

Government drought support inquiry  
Productivity Commission  
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## General introduction

The Queensland Government is pleased to provide a submission in response to the Productivity Commission's Draft Inquiry Report into Government Drought Support.

The key messages that the Queensland Government takes from the Productivity Commission Draft Report are that:

- While the National Drought Policy objective of primary producer self-reliance and preparedness for drought is sound, the programs constructed in its name such as Exceptional Circumstances (EC) do not in fact support these objectives.
- Drought is a serious though manageable risk, one among many faced by farmers.
- Drought policy should be refocused to respond to the issue of climate change with the National Drought Policy (NDP) replaced with expanded objectives for the *Australia's Farming Future* initiative which is the principal Australian Government climate change initiative for primary industries.
- Drought business support should be replaced with 'greater public funding of research, development and extension to assist farmers prepare for, manage, and recover from the impacts of climate variability and change'
- Farm income support should be accessible based on need rather than prevailing climatic conditions

The Queensland Government is supportive of the general thrust of the recommendations of the Draft Report as outlined above. It does however note that the Draft Report does not advocate specific initiatives/programs that could replace those programs that are recommended to be phased out, for example EC and state based transaction based subsidies. Further, the Draft Report does not identify the role that state governments will play in any new national drought policy.

As noted in the Draft Report, climate risk management, especially preparedness for drought should be the focus of government programs to enable the sector to maintain production despite a changing climate. According to the BoM/CSIRO report on the impact of climate change on exceptional circumstances events, the risk to production from drought will increase. In this context, it is important that the Government adopt an appropriate role that ensures producers and rural and regional communities are able to manage this climate risk.

It is acknowledged that there must be a shift from the reactive drought assistance currently provided to proactive drought preparedness policies. What remains to be determined is what programs and tools can be delivered to achieve this outcome, and appropriate transitional arrangements from current assistance measures.

This submission is intended to inform the development of the final report of the Productivity Commission by identifying those issues the Queensland Government considers will be important in gaining acceptance of a new national drought policy particularly as they pertain to new business support measures.

This submission contains some commentary on a way forward, but does so without necessarily advocating any particular set of policy responses. The Queensland Government will adopt a policy position as part of the national drought reform process in 2009.

As agreed by national, state and territory agriculture ministers at the Primary Industries Ministerial Forum on 12 November 2008, drought reform should focus on addressing the needs of farming families, farming businesses, and farming communities.

The needs of farming families will be addressed through reforms to the Australian Government's welfare system namely improving accessibility to income support to those in financial need without the requirement for an EC declaration.

The needs of farming businesses will be addressed through a transition away from EC interest subsidies and transaction based subsidies towards assistance which improves drought preparedness as advocated in the Draft Report.

The needs of farming communities were considered by the Expert Social Panel report on dryness which recommended changes to the provision of rural services such as health and community support. As responsibility for health and community services lies principally with the states and territories response to the recommendations of the Expert Social Panel will require a whole of government response extending beyond the mid-2009 timeframes for the introduction of a new drought policy. Consequently this Queensland Government submission is focused towards how drought policy will meet the needs of farm businesses and therefore will discuss:

- general principles of the new drought policy
- the potential role of the states in a new drought policy including a discussion on the continued appropriateness of drought declarations;
- what types of investment/assistance would improve the ability to manage climate risk discussing existing programs which have improved drought preparedness;
- potential program initiatives that could form part of a new national drought policy including the future role of National Agricultural Monitoring System (NAMS); and
- communications plan: how stakeholder acceptance of the new policy can be achieved.

This submission will also discuss rural financial counselling services which were considered in the Draft Report as Queensland operates its own Farm Financial Counselling Service alongside the Rural Financial Counselling Service.

#### Towards a new drought policy: general principles

Despite the limitations of current drought support measures (eg EC and state transaction based subsidies) that were identified in the Draft Report, the example of previous drought reform processes would indicate there will be strong resistance in some quarters to their removal. The removal of EC which is currently the flagship drought assistance program without appropriate alternatives could lead to either or both of two general consequences:

- increased pressure on governments to maintain or even expand existing business support arrangements such as transaction based subsidies.
- accelerated exit from the industry without any overall improvement in the sector's drought preparedness.

