**Submission concerning Productivity Commission Draft Report concerning “Regulation of Australian Agriculture”**

**Dr Chris Nadolny**

I am writing this submission based on my 35+ years of experience working in the ecological sciences, mostly dealing with conservation, management and restoration of native vegetation in rural areas. This includes previous work as a property planning adviser and as a rangeland officer. In addition, I manage a rural property with a significant area managed for conservation under a Federal stewardship scheme.

My submission primarily concerns what the Commission says about regulation of rural land clearance. In my opinion, the Commission is correct that the regulations could be simplified, but the discussion lacks perspective because the environmental consequences of clearing are glossed over. In particular, climate change, which is likely to severely threaten agriculture in the coming decades is not even mentioned (except in terms of carbon markets). According to US Government figures, in recent months global temperatures have exceeded 20th Century means by about 1.3°C. While some of this increase could be attributed to the recent El Nino, we need to acknowledge that we are already approaching the 1.5°C limit for global warming set at Paris last year. The next decade will be critical for action on climate change.

Climate change mitigation and adaptation are critical to any discussion of regulation of clearing because:

1. Greenhouse gas emissions from clearing are significant and, for example, Australia’s compliance with the Kyoto protocols were largely attributed to regulation of clearing. Furthermore, Australia needs to lead by example to reduce clearing elsewhere.
2. Climate change will have implication for where agriculture will be viable in the future and, for example, it may be wise to prohibit agricultural development in areas where rainfall is predicted to decline below critical thresholds.
3. The importance of maintaining habitat and its connectivity for climate change adaptation.
4. Evidence is accumulating that loss tree cover can directly affect precipitation and possibly lead to desertification, for example, in the case of southern Western Australia (See Pitman *et al.* 2004 *J. Geophys. Res*. 109: 1-12.)

Despite this concern, I only have minor suggestions concerning the draft recommendations:

3.1 I support this recommendation provided the explanatory text explains that, since clearing is cumulative, keeping account of what is happening at the individual property scale is important for achieving targets at a landscape scale.

3.2 I am concerned that market mechanisms should not be used to prevent clearing likely to be judged as inappropriate from both a productivity and an environmental perspective, such as, say, broad-scale clearing of non-arable semi-arid country or clearing dense forests to graze livestock. Total reliance on market mechanisms is likely to prove extremely costly with all the benefit going to a few individuals. I suggest adding the words “where appropriate” to the end of the first sentence of the draft recommendation will emphasis this point.

3.3 I agree with this recommendation and would, in particular, welcome community-based groups, such as Landcare, being better resourced.