

## Inquiry into Drought Support

We as farmers who have been exposed to several droughts wish to make a submission to the Inquiry into Government Drought Support. Our experience lies with dryland farming operating a sheep and cropping enterprise of approximately 700 hectares in Victoria, for more than 30 years.

Our submission refers to - drought in Australia; the current drought support program; its problems; the plight of farmers during drought; and programs for consideration with administration efficacy given.

### ➤ **Drought in Australia.**

Drought is described by the Bureau of Meteorology (BOM) as a prolonged abnormally dry period where there is not enough water to sustain needs.<sup>1</sup> Drought impacts agriculture by – diminishing resources to feed stock leading to the reduction of stock, especially breeding stock; it disrupts cropping programs; causes damage to vegetation which leads to soil erosion; alters water quantity and quality which can cause toxic algae outbreaks; threatens native plants and animals; and increases the incidence of bushfires.<sup>1</sup>

Whilst primary industry is first to suffer to drought, eventually the impact is felt by every Australian affecting individuals and communities, social welfare, the economy and the Australian environment or natural resource base.<sup>1</sup>

### ➤ **The current drought support program.**

Overall the current drought support program including the Exceptional Circumstances (EC) approach consists of 93 drought assistance measures, in which **\$714 million** was spent by the Commonwealth, State and Territory governments in 2006-7 (pp 6-7).<sup>2</sup>

EC measures entail -

- Income Support Payments
- Interest Rate Subsidies
- Exit Grants

and other Australian Government Policies <sup>2</sup> such as –

- Farm Management Deposits (FMDs)
- Australian Farming Future Policy (AFF) including Rural Financial Counselling and the International Agricultural Cooperation Program.
- Murray-Darling Basin Irrigation Management Grants.
- The other drought related Australian Government policies as listed in Box A11 (p 21). <sup>2</sup>
- and those additional government policies of individual States and Territories, such as transport, freight and fodder subsidies.

The key objective of all these programs (pp 6-7) <sup>2</sup> is stated to instill preparedness and self-reliance to manage climatic variability; to maintain and protect our agricultural and environmental resource base during periods of extreme climatic stress; and ensure the early recovery of agricultural and rural industries.

➤ **The problems with the current drought support program.**

A major problem is that the current assistance measures within the EC support program only come in times of declared drought – it's a bit like shutting the gate after the horse has bolted - and eligibility requires a low to negative economic status. The program is reactive; has negative connotation; it is mainly a cash system and during drought the money is spent on just trying to survive. The EC support approach **cannot** instill preparedness, **nor will it ever** promote self reliance.

The system as the Issues Paper relates (pp 9-16), <sup>2</sup> is open to manipulation; excludes those with off farm assets and income; excludes those who have instigated efficient coping mechanisms in drought; and discriminates against those with low debt – those who have worked hard and saved hard.

It excludes those in marginal areas and there are also vast differences between the states (pp 9-16). <sup>2</sup> For example, irrigators can access the Murray-Darling Basin Irrigation Management Grants to reduce a farm's reliance on water from the Basin. And the New South Wales government has introduced a 'Drought Proofing' program of loans to repair dams, stock water systems and storage. Such programs are confined to an area or state and are limited to repairs of existing infrastructure.

In the light of climate change predictions – with extremes of weather conditions of ‘more droughts’ and ‘flooding rains’, and studies as undertaken by the BOM-CSIRO who question the trigger approach to declare instances of severe drought...[deciding] that future drought policy would be better served with by avoiding a trigger at all (p11).<sup>2</sup>

Interestingly, one of the best government policies is the FMDs introduced as a financial instrument to address the effects of income variability is most effective to farmers during and following drought, yet the policy was not a specific assistance measure triggered by drought (p11).<sup>2</sup>

The BOM-CSIRO studies also reveal extremely hot weather is likely to occur every one or two years, five times greater than recent decades...[with] drought declarations “about twice as often and over twice the area in all regions.”<sup>3</sup>

Whilst in recent times agriculture’s share in the Australian economy has declined, agricultural output has actually grown two and a half times in the last forty years.<sup>4</sup> The reality is that the rest of the economy especially mining is growing faster. However, humans cannot survive on coal, gold or copper and it is farmers who produce the food Australians eat. And not only is it in domestic provision, but in 2006-7 agricultural products including processed food and beverages accounted for 16.1% of Australian merchandise exports.<sup>5</sup>

Ultimately if drought and its affects upon Australian farmers are ignored, there will be a need to import foods, food prices will rise and food shortages currently not felt by Australians will become a reality. A frightening fact is that world food reserves dropped to half from 1999 to a dangerous level of only 57 days at the end of 2006.<sup>6</sup>

Furthermore, farmers are frontline environmentalists<sup>7</sup> spending time and money on their properties to –

- conserve land and soil, native vegetation and water
- and prevent weeds and pests,

in an effort to protect the natural resource base for the future.

