
AgForce Drought and Climate Risk Committee – February 2017

Summary
AgForce’s Drought and Climate Risk Committee has developed a new approach to drought policy which aims to move industry from responding in crisis to empowering producers to better manage climate risks.

What is the problem?
Compared to other sectors of the economy, Australian agriculture operates in a highly variable business environment with dry periods a recurring feature. Under climate change projections these events are likely to become more frequent and seasonal variability more pronounced.

This operating environment requires farmers to have adaptable farm and business management strategies that take account of the risks they face. Farmers have primary responsibility for managing their own climate risks and steps must be taken that enable farmers, farming families and rural communities to prepare for dry periods and be more proficient risk managers.

Past approaches to drought policy in Australia have existed in a state of constant change, review and reform. Without a robust and objective review of outcomes, there is anecdotal evidence that even the current approach and suite of measures is not effective in addressing root causes and encouraging efforts to prepare and be self-reliant. Out of an April 2015 AgForce member survey with 138 responses from 31 drought declared shires the feedback received indicated that, while about 60pc of respondents has received state or federal assistance, issues were identified with assistance structuring or application processes and the lack of incentives for drought preparedness, provision of climate risk management skills or assistance for affected local non-farm businesses.

Key challenges to a comprehensive, lasting drought policy approach that have been identified1,2 include:

- The complexity of the problem of drought and responding effectively to it
- Difficulties in defining drought, managing severe events and declaring affected areas
- Each producer is at different stages of their business cycle with different capacity and needs
- Efforts to prepare often disqualify the producer from subsequent assistance or other incentives
- Politicisation of declarations, available assistance, inter-governmental dealings and partisan policy settings, particularly once the issue captures the media’s attention
- A credible and bipartisan government commitment may be lacking, affecting producer decision-making
- The significant and often seamless integration between the farming family and the farm business, making structuring of program eligibility more difficult when tied to structural adjustment outcomes
- Interconnections with other policy questions, such as industry structural adjustment, poverty alleviation and securing desirable environmental outcomes. This is combined with a need for consistency between government objectives in each of these areas.
- Not acknowledging the limits to the self-reliance of farmers to cope with severe drought.

Australia needs an enduring drought policy.

Where do we want to get to?
Primary producers need a change from the current, changeable, crisis-response policy approach to one with greater certainty and better outcomes for all stakeholders dealing with drought. A more proactive and certain approach will reduce the environmental, financial and human costs of managing climate risk; recognising that the better the management of drought the stronger the economic contribution of the agricultural sector will be and the better the standards of living for primary producers, as sought by all Australians.

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AgForce’s Drought and Climate Risk Committee developed a desired context for the agricultural sector in Queensland, which is underpinned by our core values and preferred future describing the attributes when the sector is at its best. Our context forms a point of reference to evaluate potential policy options and assistance measures through questioning if these policies and programmes are leading towards the preferred future and addressing the root cause of identified problems. Are they delivering socially, financially and environmentally?

VALUES -

- We value the significant contribution farm and rural businesses make to the fabric of our society and support them continuing in business
- We drive and lead innovative and thriving broadacre industries in Queensland
- We are respected, influential and proactive in the eyes of urban Australia
- We unify producers and rural communities passionate about sustainable prosperity
- We foster best management and innovation
- We value professionalism, growth, and integrity.

OUR PREFERRED FUTURE - The attributes required that reflect our values:

Queensland agricultural sector and producer attributes
Producers have a GREAT sense of self and attitude towards life. They are managing with a plan, profitable, professional, proactive, flexible, creative, capable and contented. They are valued, supported, skilled, informed, prepared, innovative and confident.

Community attributes
Our communities have lots of employment, diverse industries, and a synergy between town and country. Buying local, living local. They are open, vibrant, growing, accepting, trusted, respectful, sophisticated, free, happy, fun and sustainable. Our towns are green and clean, with large, maintained recreation areas and self-sufficient market gardens.

