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Secretary:	..... [Signature] .....

Committee Secretary  
Standing Committee on Primary Industries and Resources  
PO Box 6021  
House of Representatives  
Parliament House  
CANBERRA ACT 2600  
AUSTRALIA

Via email: [pir.reps@aph.gov.au](mailto:pir.reps@aph.gov.au)

Dear Secretary

The Australian Seed Federation (ASF) is pleased to provide the Standing Committee on Primary Industries and Resources (Committee), with a submission into the *Inquiry into the role of government in assisting Australian farmers to adapt to the impacts of climate change*.

### Opening Comments

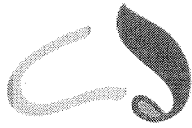
*"...investment in plant and animal genetics may be able to diminish the loss of productivity associated with higher temperatures and changing rainfall patterns".<sup>1</sup>*

The ASF encourages the Committee to broaden its inquiry to identify the obstacles for agriculture's adaption to climate change. For example the Committee may like to consider answering the following questions during the inquiry:

- 1. If Australian farmers and agriculture generally, do not have continued access to the delivery of new and improved technologies across the total seed supply chain, how will they actually adapt to climate change?***
- 2. How will the constant calls from policy makers, scientists, advocates, Government/s and industry, for more investment in plant varieties, increases in water efficiency and technologies across the total supply chain, actually going to be achieved?***

As the peak industry body for Australia's sowing seed industry, the ASF believes the Committee will be assisted in answering the questions above by further researching and investigating the critical role that the sowing seed industry can play in assisting the Australian Government, Australian farmers and the broader agriculture industry, in its pursuit of climate change adaptation and solutions.

<sup>1</sup> Garnaut Climate Change Review draft - page 34



The ASF recognises the Committee's important and ongoing focus on Australian farmers, however the reality is that their ability to adapt to climate change will actually rely, and require, a vibrant and commercial environment for the sowing seed industry to operate in.

Seed is always at the forefront of anything that grows. Ultimately farmers will require advancements in seed as an integral first part their solution for climate change adaptation in agriculture.

The reality is that Australian farmers will also require increased access to the new technologies in seed, and they will require it from the total seed supply chain.

**Therefore if the operating environment for the seed industry is not being considered, protected and enhanced, then an important link in this inquiry and the broader topic of climate change adaptation is actually being over looked.**

This is even more important when you consider that the majority of these technologies across the total seed supply chain are now predominately delivered through private investment, and with long lead times, from ASF members.

The ASF therefore strongly encourages the Committee to broaden the focus of its inquiry to consider the ASF's comments during its deliberations.

### **Terms of Reference**

The ASF notes the Terms of Reference for the Committee are to inquire and report upon of the following points and is pleased to submit the following comments for the Committee's information and consideration.

#### ***1. Current and prospective adaptations to the impacts of climate change on agriculture and the potential impacts on downstream processing***

The ASF encourages the Committee to also consider the impacts of climate change on what could be defined as "upstream processing" – the total seed supply chain.

Rural research and development in assisting "all of agriculture" to adapt to the impact of climate change is extremely important.

For example, the ASF membership comprises stakeholders from all sectors of the total seed supply chain including plant breeders, seed growers, seed processors, and covers a diversity of geography, climate, crops, and cultivars.

From turf to horticulture, pasture to broad acre, tropical to temperate, technology to conventional, the ASF believes that its membership is an extremely important part of the "adaption framework" being considered by the Committee.

**The ASF believes the Committee should consider that there is a major danger of "adaptation slippage" if the "paddock" and "downstream" component of agriculture is not in synch with the "input" or "upstream" sector.**



This is becoming increasingly important when you consider the Australian Government will commence work in 2009 to “enable it to determine in 2013 whether or not to cover agriculture emissions from 2015<sup>2</sup>”.

**2. The role of government in:**

- a. *augmenting the shift towards farming practices which promote resilience in the farm sector in the face of climate change;*
- b. *promoting research, extension and training which assists the farm sector to better adapt to climate change*

The role of Government/s in assisting “all of industry” to work towards climate change solutions is of the highest importance. This is because Government/s will set the policies and the operating environment for industries to work in.

The ASF strongly encourages further research into practices which will assist the gathering of knowledge in the agriculture sector. This also includes practical financial support to the private sector which is playing an ever increasing role.

This practical assistance would include considering the operating environment for agriculture industries, including the sowing seed industry.

The ASF was interested to read comments made by the National Farmers Federation (NFF) who identified that “*productivity based R&D has been vital for Australian farmers in developing new higher yielding and drought-resistant crop varieties, achieving water-use efficiencies and adopting conservation, tillage techniques to protect soil structure and maximise water retention*”.<sup>3</sup>

But how will this actually really be achieved in the future?

The reality now is that the majority of the plant breeding, and the importation of germplasm, are now increasingly being conducted by private breeding programs, as public breeding programs have gradually disappeared over the years.

### **Plant Breeder’s Rights**

ASF members are now substantial investors in Australian agriculture. Often it is a technical, lengthy and ultimately an expensive process.

The Advisory Council on Intellectual Property (ACIP), which “*is an independent body appointed by the government, and advises the Federal Minister for Innovation, Industry, Science and Research on intellectual property matters and the strategic administration of IP Australia*”<sup>4</sup>, has itself identified the length of investment in plant breeding.