Any reform of existing programs needs to consider that many producers currently receiving assistance may not have the capacity without government assistance to engage in extensive drought preparedness measures. Further, inherent resistance to change may mean an attachment to existing programs. Where possible, new drought preparedness programs should be structured such that they are attractive and accessible to those who would typically prefer traditional forms of assistance, and appropriate incentives exist for their adoption.

Secondly, to be better prepared for climate risk producers will need access to appropriate decision support tools. Government can play a role in ensuring such tools are available to producers, and ensure that these tools are able to take account of the implications of climate change modeling.

A drought policy focused on preparedness could be delivered through two strategies:

1. prioritisation of government support for drought/climate risk related research, development and extension as advocated by the Draft Report, coupled with
2. incentives direct to primary producers that will improve their capacity to plan and prepare for drought and manage climate risk

To address the concerns raised by the Expert Social Panel Report that there are too many drought programs administered by too many agencies one option is an integrated harmonised national program to which all the states, territories and Australian Government's are signatory to via an intergovernmental agreement. This could ensure producers throughout Australia have access to similar programs and the administration of these programs could be the same regardless of location.

Accordingly, a new national drought policy should include:

- Support for farm businesses, farm families and farm communities to prepare, manage and recover from drought including assistance for better planning to manage climate risk and physical preparedness activities;
- Increased support for drought relevant research, development, extension;
- Tools which enable better use of information in areas such as climate forecasting and support to extend information sources eg enhancements to NAMS;
- A comprehensive communication and education programme on the new drought policy; and
- An intergovernmental agreement formalising the principles, governance and funding arrangements for the new drought policy including penalties for non-compliance

### Role of the Australian Government

In order to ensure an integrated national drought program is achieved it is considered essential for the Australian Government to coordinate and take a lead role in new national drought policy.

It is noted that the Australian Government has to date provided the bulk of funding for drought assistance, it is considered appropriate for the Australian Government to continue as the principal funder of drought programs focused on drought/climate risk preparedness.

## Role of the States

State agriculture departments and adjustment authorities, potentially in conjunction with industry groups are ideally suited to be service providers for any new Australian Government funded programs focused on preparedness, as they have staff with local knowledge and an existing client base. State and territories are therefore well placed to oversee the delivery of new services, or oversee/monitor the delivery of services by other service providers. State based Rural Adjustment Authorities could transition from administering EC business support to administering funding for preparedness programs.

The current drought assistance arrangements involve the states each conducting and funding their own drought assistance programs. Previous drought inquiries and submissions to the most recent inquiry have noted the confusion caused in the minds of producers through having different levels of drought assistance programs in different jurisdictions. Businesses do not operate solely within state boundaries so ideally any new programs should be consistent across Australia. Current programs which improve preparedness (eg water use efficiency grants and productivity loans) could be incorporated in a national scheme alongside new programs to encourage drought planning and preparedness.

There is however the need to ensure that funds for drought preparedness are spent effectively. Providers of preparedness services must have the necessary capacity and expertise to deliver them.

As agreed earlier this year producers would not face a discontinuation of current EC assistance during the drought. The Productivity Commission Draft Report notes that EC and other business assistance should be discontinued during 2009-10. For Queensland this may be feasible provided good summer seasonal forecast eventuates as many EC and State drought declarations may have been revoked by that stage. However, for many parts of southern Australia dependent on winter rainfall it may prove difficult to rapidly transition to a preparedness focused policy as conditions may not have improved.

Accordingly, a phased approach to the introduction of new drought policy may need to be devised that recognises that some regions will move to the new system earlier than those where conditions are such that EC assistance will remain a little longer. This may require a more extended timetable than that indicated in the draft report and the Commission may need to revise the proposed timeframes.

Further, if transaction based subsidies were to be phased out in the timeframes identified in the Draft Report some states may face continuing financial obligations under these programs. For example Queensland's Drought Relief Assistance Scheme provides freight subsidies for restocking up to two years after the end of a drought declaration so the Queensland Government would have liabilities this scheme for up to two years (i.e. up to 30 June 2012), even if the State's current drought assistance program was discontinued on 30 June 2010 as recommended in the PC Report.

The states and Australian Government contribute to drought preparedness through public investment in research such as climate forecasting and drought resistant crops. Over the years, the Queensland Government has made significant investments in drought preparedness through what is now the Queensland Climate Change Centre of Excellence (QCCCE), attached to the Office of Climate Change. QCCCE has

developed a range of internationally renowned products recognised as a key factor in assisting Queensland primary producers having been able to cope with the recent severe drought. Previous drought preparedness investment by the states should be recognised in a national program.