Infrastructure attributes – on and off farm
We are well serviced and connected with reliable technology and communications. We enjoy efficient and effective road, rail and air services, adding value to our supply chains. New innovation in industry is encouraged and facilitated. We have good access to water, our supplies are effective and our water use efficient. The farm is safe, children friendly and our gear is well maintained, easy to use, multipurpose and adaptable.

Environment and landscape attributes
Our land is healthy, supported by a wide understanding of effective land management practices and secure property rights. Wonderful landscapes abound with full ground cover, trees and perennial pastures, flowing natural springs, and fertile land delivering high yields with low inputs. There is a balance in nature. Clean water, fresh air, and healthy soil. We have highly productive, healthy stock and create nutrient dense food. The very sight of a sunrise or sunset tops up our hearts with challenge, accomplishment and a sense of wellbeing!

What does success of the proposed approach look like?
- Producers have ownership of drought preparedness, knowing how to manage changing conditions
- Rewards proactive management by producers and their efforts on business resilience
- Producers accessing the type of assistance they need when they need it to manage drought
- Brings together the expertise needed to address all social, financial and environmental factors involved
- Fosters best management practices and shared innovative approaches
- Helps producers to continually improve their capacity over time to manage drought better.

What is the proposed solution?
AgForce has developed an Agricultural Business Cycle approach (Figure 1) as a framework for focused policy delivery that addresses the agricultural business across all of its Phases – labelled ‘Normal’, ‘Drying’, ‘Dry’ and ‘Recovery’ by ensuring relevant and useful programmes are available when they matter most.

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The new approach embeds the following overarching principles which go to addressing the key challenges to a comprehensive, lasting drought policy approach identified above:

**PRINCIPLE A: Empowering producers**

The proposed approach encourages primary producers to self-manage climate risk, including drought, and to take back ownership for their preparation and decisions in managing these risks. This ownership involves producers self-selecting both the Phase of the Business Cycle that they are in and secondly from an array of public and private programs that ensure the social, financial and environmental needs of their business and family are met within each Phase. This ‘owned’ approach is thought to be the most important element for effectively managing drought and enabling a faster recovery.

Under our approach, on-property drought status is identified and triggered by the individual producer themselves, with other mechanisms needed to manage the eligibility for, and cost of, any public assistance. For example, the amount of self-selected assistance would be capped across all publically funded measures over a set period of time, e.g. 10 years. Having the same amount of assistance available to all farmers would also avoid distortions in the choice of assistance and potentially increase efficiency and lower the cost of drought. These mechanisms and funding arrangements need to be developed, building on past drought policy experience.

Rather than drought declarations, broader public recognition of drought impacts would come from regular reporting at a local government area (LGA) level of the proportions of producers self-identifying in each phase of the Cycle. This ensures the severity of a drought can be captured for each LGA and monitors the individual programs being accessed across time. This information can then be used to highlight what services or initiatives could be provided in the Normal Phase to further assist future preparedness, setting up a continuous improvement cycle and making the policy process more proactive.

In Queensland, self-selection for assistance already occurs through the Individually Droughted Property (IDP) application process, with the Department of Agriculture and Fisheries deciding on applications based on established criteria. This approach delivers on the unique situation for each enterprise and gets away from the problems associated with a ‘lines on maps’ declaration approach.

The proposed approach has been labelled the Business Cycle because a primary production enterprise ultimately needs a business plan that is effective and sustainable and that supports a proactive, business
development approach. Working to a plan developed in good times when there is less stress on the producer and their decision-making, producers can then select assistance options in each Phase that best support their identified plan outcomes and stage of life-cycle (e.g. entering, expanding, consolidating and retiring). As such, assistance measures need to be available at all times.

Preparedness efforts should advantage producers if subsequently seeking support. Access to assistance should be subject to the long term viability of a producer’s enterprise and their ability to obtain enabling capital, including commercial financing, and an assessment that the producer had taken all reasonable steps to manage drought risk given their individual financial, physical and personal situations.

