainable in the past decade.
 - Significant numbers of these growers were/are also the most progressive, operating at ‘world best practice’; they have been faced for the first time in the history of this country with successive years of unsustainable (below-survival) water allocations.
- ◆ Unlike the other natural disasters we are currently facing, this has been a long, slow process (over the past several seasons), and has generally remained ‘below the radar’ for most of the media/general public

- This is in fact a process of unplanned and uncoordinated (and, to date, largely unassisted), structural adjustment in our industry
 - with many businesses slowly “bleeding to death” in the irrigation drought, until they are bankrupt, and are finally eligible to access some Government assistance;
 - Current Government assistance (EC) eligibility criteria continue to block access by many of these growers to Government assistance available to other farmers – which has focussed on droughts and broad-acre, dryland farming – for at least the past 10-15 years; for example
 - assets thresholds and their interaction with:
 - superannuation and
 - multi-family enterprises.
- ◆ Fortunately, there has been minimal loss of life (except for some suicides attributed to the crisis).
- ◆ However, the impact on livelihoods, the environment, regional communities, export earnings, and the nation’s food production has been huge, and it continues to worsen
- As a result of the ongoing below-survival water allocations for permanent plantings in the southern MDB, at the end of last summer we had lost (dead/dying & bulldozed) approximately 50% of the main Riverland (SA) industries – vines and citrus trees;
 - At current evapo-transpiration rates, the figure in the Sunraysia (Mildura/Wentworth) region may well be similar by the end of this summer;
 - More easterly regions (eg Swan Hill/Robinvale; the Goulburn Valley; General Security water licence-holders on the NSW side of the Murray) have also been severely impacted, and there have been major losses to date;
 - The only region in the southern Basin less impacted to date has been amongst the High Security water licence-holders in the MIA.
 - The situation regarding the winegrape industry in the Riverland and Murray Valley NSW/Victoria is critical. Continuing reduced allocations for Murray irrigators on the Victorian side of the Murray Valley and in South Australia continues to also impact yields and grower revenues. Between 30% and 50% of growers have not been able to finance purchase of additional water – with yields crashing and vine health beginning to be severely compromised. This has left many growers short of water, compounded by the recent heat wave (i.e. 12 consecutive days of plus 40°+). Riverland and Murray Valley yields are estimated at 320,000 tonnes and 300,000 tonnes respectively – a combined 340,000 tonnes below the vintage production levels of 2006 or a loss of approximately \$136 million in grower gross annual revenue (at \$400 / tonne average). The outlook for grower viability and for regional economic impacts is very serious – with unprecedented numbers of growers indicating that they would leave the industry if they can find a viable method of exit.
- ◆ A disaster is unfolding in the Murray-Darling and Swan Hill wine regions. We fear for the very capable mid-size wine grape growers;
- Small operators generally have off-farm income whereas the "mid- to big" growers don't have the time to also work elsewhere. The only enterprises that may be able

- to stay in business in the medium- to long-term are the large corporate-style vineyards that have the resources and access to funds to cope with the vagaries of agriculture;
- Increasingly, there is a view that the viticulture industry in the region may not be able to recover (from the combined effects of lower-than-survival water allocations over the past several seasons, plus the heat wave) from a production perspective; viticulture, citrus and other crops in the Sunraysia region may see similar exits (up to 50% of growers following this season) as we saw earlier this year in the Riverland. Given the current structural supply / demand imbalances in the wine industry - estimated by the AWBC to be the equivalent of 20,000 ha to 40,000 ha of planted vineyard excess to medium to longer term requirements - it must be noted that the imperative for the wine grape sector is grower exit assistance, rather than assistance with replanting. This will be true of other industries in some regions.

Other 'Unseasonal' Extreme Events

- ◆ The cherry and stonefruit industries, in particular, suffered major crop losses across all growing regions in WA, SA, Victoria and NSW before Christmas 2008, due to unseasonable rain events (this included snow in Orange!).
- ◆ Riverina wine grape growers had 2 localised but severe hail events in November and January – reducing production potential by a reported 15,000 to 20,000 tonnes.