An integrated, national drought assistance program where all jurisdictions participate could be facilitated by multilateral or bilateral agreements among the Commonwealth and the States and Territories which would need to identify:

- The purpose of the program
- How the program will be delivered
- How assistance under the program will be triggered
- Any standards and targets for the program including reporting and appeal arrangements and accountability frameworks
- How the program will be funded
- Recognition of programs already being delivered by each jurisdiction

Negotiations on such agreements may need to include consideration of mechanisms to ensure observance by all parties to the objectives of the new national drought policy including use of funding controls. The exact provisions of an intergovernmental agreement would need to be agreed upon by PIMC ministers in 2009.

With a move to a uniform national drought policy with a shared set of preparedness programs will come the need to consider the future of State based drought declarations. A cost benefit analysis of the current drought declaration processes would need to be undertaken to inform a decision on whether any drought declaration processes should continue and if so in what form.

As the BoM/CSIRO report for the drought reform process identified with regards to the EC declaration process:

“the one-in-20-to-25-year EC event trigger definition is not appropriate under a changing climate, and that future drought policy may be better served by avoiding the need for a trigger at all.”

The same argument may also hold for the various state-based drought declarations which are the trigger for much state based drought assistance. The drought declaration process is different in each State and Territory in Australia with the EC declaration a separate process. Victoria, South Australia, and Tasmania do not have a formal drought declaration process. The Queensland drought declaration process is discussed briefly at **Attachment A**.

Drought declarations give common climate variability a natural disaster overtone. As the drought declaration triggers government assistance this gives the perception both in the public and government’s mind that circumstances have changed overnight whereas drought is an incremental and gradual process. Conditions for producers are likely to be poor before the declaration is made and, due to the lag between improved conditions and when the producer will benefit from those conditions, may sometimes be poor even after the drought declaration is lifted. In some circumstances, drought declarations may remain in place, even though the season and the condition of pastures and crops have all substantially improved as the body determining drought declared status errs on the side of caution.

### Drought/climate risk preparedness

In developing a new drought policy consideration needs to be given about what suite of measures could be delivered which could improve primary producer preparedness for both drought events and longer term climate change. By and large, current drought assistance programs typically provide reactive assistance, that is, they provide assistance which addresses the symptoms of current drought as opposed to assistance which helps producers in implementing strategies which will help them prepare for and respond to future droughts.

If drought should be seen as a risk that can be managed how would a program focusing on preparedness address business risk, either to minimise the risk or help address risk? Three broad approaches will improve preparedness:

- Improved risk information, including improved seasonal forecasting
- Farm risk assessment management skills and enhanced decision support tools
- Building financial and physical risk reserves

Business circumstances may prevent farmers from engaging in risk management strategies either financially or physically. Having the financial capacity to afford a strategy appropriate to the industry and commensurate with the size of the business enterprise concerned is the key to drought preparedness. Those that could benefit the most from preparedness may not have the financial capacity to do so especially if preparedness is contingent on sole contribution from the farmer.

Research conducted by the Queensland Government (in 2004) and others on preparedness has identified that many producers at the lower end of the production spectrum who may have been in the business a long time are often reluctant to engage in the new farm management practices implied by 'preparedness'. It will be a challenge to craft preparedness assistance that will reach out to these farmers.

The survey evidence indicated that some larger farms are better prepared for drought than smaller ones and are more likely to have a documented drought preparedness plan. Very large farms are four times more likely to have a written business plan than small farms.

Optimal strategies to prepare for drought are likely to vary from farm to farm, industry to industry, region to region and drought to drought. Accordingly, a drought preparedness program should offer a range of drought preparedness measures to cater to individual circumstances.

The following broad categories could be considered as part of a strategy to improve drought preparedness:

#### Improved seasonal forecasting

The reliability of models needs to be improved in order to deliver more accurate forecasts over longer timeframes and forecasts relevant to particular locations.

Current seasonal forecast reliability declines beyond three months. Beyond that timeframe forecasts are not as reliable as a tool for farm decision making. In the Queensland context, with a defined wet and dry season, reliable forecasts of the next wet season at the end of the current wet season (six to nine months lead) would assist Queensland livestock producers in making production decisions.