Where required, helping people recognise the benefits of identifying an unsustainable situation and grasping the opportunities for a life after farming is important. Further meaningful exit strategies need to be developed—such as Recognition of Prior Learning services and career planning. Drought measures need to be realistic about the prospects of a farming business but at the same time compassionate about the people involved.

**PRINCIPLE B: Requires mutual obligation on both producers and government**

An element of mutual obligation or responsibility is embedded into the Agricultural Business Cycle and apply equally to both landholders and governments operating in a partnership approach.

In taking greater ownership, primary producers will need to accept an obligation to undertake planning and practical on ground works within their business in order to self-manage dry periods of a couple of annual cycles (e.g. wet seasons in Queensland) duration. To share risk and minimise moral hazard through aligned incentives, public assistance would be dependent on recognised efforts to prepare for drought, including practical on-ground measures. These mechanisms and funding arrangements need to be developed, building on past drought policy experience. After completing identified eligibility activities, producers can be assured of access to necessary future support.

Governments take responsibility to provide bipartisan, certain policy and adequate, secure funding commitments directed towards enabling a producer’s capacity to achieve their responsibilities to prepare while also delivering assistance for those droughts that exceed reasonable expectations on producers to prepare for in order for the approach to be defendable.

Governments must also ensure that policies in connected areas, including NRM, water, regional development, infrastructure, health, employment and climate policy, are aligned and consistent with the proposed new policy approach. An effective, sustainable drought policy model is vital to any national vision for agriculture and securing an agricultural sector that is resilient to changing climate.

**PRINCIPLE C: Shared leadership from both industry and government**

This Agricultural Business Cycle approach will require leadership from both industry and government. This is so a united front and consistent messages can be presented to the community when future events are encountered and pressure exerted to provide additional ad hoc measures, and between drought events when governments are under pressure to cut program funding. There must be a credible commitment to the approach, while retaining some flexibility to manage evolving circumstances. A communications strategy would be required to outline the benefits available to producers, rural communities and broader society from improvements in drought preparedness.

**PRINCIPLE D: A broad collaborative approach taken**

Climate risk management involves social, financial and environmental elements with a wide range of people affected by adverse events and with valuable skills and expertise that could be drawn upon. A coalition containing such expertise will be needed to develop the Agricultural Business Cycle approach and to deliver it effectively. AgForce, rural financiers, local communities, NRM groups, research and development professionals and health providers and others all have a role to play in developing an approach that will stand the test of time.
PRINCIPLE E: Science-based policy development essential
Assisting stakeholders in the structuring of the approach and the principles that support it will require scientific
enquiry and robust information. Producers must highlight new innovation, results and best practice. The
diversity of producer solutions also needs to inform departmental agency and research body understanding.

Such research and development will need to be clearly directed at answering specific policy questions, such as
identifying on-property Phase trigger points and in evaluating included measures. This could occur through a
formal Cooperative Research Centre or a less formal collaborative approach. BMP program data can also
support the identification of needs and the improvement of industry standards over time. Tools such as The
Monitor from ABARES could provide decision support for primary producers.

PRINCIPLE F: Continuous improvement mindset
No two climate cycles are the same and this is more emphasised with climate change. The Agricultural Business
Cycle approach is built on an action learning (continuous improvement) process to help ensure producers can be
responsive, improving on-farm capacity over time to manage drought, with policies and programs enabling this
improvement. Documenting best case producer scenarios across a range of circumstances within the Business
Cycle would be useful to illustrate what is possible.

Continuous dynamic improvement must also occur at the strategic policy level balanced against the need for a
credible commitment to the overall objective. Regular monitoring is embedded requiring a range of producers
(e.g. in different stages of the climate cycle, commodities etc.) and others including government agencies,
financiers, researchers, NRM representatives, health providers etc.