Proposed Relief and Recovery Assistance Measures

In the face of more severe, more frequent and more unpredictable Extreme Weather Events caused by growing climate variability/climate change, Horticulture is looking to Governments to provide a strategic and comprehensive program to cover all natural disasters which impact on the industry, and move away from the traditional EC package (which has focussed on droughts and broad-acre, dryland farming).

Rather than an *ad. hoc.* series of responses from Governments to each of these natural disasters in turn, the industry is proposing a suite of responses likely to be required in any kind of natural disaster event; with additional targeted measures on a case-by-case basis, as required.

Immediate/Urgent Assistance Required

- ◆ In major disasters/emergencies, the immediate appointment of a Response Coordinator (similar to the role Major Cosgrove played following Cyclone Larry) is critical
 - modelled on the 'War Book' concept;
 - with powers to coordinate response;
 - provides a major morale boost to the local community
 - reduces or eliminates overlap of services;
 - facilitates communication with the local community

- ◆ **Assistance with immediate clean-up.** In all disaster areas, assistance (from the armed services?) in the immediate tasks of clean-up and assessment; eg:
 - Removal of:
 - burnt/too damaged/flooded trees and vines, and too damaged/rotting produce (primarily a wide range of fruit and vegetables)
 - damaged irrigation infrastructure
 - damaged fencing
 - mud/debris
 - non-repairable equipment and machinery
 - damaged/destroyed/burnt out homes/sheds/farm infrastructure
 - burnt/damaged wind-breaks and other farm infrastructure;

 - Assessment of damage/losses of:
 - lost stock
 - lost productivity/productive capacity
 - personal assets
 - business assets/infrastructure
 - collateral damage;

 - Assessment of the 'gap' between damage/losses and any insurance cover
 - it is not possible to take out flood (or, frequently, hail) insurance, so individual enterprises will need to access alternative sources of funds to re-establish plantings and infrastructure.

- ◆ **Immediate grant assistance**, in all disaster areas, (subject to eligibility criteria) of \$25,000 to each affected business.
- ◆ **Income support** (via Centrelink) for all families directly supported by the affected business.
- ◆ **Trauma counselling**
 - Farming families in the affected regions may have both their business and personal lives severely impacted, and many will be suffering from Post-Traumatic Stress as a result of the loss of home/productive capacity/family members/friends;
 - Farmers are traditionally reluctant to seek assistance, particularly in more personal matters – it is critical that all the affected families in each region are visited personally (at home) by a qualified PST counsellor familiar with regional communities/growers, to talk through the experience and recommend follow-up visits/experts.

Longer-term Recovery Assistance Required

- ◆ **Planning assistance** – the Federal Government to provide strategic planning assistance to local Councils and growers (through their PIBs) to ensure that whatever re-planting or recovery is undertaken is better planned - commercially and environmentally - than what went before.
- ◆ **Income support** - until cash-flow returns to 'normal'/sustainable - for:
 - All families directly supported by the affected business;
 - Key workers employed by the affected business; to be paid via the employer, and 'topped-up' as possible, in order to retain skilled and experienced workers
 - much regular work will need to be undertaken on affected orchards/vineyards/plantations before full productivity is restored (eg replanting,
 - replacement of fencing, sheds and irrigation infrastructure, and ongoing pruning, spraying, grafting);
 - in the case of orchards/vineyards lost, this could be for a period of up to 4-10 years until full productivity returns;
 - Horticulture is requesting an extension of the Drought Force Program which, during the drought, has helped to ease the burden of drought on families (similar to the arrangements put in place after Cyclone 'Larry'). The extension of the program would assist farmers affected by a reduction in income due to natural disaster to keep key permanent employees on the farm for cleanup and farm maintenance. This will also encourage workers to remain in their local communities.
- ◆ **Long-term no interest, or minimal interest, loans** for meeting the 'gap' between insured, and actual replacement, value of:
 - Replanting;
 - Replacement of fencing, sheds and irrigation infrastructure;