Queensland has developed a range of tools such as Rainman, WhopperCropper, droughtplan etc, which have been largely developed utilising the Southern Oscillation Index (SOI) phase system. Other states and territories have similar programs. All of these products require ongoing maintenance and regular updating, and could be incorporated into new web based systems to improve their uptake and availability.

QCCCE has had SPOTA-1 under development for nearly a decade. This system aims to forecast the prospects for the coming wet season as early as the tail end of the preceding wet season. Final development is required to increase its reliability and complete its proving stage, including peer review and publication.

CSIRO and BoM have a joint venture examining the utilisation of the POAMA model for seasonal forecasting. This would differ from current methods such as the SOI phase system in that the POAMA derived system seeks to incorporate climate models to produce dynamic forecasts (thus including factors arising from modelled climate change), whereas the SOI phase system relies on statistical information from the historic record.

It is understood that Western Australia and CSIRO has recently announced a collaboration to investigate improving seasonal forecasts for Western Australia using Global Climate Models, as the SOI phase system and tools such as SPOTA-1 are more focussed on predicting seasons in eastern Australia.

Each possible forecasting system has its own features and reliability varies from region to region and with time of year. The final stage would be making these forecasting models widely available to producers (with useful reliability information) and possible inclusion in the National Agricultural Monitoring System (NAMS) as the primary source of climate risk information.

### Training

Improving the skills set of farmers, farm staff and consultants to whom farmers rely on for advice will be an important consideration in managing climate change. A changing climate however will impact on different agricultural sectors in different ways and mitigation response strategies will differ depending on production type and individual circumstances. This means that training provided on business planning/climate risk will need to take into account production type and location.

An increased emphasis on having producers demonstrate climate change/drought preparedness via formal planning processes such as Farm Management Systems also known as Property Management Systems incorporating climate risk plans will create a greater demand for the services of competent consultants to provide this advice. Therefore, improving the skills set of farm advisors as well as producers will also need to be considered in the new drought strategy.

As well as training in planning, training for farmers and consultants in technical issues which improve drought preparedness could be beneficial, for example improvements in water use efficiency. An emphasis on the provision of climate forecasting tools as a means of production planning may also require farmer and

advisor training in understanding and appropriately applying such tools to their circumstances.

#### Enhanced decision support tools

Currently the range of decision support tools is not as reliable as they could be and are based on often generalised information. Decision support software which is more sophisticated and able to be tailored to the producer's individual production system, soil-type, and cultivation practices etc while incorporating more reliable seasonal forecasts would be of value to producers. Such investment will be strongly supported by industry. In its submission to the Expert Social Panel the Horticulture Association considers 'that farm management tools which incorporate climate variability...offer considerable leverage in dealing with drought and should be the centerpiece of future drought/disaster policies. Investigation may be warranted in ensuring that tools are available, relevant to all industries, that for example include a component that helps to assess the reliability of water supplies in the face of climate change.

The development of drought preparedness modules that may be able to be integrated into Farm Management Systems (FMS) and Grazing Land Management (GLM) or similar programs<sup>1</sup> could ensure a whole farm integration of drought preparedness into management processes consistent with sustainable and profitable long term returns. The suitability of existing programs to act as a vehicle for climate risk planning needs to be evaluated.

Work has been done at the national level on developing broad principles for Farm Management Systems otherwise known as Property Management Systems.

#### Integration of forecasting and decision support into NAMS

Seasonal forecasting information together with farm decision making software could be incorporated into an upgraded National Agricultural Monitoring System (NAMS). This information would be routinely updated to include new climate research or software patches to improve functionality and ease of use. This would make this information widely accessible. NAMS could potentially form the superstructure onto which more specific software applications (such as industry specific production software) could then be integrated.

#### Assisting preparedness activities

Governments can potentially use either grants or loans to encourage preferred types of behaviour.

##### *Grants*

Grants were identified in the 2006 review as the preferable method of assistance because they have the flexibility to suit a variety of farming systems, are more easily targeted to those in need and as they are not based on particular activities are less likely to create market distortions in the same manner as transaction-based subsidies and EC Interest Rate Subsidies. In the same vein grants could also be provided at the community level to improve rural cohesiveness or environmental outcomes during drought. Any grant program should be consistent with and reinforce the new

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<sup>1</sup> Examples of other programs include Meat Livestock Australia's Edge network, revised FutureProfit programs and other workshops and web based tools, or the Australian Government's Climate Change Action Plan required to access Transitional Income Support.



national drought policy and should be primarily based on primary producer or community need.