Today there is very little to show for the **\$714 million** investment of tax payers’ money as made by the Commonwealth, State and Territory governments in 2006-7, and the 93 drought assistance measures have done nothing to create an environment to encourage the adoption of climate change management practices.

Consequently government must support preventative tactics to properly activate their 'preparedness' and 'self reliance' concept. For the sake of the natural resource base, rural industries and all Australians as consumers of farm produce, there is need for a Uniform Drought Proofing Scheme of proactive practice for all farming businesses to access, whether in drought or not and whether rich or poor.

➤ **The plight of farmers during drought.** (p 6)<sup>8</sup>

1. Stock survival.<sup>8</sup>

In drought, farmers are first struck by diminishing pasture feed for their stock and consequently have to consider supplemental feeding with hay and/or grain. Options available at the time of drought are dependent upon the amount of on-farm storage fodder reserves, storage infrastructure, stock numbers and type, and cash reserves.

Those with few on-farm reserves are forced to destock or purchase fodder at a time when the fodder prices are extremely high. It is only recent that there was such a shortage of fodder reserves in Australia that the Howard government was contemplating importing 'meal' from overseas.

However, the importation of fodder either domestically or from other countries brings with it even greater costs and troubles - of transport and freight charges, weeds and chemical residues.<sup>9</sup> Dry soil conditions prolong the longevity of weed seeds which can become a serious financial burden through lost production and the high costs of control.

More recent figures from the Australian Fodder Industry Association and the Australian Bureau of Statistics reveal fodder reserves are continually falling and predict that by 2012, reserves could drop to just 4 to 5 percent of total production.<sup>10</sup> The decline is attributed to higher stocking rates and financial pressures felt by farmers. This is a 'scary image' which could spell 'catastrophe' for many in a very short time.<sup>10</sup>

2. A lack of water.<sup>8</sup>

During drought, poor rainfall coupled with extreme temperatures and driving winds depletes water supplies. Much depends on the volume of water reserves and the state of dams prior to drought in respect to size, depth and existence of sediment, with those in the poorest state succumbing to evaporation leading to stock bogging in dams. (p 6)<sup>8</sup>

Bores are a supplementary source for water however they have their problems too, particularly in dry periods. The regional water table can drop through over-use affecting supply to surrounding communities; the water may become salty; and eventually become unpalatable for stock.<sup>11</sup>

The average requirement during drought is 6 Litres of water per day for sheep and 50 Litres/day for cattle.<sup>12</sup> On days of extreme heat, the requirement can increase to as much as 9 Litres and 90 Litres respectively. Take a mob of for example 1000 sheep that you are trying to hold onto. That is 42,000 to 63,000 Litres for just one week which when in drought there is no rainfall available to replenish supply.

### 3. Deterioration of the landscape.<sup>8</sup>

Weather conditions of severe winds and extreme temperatures dry out the landscape destroying the vegetation base and promoting erosion. Pastures are destroyed and existing stock place even further stress upon the ailing base.<sup>12</sup>

Recent strategy is to construct stock containment areas to confine losses to a smaller area and conserve pasture of the larger areas, but containment areas suffer to extreme damage too, and farmers have little choice but to sit and watch the top soil disintegrate and blow away into neighbouring farms.

Nonetheless, during drought the difference between paddocks sown with deep rooted perennial pastures like lucerne (where roots travel down to almost 25 cm) and the traditional pastures is phenomenal, just in the amount of dust alone, with consequences that the amount of erosion from wind and water is well reduced in the former.

### 4. The pressures of unrelenting work felt with drought.<sup>8</sup>

During drought the hours of work required to feed sheep and check dams is longer and more constant. Since we shear in February, the drought saw us still feeding stock late into the night with the ute lights, after a 10 hour day's work in the shed.

And there is added mental anguish of not knowing if or when the drought will end, and if there will be enough water and feed on hand. It is difficult to describe the devastation felt as years of hard work and investment is cracking below your feet and blowing over the fence.

## 5. Loss of income, including future income.<sup>8</sup>

Financially, the effect of drought is long term. Loss of income from destocking at a time when stock prices have usually plummeted due to rising supply, the existence of poor quality stock and falling demand. By the time restocking becomes a viable option prices have risen to consume most financial reserves.

Damaged landscapes require expensive pasture renovation and/or excessive inputs to make suitable for cropping. There is consequently little left to plan for beating the next drought.

For us, we decided before the worst hit to cut all our crops into hay. That gave us almost 400 tonnes of oaten hay with the aim to hold onto our sheep which were the product of years of breeding. Whilst we were able to achieve the goal to a degree, grain sales were lost for that year and the next, for the heavy rains that followed marred any opportunity to crop or even conduct pasture renovation to repair the erosive damage caused by wind then water.

