This is a submission to the Public Inquiry into Rural Research and Development by the Australian Government Productivity Commission.

This submission is from Ross Pearce, a Director of Mirrabooka Farms P/L .

It is extremely important that government supports agricultural research and development into the future. Quite simply todays research is tomorrows food. It can take a long time from when research starts to when a practical outcome is reached. So it is vitally important to maintain funding so as to ultimately achieve those outcomes, which can often be of huge significance, not only to the particular rural industry involved, but also to the community at large.

Our business, Mirrabooka Farms P/L, produces apples and cherries. Over the years new developments from research and development in these industries has been of immense importance to not only our profitability, but also to the environment and to the consumer.

Research into integrated pest management has meant we've been able to produce our apples with greatly reduced chemical use, providing "cleaner and greener" benefits to both the environment and the consumer.

Research into identifying and understanding the role of biological control agents such as predator mites, lacewings, lady beetles and parasitic wasps to control orchard pests has resulted in a major shift in orchard management, particularly relating to chemical use. The environment and community have also benefited from a reduction in chemical usage, and also from less spray machinery operation, thus reducing greenhouse gas emissions.

With the proposed importation of apples into Australia, research and development into potential new pests and diseases is absolutely essential. A severe outbreak of a new pest or disease in the Australian apple industry could be devastating for it. We must be vigilant and scientifically prepared for such an outbreak.

Other important areas of research that need to be maintained into the future include development of new apple varieties and rootstocks. The world famous Cripps Pink, marketed as Pink Lady™, has benefited both the apple industry and the consumer, thanks to its wonderful eating qualities. The role of Cripps Pink in introducing and maintaining apples in consumer diets is something that should not be under estimated in terms of consumer health.

Currently new apple varieties are being developed in Australia which are resistant to one of the major fungal diseases, known as Apple Scab or Black Spot. Again, both the grower and the consumer will benefit from reduced fungicide usage.

At Orange Agricultural Research Station, new apple rootstocks are being bred for resistance to the fungal root disease Phytophora, and for resistance to aphids. These rootstocks are also being selected for their productiveness. With an increasing world population and diminishing agricultural land available, the need for new higher yielding apple rootstocks with the benefit of certain pest and disease resistance, will be of great importance to the community.

I understand, unfortunately, this apple rootstock research at Orange is winding back due to a reduction in funding. Such research can take many years, even decades, to find the “industry changing” result.

Over the years, research into the storage characteristics of the different apple varieties, along with new cool storage technology, has meant that consumers now have access to high quality apples all year round.

Another area requiring continuing research and development into the future is increased water use efficiency. This may involve monitoring equipment, irrigation technology, new varieties and rootstocks. Potential climate change enhances the need for research in this area.

Our orchard has also benefited from research and development into high production intensive apple orchards. The community and environment also benefit from such apple growing systems as production per input unit is increased, particular with regard to water and chemical use.

As growers we are happy to pay a levy to help fund research and development.

However, we fell it is important that government also contributes, as more often than not the community as a whole benefit.

Indeed, sometimes the community can benefit much more than the grower. An example of this is the biological control of the pest Codling Moth by the placement of mating disrupting “pheromone ties” in the apple trees. This form of control is more expensive than a traditional pesticide spray program. However, we chose the biological control approach as it is more environmentally and consumer friendly.

The governments matching funds program helps to pay for the benefits that the community gains. Without such government funding it is reasonable to suggest that rural industries are likely to see a decline in research and development. The long term ramifications of this could be very serious for those industries, the environment, and the community.

In the future the apple industry will need to make further changes in order to reduce environmental impacts, ensure food security, introduce new and interesting varieties, and be more efficient with the use of water.

This will require research and development, and many of the benefits will be community benefits, to which the community should contribute by providing some of the research funds to achieve these outcomes.

Thankyou for the opportunity to make this submission,

Ross Pearce

Director,

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