Preparedness activities that could be supported at the farm level include at the first stage risk analysis and planning, changing farming systems, new fodder and water conservation techniques, timing of destocking, guides for crop planting decisions and diversification strategies. The planning process would be integral to ensuring producers understand climate risk and the appropriate steps that would help to manage that risk. If investments are identified by this process that may help address climate risk, government could also consider a contribution.

Issues to be considered regarding any potential grant funding include:

- What criteria should apply to ensure grants are needs based?
- Frequency of assistance ie is funding provided on a one off or annual basis?
- What is an appropriate form of co-contribution?
- Will the size of the grant be related to business size?
- Is the grant solely for preparation or should there an aspect of carry-on or recovery (i.e welfare grants)?
- How will on-ground change be measured?
- How will the effectiveness of the grants scheme be measured?
- Will any grant scheme be time limited or ongoing?

#### *Loans or a mix of grants and loans*

Queensland does have some concerns regarding an income contingent loans scheme as has been proposed in several submissions to the Commission. The success of the Higher Education Contribution Scheme (HECS) scheme is used as an example of a similar program, but it must consider that the majority of HECS recipients are future salaried or wage earners, and thus their income is clearly defined. Primary producers have greater flexibility with regard to their bottom line, and thus the incidence of repayments, even in good years may be low. Combined with the possibility of prolonged or multiple drought events, the scheme may not be as self funding as envisaged and it is possible that the loans are repaid only when the business is sold or the estate is settled. This option may not be realistic if the debt accumulates at a faster rate than the value of the farm assets over a long period of time.

Another example of a loan scheme suitable for improving preparedness is the Queensland Government's Primary Industry Productivity Enhancement Scheme (PIPES) administered by QRAA which provides concessional loans that can be used by primary producers for a range of measures which improve farm productivity or profitability. The eligibility criteria of a similar national scheme could be refined to explicitly encourage drought preparedness.

Alternatively, a national scheme similar to the PIPES scheme could be developed but more specifically oriented towards climate change and climate variability risks.

A loan scheme is attractive to governments as it is self funding in the long run. However, it tends to be less popular with producers, who eventually have to pay the money back, and could complicate their loan arrangements with their major lenders.

#### What does industry think government should do to help them prepare for drought?

In the *Managing the Drought* (2004) publication the Queensland Government identified strategies applied by industry to prepare for drought as well as areas where

industry considered needed improvement. Among livestock producers and mixed livestock cropping producers, the key areas that farm managers nominated for improvement were:

- Livestock selling strategies,
- stored fodder strategies,
- water use efficiency

For cropping farms and horticulture farms the vast majority of the responses to drought preparedness revolved around irrigation water either using it more wisely or getting more of it.

On the subject of what horticulture farm managers thought governments could do to help them better prepare for drought the majority of responses were related to greater levels of financial assistance, particularly with helping farmers invest in water saving capital infrastructure with a significant number requesting training in improved water use efficiency.

Surveys have indicated that while farm managers believe government support to enhance farm management is either important or very important they rate government research and development as more important than farm management. Accordingly, there would be solid support for public investment in programs such as crop science and climate forecasting which will benefit producers as a whole. There is a clear need however to ensure that research is to be the centerpiece of government investment in drought assistance that it is clearly publicized and the application of this research to individual farmers is carefully observed and reported on.

As a means of pointing towards what sort of programs can be delivered as a means of promoting drought preparedness the Queensland Government already provides a range of services aimed at climate risk adaptation. These are briefly discussed in **Attachment B**.

#### Mutual obligation requirements for drought assistance

The benefits of mutual obligation in the provision of income support were discussed in detail in the Draft Report. The provision of drought business support in grants/loans form may also be contingent on some form of mutual obligation. In other words; the provision of assistance is contingent on the producer engaging in demonstrable activities which improve their preparedness. There will also be the need to determine who will be responsible for ensuring compliance with any mutual obligation requirements and enforcing any penalties associated with non-compliance. Were this to be the responsibility of an adjustment authority such as QRAA or farm financial counseling services it will be necessary to ensure they have the expertise to evaluate the preparedness activities that have been undertaken.