PRINCIPLE G: Included programs are strongly beneficial
Each policy initiative/program identified within the Cycle must be able to deliver practical long term benefits to
the businesses and individuals involved and apply to all types of farming enterprise. Programs need to add value
to the enterprise plan, rather than simply ‘ticking boxes’ for eligibility purposes. Initiatives that do not deliver
great value should be removed/replaced.

PRINCIPLE H: Progressive introduction necessary
While drought policy is an evolving field and subject to frequent reviews, commercial primary producers have
already made business and risk management decisions based on the current policy and will be in a range of
climate and financial circumstances. Drought preparedness and cultural change in some segments of industry
will also take time. A transition period is required while the new approach is developed and then phased in, e.g.
3 years to full development followed by 7 years to full implementation. Current settings and measures will need
to continue until recovery from the current drought has occurred and the new approaches are in place.
Producers could self-select to enter the new system when they are in an identified phase of the Business Cycle.
A communications strategy would be necessary to ensure farmers and their advisers were aware of the new
policy approach to drought.

Agricultural Business Cycle – how would it work in practice in the context of drought
Effective provision of drought support is complex as every enterprise is unique and will experience drought
differently - as each enterprise:
- Enters at varying times and recovers over different periods
- Requires different levels and types of assistance during the various phases of the climate cycle
- Addresses social, financial and environmental factors differently.

While to some extent artificial divisions, the proposed approach divides the drought risk Cycle into four Phases –
labelled ‘Normal’, ‘Drying’, ‘Dry’ and ‘Recovery’ and with three general Categories of drought impacts or
influence – Social, Economic, and Environment. Following a continuous learning approach, the starting Cycle is
followed by future Cycles where lessons are applied and a greater resilience to impacts is shown. Figure 1
provides a schematic representation of these Phases, Categories and cycles.

Policy measures, both private and public, within each Phase and Category of influence are identified by
stakeholders using the best available knowledge on producer needs and effectiveness of the intervention, both
individually and together with other measures. Selected measures ‘populate’ the Cycle Phases as options for self-selection by producers with some measures applicable in all Phases or in certain Phases only.

In managing taxpayer expenditure, access to publically-funded grants programs within the policy measures would be subject to a centrally-administered overall cap per enterprise over a set time period. This would commence in line with past expenditure on drought assistance and be easier to budget for given the cap and time limits per producer. Any concessional loan programs would not be subject to the cap as these would be repaid by the producer and cover any administration costs. Further, any welfare based support would not be subject to the cap but would involve mutual obligation provisions and exit assistance for non-viable producers once received for a set period of time, e.g. 3 years in a seven-year period as proposed by the Productivity Commission. Thus welfare would be addressed fairly while not unduly impeding industry adjustment.

A key challenge in developing the Cycle is clearly and robustly defining the Phases of the Cycle, and the triggers when producers transition between Phases, for each geographical or production region. In defining drought a range of deficiencies are experienced (meteorological, agricultural, hydrological, and socio-economic), exacerbated by contributing factors (e.g. other climatic factors (temperature extremes, time since last dry/wet period, etc.) and past business conditions (markets, regulations, other policies, etc.). There are also government and organisational differences in the existing definitions being used.

Further research and development work is needed to clearly identify the attributes of each Phase and the transition triggers for each region and each enterprise type or combination of enterprises. This information could be contained in a guideline for those producers making such decisions and provide clarity about the likely frequency of movement through Phases around the Cycle. This piece of work is best done in collaboration involving government and industry stakeholders, the Rural Development Corporations that may contribute funding, and members of the RD&E professions.

As a starting point for discussion, AgForce’s policy Committee proposes the following definitions:

**Phase description - Normal**
The ‘normal phase’ occurs at the end of the previous Recovery Phase and before the start of the next Drying Phase. As such it represents more an absence of trigger conditions rather than the presence of set trigger conditions that applies to the other Phases. Acknowledging that the impacts of a drought can extend for a significant period the Normal Phase occurs after land/pasture conditions, cash flow and personal wellbeing has been restored after a drought and lasts to the end of the first failed wet (growing) season, when the next Drying Phase commences.