### ➤ **Suggested tactics for consideration.**

We suggest the following five preventative tactics as a more efficient and effective method to administer drought policy for Australian agriculture.

#### 1. 'Fodder production needs to encouraged'<sup>13</sup>

There must be incentive for all farmers to manage the opportunity cost of on-farm storage of fodder. If adequate storage is at hand, it would give producers opportunity to preserve breeding stock. Fodder is a necessity and a system is needed to quell the competition and rising costs of fodder during times of drought.

Fodder storage should be given a **tax-credit value** paid by the ATO and incorporated into BAS statements. For example, if a farmer has 500 tonnes of hay in storage at \$1/tonne/quarter, there is \$500 to credit the BAS system. In the next quarter the farmer may feed out 50 tonnes thus the balance would reduce to 450 tonnes and \$450. Sell the hay and the credit becomes a debit on the BAS statement payable to the ATO. Such a system could meet the opportunity cost of production and storage. It is a positive risk management action which rewards for preparedness and self reliance with extra cash flow for maybe purchasing new fodder to keep

the storage and credit up, be directed to new infrastructure for storage, toward employing some help, or for general expenses.

- *The administration of such a scheme would of course be based on honesty, but then much of the existing tax system is anyway. Honesty may need to be tested through audits to ensure the storage supply does exist, with harsh fines for anyone caught cheating the system. For the ATO, there will be another section to account. For the farmer, it will mean knowing exactly how much fodder is on hand and it may require a journal of its movement. Nonetheless, it is information that each and every farmer will need to be aware of anyway and will require with some extra simple arithmetic at BAS time.*

## 2. An adequate water supply is vital as a coping strategy for drought.<sup>14</sup>

With periods of flooding rains predicted through climate change it is nonetheless an avenue to be advantaged. Water is essential to life and surveys conducted during droughts over the past 20 years have indicated that those properties which did not run out of water could attribute this to at least one large deep dam located on the property.<sup>15</sup>

Whilst dams are subject to evaporation losses of up to 1200 mm per year, deep dams loose relatively less of their stored water to evaporation.<sup>15</sup> Dams must be situated strategically to secure catchment runoff and be construction in a quality manner. Existing dams need to be regularly cleared of sediment and any seepage repaired.

However, the application of large covered tanks to collect water from roofs is a huge back stop for watering stock during drought. Rainfall of 1mm onto 1square metre of roof will generate 1Litre of water. Consequently a roof of 100 square metres where the annual rainfall is 500 mm will collect 50,000 Litres of water.<sup>16</sup>

Installing reticulation systems from dams and tanks avoids pugging and bogging of stock in dams, and requires major systems of pipes and troughs strategically placed throughout the property or to stock containment areas.<sup>14</sup>

There must be advisory services available to farmers to ensure they can access and develop appropriate water management strategies, with design suitable to location and rainfall in an effort to ensure adequate water supplies during drought.<sup>15</sup>

The problems associated with dams and bores in times of drought gives merit to water reserves in tanks. The administration of a water storage credit system by volume would be almost impossible to account, however acquirement of tank water storage capacity as a **tax-credit value** paid by the ATO and incorporated into BAS statements would be possible.

For example, if a farmer has tanks on-farm ready for stock use of 200,000 Litres in total at \$1/kilolitre/quarter, there is \$200 to credit the BAS system. As with fodder, such a system would assist the opportunity cost of stock water storage facilities. It is a positive risk management action which rewards for preparedness and self reliance with extra cash flow for maybe purchasing more tanks, other infrastructure for storage, toward employing some help, or just for general expenses.

- *Like fodder, the administration of such a scheme would be based on honesty, which may need to be tested through audits to ensure the stated water storage capacity does exist, with harsh fines for anyone caught cheating the system. For the ATO, there will yet be another section to account. For the farmer, it will mean knowing exactly how much water storage capacity is at hand and will require with some extra simple arithmetic at BAS time.*

### 3. 'Storage infrastructure costs' (p 9) <sup>17</sup>

Producing fodder and renovating pasture is extremely expensive and involves a large range of agricultural machinery – tractor with front-end loader, spray unit, drill, harrows, mower, rake, baler, truck/trailer and on it goes.

Losses in grain to weevils or water damage, and hay to vermin and weather can be high (p 9). <sup>17</sup> It is therefore essential that adequate measures are taken to protect fodder in storage, however the cost to place infrastructure on farm in order to store fodder is an astronomical up-front investment with currently very low and long depreciation returns at the tax end.