A mutual obligation framework also creates the possibility of changing producers' relationship with government from a positive one where government provides freely available and sought after assistance to a potentially negative and adversarial one if governments were to dictate how assistance should be spent and if they were to punish non-compliance. For example, if governments were to discontinue assistance to more marginal producers there could be appeals against the decision administratively, judicially or politically. There is also the possibility of negative publicity if assistance to farmers were cut off.

The cost to government of administering drought preparedness/climate risk assistance may increase under a mutual obligation framework.

### Communication strategy

Acceptance of the new drought policy may benefit from a clear communications strategy which outlines the benefits accruing to farmers and the rural community from improvements in drought preparedness. It must be clear to the public that these benefits outweigh the costs associated with losing EC and transaction based subsidies.

Accordingly, any new program focused on pre-drought preparedness assistance needs to keep in mind how the public and farmers perceive government assistance. That is to say, while measures to improve producer and community preparedness may be the most effective response to a variable climate, when a drought occurs there will inevitably be calls for further assistance.

Therefore, any preparedness program needs to be well publicised to show the active steps being taken by government to help farmers prepare for drought and encourage uptake by producers including well documented examples of successful farmers who utilise preparedness assistance.

Given that market research conducted of urban perceptions of rural Queensland indicates that drought is one of the concepts most closely associated with rural Queensland, the promotion of success stories of preparedness and planning will reduce the popular perception that drought is a frequent and insurmountable obstacle to only be overcome with government financial support. The perception of helplessness in the face of drought reinforces the widely held view that farming is a very poor career choice. Accordingly, demonstrations of how sound business practice together with application of the latest science can lead to farm viability despite drought will go some way to increasing the attractiveness of farming as a career.

### Financial Counseling Services

Section 8.4 of the Draft Report discusses the provision of financial counseling services by government noting 'the rationale for government provision is weak.' In the Queensland context, the Queensland Government would argue that its Farm Financial Counseling Service (FFCS) which operates in conjunction with the Rural Financial Counseling Service (RFCS) discussed in the Draft Report facilitates an orderly adjustment process that also ensures that producers in difficulty are able to access appropriate information to aid a rational decision making process. The FFCS has also developed significant expertise and knowledge of the socio-economic considerations within an appropriate adjustment policy.

Financial counselors use analysis to help producers assess business options, strategies and plans for improvement or exit from agriculture. Counselors also assist in negotiations with financial institutions and where appropriate refer producers to a functional network of professional service providers for advice on commercial issues and assistance with social welfare matters. In the case of FFCS at least, the emphasis is on business improvement, which may or may not facilitate access to schemes of assistance that have flow on effects for communities, regional employment and government policy.

It is noted the Draft Report recommended a review of the RFCS and the Queensland Government would support such a review and would consider inclusion of the FFCS as part of any such review as a point of difference with the RFCS and also in the interest of improvement to both services.

## **ATTACHMENT A: QUEENSLAND DROUGHT DECLARATION PROCESS**

To be eligible for drought declared status in Queensland the property or area under assessment must meet the 1 in 10 to 15 year rainfall deficiency threshold. This assessment compares rainfall recorded during the previous 12 months with historical data. Where an individual property or an area meets the criteria for severe drought an Individually Droughted Property Declaration (IDP) or an area declaration can be made. Area declarations are based on local government boundaries. A drought declaration for an area or an IDP enables primary producers in the region to access State-based drought assistance programs such as the Drought Relief Assistance Scheme (DRAS).

The responsibility of making a drought declaration or revoking a drought declaration rests with the Minister for Primary Industries and Fisheries. The Minister acts on the advice of a Local Drought Committee (LDC) comprising industry and departmental officers. Recommendations made by LDC's are confidential until the Minister has assessed them and an official announcement has been made. As well as the 1 in 10 to 15 year rainfall deficiency, an LDC would consider in determining whether to recommend a drought declaration for an area the following conditions:

- Availability of pasture
- Availability of water
- Condition of stock
- Extent of drought movements of stock to forced sales or slaughter and to agistment
- Quantity of fodder introduced
- Assessment of overall agricultural conditions in the area
- The number of IDP declarations
- Other abnormal factors such as high temperatures and winds

The revocation of an area drought declaration can only occur after widespread rains have promoted sufficient pasture growth and surface water in order for stock to be maintained in sufficient condition until further rain could reasonably be expected (typically the next summer wet season).