**Phase description - Drying**
The Drying Phase occurs between the first failed wet/growing season and up to the point just after the second failed wet/growing season. This coincides with the period when the reasonable expectation is on individual producers to have prepared appropriately for such a regularly expected deficiency. The early warning indicators include pasture reduction at the end of the expected growing period for the region or upon reaching September or October and with dwindling water supplies. The definition of dryness depends on the management system and the need for and timing of the use of available water. Early warning of Drying needs to trigger a wider effort by producer groups to activate an agreed dryness plan, including extension of relevant management steps.

**Phase description – Dry (In event)**
The Dry Phase commences just after the second failed wet season is experienced, e.g. triggered on 1 April. (Qld) The definition of a failed wet season is when the effectiveness of rainfall received (given the seasonal conditions - high temperatures and evaporation, low humidity and drying winds) is inadequate to secure the expected, reasonable agricultural production targets for the enterprise and region in the coming year.

**Phase description – Recovery**
The Recovery Phase starts when a producer can complete a pasture growing season plan as pasture volume is restored, or alternatively can plant a crop into an adequate soil moisture profile.
Enterprise description
Jack and Jill live at ‘Hillview’ near Tambo in central western Queensland. They run a cattle breeding and fattening operation on 25,000 ha of Mitchell grass and some mulga country. They receive about 520 mm of summer dominant rainfall annually, ranging from 170 to 1350 mm.

Year 1 - Normal
Jack and Jill had a good wet season and are heading into the year with optimism. They consider that they are in the NORMAL PHASE of the Business Cycle and hold their regular annual family meeting to revisit their personal goals, plan a holiday and do a health check. With Tom, their agribusiness advisor, Jack and Jill also work through their business plan and update their financial benchmarking records, ready for their next small group meeting. As part of their farm and pasture development plan and with a Sustainability Loan from QRAA, Jack progresses the installation of additional water supply points to better manage grazing, increase recovery of plants and grow as much grass as possible. With her deep wells of patience Jill takes the backpacker, Lars, through the farm’s Standard Operating Procedures yet again.

Year 2 - Drying
The wet season has failed to eventuate and Jack and Jill are now considering their options. From their monitoring data and feed budget, they can see the pasture supplies will not last their current stock numbers until the next wet season. They notify the Department of Agriculture that their property is in a DRYING PHASE which, together with other notifications, triggers Department staff to publicise locally-relevant Drying Phase management steps and for the Country Womens Association to schedule some social events with other organisations. Jack and Jill start supplementing based on their livestock nutritional management plan and destock the less productive classes of cattle. They contact their bank and financial advisor to update them and review their current expenditure to identify some costs that can be reduced. Jill checks to see that her BlueCard is up to date and contacts the local school about potential part time employment. Jack keeps up with pest and weed control efforts including pig baiting with the local syndicate.

Year 3 - Dry
The second wet season has failed, temperatures are over 40°C and the outlook is grim. Jack and Jill continue with their regular family meetings to check-in on how everyone is going. They also keep up their weekly tennis game and three monthly benchmarking group discussion, and though it can be hard to find the motivation it is a good chance to support other farming families and be supported. They notify the Department of Agriculture that they are now in a DRY PHASE and with evidence of their past efforts to prepare for dry periods they access a concessional drought loan, with the support of their bank, some wage assistance to retain Lars on-farm, and land rent relief released for the region due to having more than 70pc of producers being DRY. They continue with their dry season and farm business plan and are glad that they could install some additional watering points which has enabled them to carry through a few more of their core breeding stock than they might otherwise have done while protecting their pastures. Jill has also been able to pick up 3 days a week at the Primary school through her previous contacts which provides much needed cash flow.