Following our own experience in 2006/7, we found tarps cumbersome and potentially dangerous, however a zincalume hay shed filled in 3 sides, with measurements of 37 metres length x 12 metres width x 5 metres height and capable of holding approximately 400 tonnes of hay exceeds well over \$40,000 erected.



An average sized grain silo capable of storing 45 tonnes of grain erected on a concrete base costs approximately \$6000 creating an opportunity cost of around \$130/tonne in the first year alone.

The same exists for water storage facilities, dam cleaning, sinking dams and water reticulation systems. A water tank capable of holding 106,500 Litres of water is advertised from \$7900 but that is without site preparation and plumbing connections (The Weekly Times, July 9<sup>th</sup> 2008, p 63). And remember in the depths of drought without any rainfall, the water capacity of one of these tanks will cover 1000 stock for just 2 weeks.

Consequently there must be drought proofing assistance given via 'rural loans', 'grants' and incentive rewards through 'tax investment allowances' to motivate farmers to instigate risk management strategies of farm infrastructure, in order to manage the opportunity costs tied up in fodder and water storages. Once in place, it will increase ability to cope with the predicted frequent droughts of climate change ahead, and conducive to the government's concept of preparedness and self reliance.

- *The administration of assistance packages in the form of application for grant payment could be made to a body such as the Department of Primary Industry, once evidence via receipt of paid invoices is provided of the purchase and installation of drought-related infrastructure. Investment allowances for drought-related infrastructure would be calculated and lodged as a deduction within the business tax return at the end of the fiscal year.*

#### 4. 'Having land in good condition' (p 7) <sup>17</sup>

If droughts are to become the norm, there is a need to develop more varieties of drought resistant deep-rooted pasture which are able to hold the soil together during the extreme winds of drought conditions (p 6), <sup>17</sup> in order to protect the agricultural resource base.

The cost attributed to planting lucerne pasture is obscene and rising. Pasture renovation too. For example, this year our expenditure just for the pasture seed, chemicals and fertiliser is \$240 per hectare, and that is without the fuel, labour and machinery necessary to plant.

Government grants with continuing research and development are needed into drought resistant pasture species <sup>18</sup> so farmers can prevent some of damage caused by drought. A strong drought resilient pasture base has

subsequent benefits of reducing pollution of dams from manure, soil and dried vegetation; <sup>14</sup> may for period stall or reduce the quantity of supplemental feeding of stock; and effectively protect the environment and natural resource base.

- *The administration of pasture renovation grants would require farmer awareness of the service through advertisement or the like. A body such as the Department of Primary Industry with agronomists to administer application to ensure appropriate process are undertaken relative to the location, soil types etc, with checking that the grant money terms and conditions have been honoured.*

5. 'A key message is planning' (p 9) <sup>17</sup>

In 2003, producers of the North-West Slopes of New South Wales undertook a review of their drought preparation and their business strategies following the 2002/3 drought. In order to do better than just survive, the key message that came from the forum was –

**[no] matter which strategy you intend to pursue, the importance of having a written action plan was stressed a number of times. 'Know what you are going to do and when' was acknowledged as the key to staying in control, was accepted as leading to less stress for your business, your family and your property. (p 9)** <sup>17</sup>

Instead of counsellors in response to drought, we need **planners in drought proof strategies** to instill the desired preparedness and self reliance concept. Planners who can advise on farm fodder storage requirements for the enterprise; the amount of water capacity required; the infrastructure that needs to be in place; and the type of pastures most suitable to the area in order to protect the land in times of extreme weather events.

Planners, who will encourage investments such as FMDs to balance income variability; who advise to access grants, loans, tax credits and investment allowances; who guide in risk management strategies to meet the significant challenges climate change will bring for Australian agriculture.

- *The administration of **drought proof planners** would need to be placed in the hands of a body such as the Department of Primary Industry, which would first need to develop appropriate plans for*

*all agricultural sectors and once structured, ensure there is farmer awareness of the service.*

➤ **In summary.**

Stock survival; a lack of water; deterioration of the landscape; the pressures of unrelenting work; and the loss of income and future income are the main concerns felt by farmers in times of drought.

The key objective of the preventative tactics concerning fodder production, an adequate water supply, storage infrastructure, protected landscape, and planning, is to meet the government's concept of preparedness and self reliance of Australian farmers to manage climatic variability. Moreover, this five point preventative framework could be applied to almost every sector of Australian agriculture.

Supporting agriculture using a proactive uniform drought proofing approach will ultimately filter through to positively benefit rural industries and communities, social welfare, our economy, and protect the Australian environment or natural resource base.

Unlike the current 93 drought assistance measures of the Commonwealth, State and Territory governments including EC payments, **this system will shut the gate before the horse has bolted** and give farmers scope to manage periods of extreme climatic stress.

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