



From the Chairman

Major General the Honourable Michael Jeffery, AC, AO (Mil), CVO MC (Retd)

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Preparing Northern and Inland Australia for Climate Change by Regenerating Our Soils

Since writing to you in late November, I have had numerous meetings with senior scientists and others who agree that climate change represents an unprecedented challenge. We agreed that time is of the essence and that we must not only recognise the problem but start to take action to prepare for its eventuality and to redress its impact.

Last year Future Directions International published a paper titled *Regenerate Australia: Our Greatest Challenge and Opportunity. A Conceptual Paper*. Working closely with Soils for Life (www.soilsforlife.org.au), and in particular scientist Walter Jehne, this paper outlined how we might regenerate the soils of northern and inland Australia, reduce the impact of wildfires on climate change and develop a more profitable pastoral and agricultural sector.

The concept paper was very much a work in progress. As our understanding of these issues develops, and more people are involved, the concept will be refined. The second edition of this paper will be issued this week. The paper makes the following key judgements:

- Soils and bio-systems throughout Australia are generally in decline, leading to a loss of arable land, with serious water, food, economic and environmental consequences.
- Australia urgently needs to focus on regenerating the health and resilience of its soils and landscapes to reverse this decline and better survive the impact of climatic extremes.
- Australia needs to recognise that water is the key natural strategic asset and ensure that it is captured, conserved and used effectively.
- This can only be done if the soil structure is restored so that its “in-soil reservoirs” absorb and store more of the unreliable rainfall, thus extending the level and longevity of green growth across Australia’s landscape.
- Soil restoration also requires reducing both the loss and emission of carbon from vegetation and soils, which results from increasingly more intense and frequent wildfires, by converting these fuels into dung and soil carbon through the gut of carefully managed grazing animals.

- To achieve this, there is a need to examine the potential for restoring the grazing systems that earlier created the soils, hydrology, resilience and productivity of large areas of Australia. The regeneration of these systems is now critical.

This paper, which is an update of that issued last October, seeks to discuss these issues further and describe how they might be addressed. It is based on detailed analyses of the science and practical grass roots experience and proposals of what has and can be done. While not all the substantiating evidence can be presented in this paper, views, questions and alternatives of how to regenerate northern and inland Australia are welcomed.

Over the next few months, further papers will be produced that consider issues such as the impact of wildfires, how water will be managed, how soil will be regenerated and the importance of carbon. Key individuals will be interviewed and their conclusions recorded.

Six strategies, which are discussed in this paper, are seen as key steps to achieve these outcomes. We must:

- Prevent the collapse of the bio-systems at risk from climate extremes.
- Increase the availability of permanently distributed surface water.
- Regenerate the structure, hydrology and resilience of soils.
- Manage additional stock to reduce fire risks.
- Manage increased grain production.
- Revitalise regional communities.

I cannot stress strongly enough the importance of the ideas contained in the paper and encourage you to read it.

Your comments would be most welcome.

Major General the Honourable Michael Jeffery AC, AO (Mil), CVO MC (Retd)
Chairman, Future Directions International
(Former Governor General of Australia)