Year 4 - Recovery
Due to a late but sustained wet season Jack and Jill have the pasture volume to commence the recovery and restocking process. They consider that they are in the RECOVERY PHASE of the Ag Business Cycle and celebrate with friends and debrief with their benchmarking group to identify the lessons they learnt and to use this to update and improve their business plan. After talking with their financial advisor, Jack and Jill sit down with their bank’s relationship manager and discuss a financial recovery plan and seek the bank’s support for a staged restocking program to enable their pastures to recover.
Agricultural Business Cycle: Cropping example.

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Enterprise description
Harry and Liz live at ‘Plainland’ near Dalby in south eastern Queensland. They run a dryland grain growing operation on 800 ha of black clay soils and some sandy loam country. They receive about 600 mm of summer dominant rainfall annually, ranging from 420 to 805 mm.

Year 1 - Normal
While the succession was challenging, stock agent Harry and graphic designer Liz have bought out Liz’s parents with a hefty debt but also enough rain to plant winter wheat and chickpeas. They are in the NORMAL PHASE of the Business Cycle. They work on a 5-year business plan which includes paying down the debt to Liz’s parents, the bank and the QRAA First Start loan. Harry investigates water efficient cropping techniques and sets up an environmental plan through the local NRM group. He investigates the availability of irrigation water supplies. With a young and growing family spending quality time with the kids is their priority, as is establishing good sleeping habits. ‘Plainland’ receives some early October storm rain which downgrades the impending harvest.

Year 2 - Drying
After a poor harvest and planting in October, Liz and Harry fail to receive effective rain over the rest of summer. The rainfall outlook for the year is not promising so they notify the Agriculture Department that their property is in a DRYING PHASE. They hold a family meeting with Liz’s parents to take stock and agree to delay repayments. Harry contacts his old employer but no work is available. The bank will not extend further finance for an irrigation system but are kept aware of their situation. Harry and Liz see their local Rural Financial Counsellor to understand available assistance options and go ‘interest only’ on their QRAA loan. Harry keeps up with the weed control plan, surprisingly expensive even when dry. As part of their Dry Season Plan, he tidies the sheds and fixes the fences and water points on the lighter country. Sparse winter rain means only half the usual area is planted – returns from the very mediocre harvest are supported by a multi-peril crop insurance policy.

Year 3 and 4 - Dry
With another sorghum crop failure on top of two marginal winter crops, Harry and Liz notify the Department they are now in a DRY PHASE. Regrettably, multi-peril insurance is not yet available for summer crops. With evidence of their efforts to prepare for dry periods, they access relief from some fixed costs including stamp duty, electricity and registration. Harry looks for off-farm contracting work and Liz applies for income assistance from Centrelink and gets some help from the QCWA. While the grass lasts cattle agistment provides a small amount of funds as does baling the failed sorghum, reducing vital ground cover. They manage to cover their household costs. ... With another dry year things are very tough. Her mother’s group supports Liz and Harry attends his usual GP check-ups and converts old farm equipment into sculptures, which is relaxing and brings in a few dollars. They holiday at a friend’s beach unit for a much-needed break before Harry starts as a harvesting contractor down south. Liz has managed to pick up some graphic design work while her parents look after the kids. Refinancing part of their bank loan using a concessional drought loan reduces interest costs and, as part of their Centrelink mutual obligation, the RFCs help with dealing with the outstanding loan balance. Deep sown on some March rain, they get a below average winter crop but multi-peril insurance means they don’t go further backwards – a huge relief. Finances remain very tight.

Year 5 - Recovery
An early wet season allows a sorghum crop to be planted and price forecasts look positive. Harry and Liz decide that they are in the RECOVERY PHASE. They celebrate with friends and discuss with Liz’s parents what worked and what didn’t and to set up a plan to resume repayments. They also plan to set aside a portion of future income into an FMD to establish a financial reserve and continue multi-peril insurance until that reserve is established. On the back of a solid sorghum harvest they call the bank and QRAA to revisit their arrangements.