- Replacement of equipment and machinery;
 - Replacement of the family home(s);
 - Costs not covered by flood insurance (North Queensland);
 - Long-term low interest loans for **natural disaster recovery** of affected horticulture crops (eg 'heat-stroke', bushfire, hail, major storms or frost events, cyclones, drought)
 - for crop replanting in disaster declared areas;
 - available to all horticultural businesses, and those providing 'mother stock'/seed for the horticulture industry;
 - CPI rate for 10 years, which then reverts to commercial rate for remainder of the length of loan;
 - non-repayment period until first commercial crop – or up to 5 years;
 - re-plantings would be at current industry commercially viable standards eg *Future Orchard 2012*, which is not for replacement of the same amount of trees, but for replanting of the same amount of acreage/canopy;
 - for those able to make some repayment this loan would be included in the current EC funding which provides 80% of interest payments;
 - some farm properties which have been burnt out, and which have existing loan repayments, may not now have the equity to cover even the existing loan, let alone a new loan.
 - Amend the current state-administered Bushfire Assistance Loan available for Victorian bushfire victims, and roll-out the amended plan to horticulturists nationally, which would allow for:
 - an increase in the available loan amount up to \$1million
 - an interest-only payment period to the first commercial crop or up to 5 years
 - available to all horticultural businesses, and those providing 'mother stock'/seed for the horticulture industry;
 - this would be for the replacement of crops where needed, purchase and installation of hail and shade netting replacement, machinery and infrastructure
 - and to fund initiatives like spraying of "Screen" which is a clay spray that assists in stopping sunburn and heat
 - there is a similar grant available in NSW specifically for netting.
 - This loan would tie-in with current EC funding which provides 80% of interest payments on loans.
 - HAC encourages the Federal government to work with all the State/Territory Governments to develop a workable loan arrangement for horticulture.
- ◆ The prolonged drought has slowed maturity in a wide range of permanent plantings. Horticulture is requesting the Australian Taxation Office to be sympathetic in administration of the so-called '**non-commercial losses**' provisions, including taking account of re-planting/recovery situations.

◆ **A network of Local Disaster Support Coordinators in each affected region to:**

- Operate as an integral part of the local coordinating committees, to
 - avoid unnecessary duplication and to try to prevent the ‘cracks in the system’ through which so many people fall
 - coordinate the provision of services at the local level, making growers and their families aware of the services on offer, and the individual and agencies offering those services
 - we are still receiving reports that there are currently so many ‘players’ in a local area that the situation often resembles “a dog’s breakfast”;
- Reduce the sense of isolation and lack of information for affected families/businesses, and the feeling of being overwhelmed by the recovery task ahead.
- Liaise with - and refer affected growers and their families to - appropriate expertise/services (eg Rural Financial Counsellors, PTS counsellors, Centrelink);
- Offer free social activities (BBQs, family days, Awards Night dinners) in the local community, which bring the growers together with the local service providers in an informal, relaxed atmosphere – and which also enabled them to engage their social support networks within their community;

◆ **Assistance with RCC/RPL, up-skilling and re-training, as required, to:**

- Ensure that every affected grower is offered the opportunity to undertake Recognition of Current Competencies/Recognition of Prior Learning
 - organisations such as Tocal (NSW Government RTO) can undertake this in an affected region in under a week;
 - such assessment provides the opportunity for affected growers to gain self-confidence, up-skill/re-train, and gain documentation of ‘saleable’ skills;
- Assistance with up-skilling and re-training for those growers eligible for an Exit Package, to enable them to more readily enter the workforce in a productive capacity.

◆ **North Queensland Floods/Cyclones, etc.** In the longer-term, there may be a need to have **alternative transport options** available to growers when the main arterial of the Bruce Highway is cut or blocked.

- Industry is proposing that the Federal Government assist with a feasibility study to assess the viability of an ongoing sea route for produce from Far North Queensland to the major east-coast markets of Brisbane, Sydney & Melbourne (which could be ‘ramped up’ in times of natural disaster, if supply lines are cut).

◆ Given the market failure in this area, Horticulture requests that ABARE undertake a cost-benefit analysis and feasibility study of various alternative options for crop insurance.