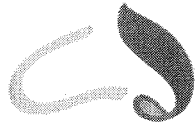
ACIP identified this in its own options paper into the current Review of Enforcement of Plant Breeder’s Rights, where it highlighted that the “*breeding of a new variety typically takes about 12 to 14 years*”.<sup>5</sup>

<sup>2</sup> Page 15 Carbon Pollution Reduction Scheme: Australia’s Low Pollution Future – White Paper

<sup>3</sup> NFF Federal Budget Submission 2009 – Feeding a hungrier world

<sup>4</sup> ACIP Website <http://www.acip.gov.au/>

<sup>5</sup> ACIP options paper June 2007 – page 3



Furthermore the ASF believes that the cost of evaluation of plant materials is high, as a large proportion, in some cases, >99.95% of breeding lines will be discarded from the process due to under-performance in one or more characteristics, before a viable commercial product is released

This long period between initial investment in breeding and the commercialisation of varieties, together with the high level of ongoing investment across the total seed supply chain is necessary to develop varieties to commercial release and makes plant breeding and the introduction of new technologies a high-risk investment for commercial companies.

The plant breeding industry therefore requires improvements to their operating environment through substantial changes being made to the operating environment of the *Plant Breeder's Rights Act (PBR Act)* for example.

The *PBR Act*, in its current form, is not sufficient to enable PBR owners to achieve adequate protection, and enforcement in a manner which is cost effective, timely and most importantly enforceable.

### **The Innovation Patent**

The ASF also believes improvements in the innovation patent through the inclusion of biological matter as an innovation patentable matter, is also now more relevant than ever, due to the changes in the plant breeding industry, the cost of bringing varieties to market, and the lack of enforcement.

This innovation patent is also currently under review by ACIP.

The innovation patent and the *PBR Act* should also be viewed as being complimentary and not competitive, and improvements to the innovation patent will not interfere with the operations of an improved *PBR Act*.

An improvement in the innovation patent will assist in encouraging the ASF membership to continue to invest in the areas of science, innovation and technology, and will assist in enabling Australian plant industries to access the latest international technologies and germplasm.

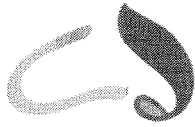
### **Biosecurity and Quarantine**

Australia's biosecurity and quarantine arrangements are also another important operating environment for the sowing seed industry.

These arrangements must be streamlined to facilitate the delivery of new and improved technologies to Australian agriculture by commercial operations, and therefore will assist in agriculture's ability to adapt to climate change.

The release of the report from the independent panel chaired by Mr Roger Beale AO, *One Biosecurity: A Working Partnership*, will potentially change the operating environment for the movement of seed.

It is important to highlight that while the ASF continues to acknowledge that there must be a shared responsibility for Australia's biosecurity arrangements, there must also be appropriate conditions in



place to achieve our goal of increasing the efficient flow of seed and new technologies across the borders, both international and domestic.

The ASF believes that the relationship between the Commonwealth, States and Territories will be paramount to achieving this goal.

The ASF notes that the Australian Government is seeking to achieve a National Agreement on Biosecurity, and will enter negotiations with the jurisdictions. This is now a critical time for industry and will be a major challenge for government officials.

The ASF encourages the Committee to investigate the real need for the relevant jurisdictions to achieve an outcome with the Australian Government and to ensure that a “layered approach” to the biosecurity and quarantine arrangements do not unnecessarily impede on the flow of new technologies in seed.

**The Committee should be aware for example, that there has been a federal review of Biosecurity and Quarantine arrangements, and now Queensland and Victoria are also undertaking their own separate reviews at the same time. The ASF is concerned that there is a lack of consultation between Government/s occurring.**

Ultimately, the ASF encourages the Committee to work with the sowing seed industry to grow the collaboration between industry and Government/s.

This will assist in achieving policies which improve the operating environment, and target the key components of agriculture, including the sowing seed industry, which will ultimately assist our adaptation into the future.

### ***3. The role of rural research and development in assisting farmers to adapt to the impacts of climate change.***

The ASF believes the role of rural research and development in assisting agriculture to adapt to climate change is extremely important.

The ASF seeks to be involved in the consultation process on climate change. This is because the seed supply chain will be at the forefront of identifying and implementing the appropriate research and development programs, and technological advancements to assist in taking agriculture forward.

These technological advancements will include the breeding, production, processing, treatment, movement and delivery of sowing seed across all industries.

The ASF therefore encourages the Committee to ensure the inquiry broadens itself to ensure there is an investigation into the need to assist the sowing seed industry with targeted research funding.

By targeting this funding correctly, it has the potential of improving and encouraging the real incentive for investment in new technologies.



**Otherwise the delivery of these technologies could be hindered at a critical time, and therefore Australian farmers, and their ability to adapt to climate change through ongoing access to new and improved seed could well slowed, if not eventually jeopardised.**

Ultimately there needs to be a recognition that agriculture is in this together, and market signals need to be crystallised to secure investment along the total seed supply chain.

The ASF would welcome the opportunity to provide further information to the Committee upon request and wishes the Committee every success in its deliberations.

Yours sincerely

Will Golsby  
Chief Executive Officer  
**Australian Seed Federation**