The drought declaration process has in the past been criticised by non-livestock producers as principally considering the conditions of livestock producers such as pasture and water availability as opposed to factors such as availability of surface or ground water which would be used by irrigators. This is not surprising given the principal assistance measure obtainable is DRAS which is directed to that sector.

## **ATTACHMENT B: PREPAREDNESS PROGRAMS CURRENTLY PROVIDED BY THE QUEENSLAND GOVERNMENT**

QDPI&F spent \$30 million on programs explicitly linked to climate risk management in the 2008-09 financial year. Adaptation, including drought preparedness, accounted for 88 per cent of the climate change specific investment within these programs, and 12 per cent was invested in mitigation. Nearly half of the investment was in practices and tools to adapt to climate variability, including approximately \$4 million directly related to drought preparedness.

In addition to the QDPI&F investment in climate change programs related to the primary industries sector, approximately half the Queensland Government investment in the Queensland Climate Change Centre of Excellence (QCCCE) (around \$3.25 million in 2008-09) is linked to drought preparedness and producer climate risk adaptation. This builds on a long history of Queensland Government climate change research, which has resulted in a range of internationally renowned products.

Queensland currently provides the following programs to assist producers manage climate risk:

- Seasonal forecasting:
  - Development of the Southern Oscillation Index (SOI) phase system which has wide international adoption. This information provides three month seasonal forecasts and is disseminated through the longpaddock website, rural press and ABC weather reports on radio and television.
  - QCCCE is also undertaking further climate forecasting research such as developing the Seasonal Pacific Ocean Temperature Analysis-1 (Spota -1) which is intended to forecast summer rainfall by the end of the preceding wet season (nine to twelve month forecasts), an outcome very important for the beef industry.
  - Seasonal Crop Outlooks for wheat and grain sorghum. These reports are also integrated into the National Agricultural Monitoring System (NAMS) and provide input into ABARE's Crop Report.
- Decision support tools:
  - Whopper Cropper helps producers crop management decisions based on the likely season and current soil moisture profiles
  - Rainman which allows users to calculate chances of monthly and seasonal rainfall
  - DroughtPlan helps producers develop profitable and sustainable grazing strategies to manage for rainfall variability. DroughtPlan comprises a number of products including BB-Safe, Graze On, Pasture Supply and Demand Evaluator, and the Assessing Your Livestock Management Option
  - Breedcow and Dynama designed for managers of extensive beef production systems
  - AussieGRASS is a system for assessing, monitoring and forecasting the condition of Australia's extensive grazing lands. AussieGRASS is a key component of NAMS.
- Extension and training: a range of drought risk management workshops including:

- 'Managing for Climate' workshops designed to help take some of the guesswork out of weather and assist in decision-making and includes an explanation of the Southern Oscillation Index (SOI) by a climatologist and how its use when making major management decisions can improve the management of risks and hence profitability,
  - 'Assessing Your Livestock Management Options' a workshop to help producers plan for and manage drought,
  - 'Decision Trees' a technique and workshop process to evaluate the key elements of a drought management decision-the uncertain events (e.g. duration of drought), the tactics (sell, agist, feed) and the pay-offs for each event/tactic combination, and
  - 'Drought plan - managing for climate variability' which has been developed, with the help of producers, to provide activities and products that integrate climate variability with farm decision making and property management planning.
- Research and Development such as the sorghum and maize breeding programs which have developed cereals with superior yields under drought conditions.

In addition to the \$7.25 million in direct drought preparedness programs, there are also other programs relevant to the helping producers manage climate risk.

The Queensland Government also provides support to improve water use efficiency and encourage irrigators to adopt sustainable irrigation management practices through programs such as the Rural Water Use Efficiency Initiative (RWUE) and South East Queensland (SEQ) Irrigation Futures. These programs take a partnership approach with industry to provide services to growers to improve on-farm water management practices and maximise efficiency. Stage 1 of the RWUE program was estimated to have generated water savings in excess of 100,000 ML per year, while SEQ Irrigation Futures aims to achieve efficiency gains of 10 per cent in participating industries. Increasing efficiency of water use provides primary producers with opportunities to maximise profit from available water, which will assist managing climate driven reductions in water supply.