 **Landcare Broken Hill Inc**

***Greening the Hill Mk.2***

ABC Radio interview No.11 – 9 July 2019

**Tree planting to capture carbon dioxide**

“Planting billions of trees across the world is by far the biggest and cheapest way to tackle the climate crisis” say scientists in a recently released report, published in “Science” – the respected science journal. And our capacity to plant trees is possible “without encroaching on crop lands and urban areas”. They did include grazing lands in their calculations, accepting more sparse plant in such areas, say just 2 to 3 trees per field, noting that grazing animals benefit from shade and cooler sheltered areas.

This new research shows that a worldwide planting programme could remove 2/3 of all carbon emissions that humans have caused. As trees and plants grow, they absorb and store carbon dioxide emissions that are driving the dramatic climate variability we are experiencing.

The research shows that there is about 1.7bn hectares of treeless land across the world on which some 1.2tn of native saplings could be naturally grown. The research has taken into account that in tropical areas up to 100% tree cover could be achieved, whilst in more arid zones, such as around Broken Hill, tree cover could only achieve a modest percentage, perhaps 50%, but nevertheless make a huge difference. Focussing on Australia, the scientists have identified the tropical east coast as offering the most opportunity for tree planting.

The research shows that such tree planting on a massive scale would be the No.1 solution to redressing the challenge of climate change. It is estimated that the tree planting proposed would take some 50 to 100 years to achieve, before reaching the full target of removing 200bn tonnes of carbon from the atmosphere.

The new research was based on the measurement of tree cover across the globe in 80,000 high-resolution satellite images from Google Earth. Artificial intelligence computing then combined this data with 10 key soil types, topography and climate factors to create a global map of where trees could grow – an area of 1.7bn hectares if areas used for growing food is excluded.

The scientists say that this approach to redressing climate change with tree planting is available now, it is the cheapest option available and has the potential to get everyone involved. As Landcare Broken Hill has said when Greening the Hill Mk.2 was announced, individuals can really make a difference by growing more trees themselves, supporting forest restoration and tree planting schemes (like Landcare’s) and rejecting irresponsible land management practices.

Christiana Figueres, former UN Climate Convention chief and founder of Global Optimism said: “*Finally we have an authoritative assessment of how much land we can and should cover with trees without impinging on food production or living areas. This is hugely important blueprint for governments and private sector*”

René Castro, assistant-director general at the UN Food and Agriculture Organisation, said: “*We now have definitive evidence of the potential land area for re-growing forests, where they could exist and how much carbon they could store*.”

The research says there are currently about 3 trillion trees on Earth, but that figure represents only about 50% of the number of trees that existed prior to human dominance of the globe. Some scientists have indicated that if this massive tree planting occurred, matching natural systems as near as possible – that is, avoiding the plantation approach of a monoculture – is essential for protecting wildlife and thereby protecting biodiversity.

**Australian position – a long way to go**

Australia is sadly far behind many other countries in the degree to which they are planting out trees. A few years back I travelled some 100s of kilometres by road in China and was stunned at the extent of tree planting that was underway.

As a Nation we condone far too much land clearance, which is almost invariably of short-term benefit for just a couple of decades, before the adverse long-term consequences become apparent. It destabilises the soil, encourages the proliferation of weed species, adversely impacts local micro-climates before entrenching longer-term adverse climatic impacts, such as the dust storms the Far West has now experienced with regularity in recent summers.

**Landcare Broken Hill’s immediate challenge**

With increasing plant cover and tree planting, Landcare Broken Hill is impatient to get going, as are many in the Broken Hill community. Eg the local Scouts has asked whether Landcare Broken Hill will be planting trees on National Tree Day on Sunday 28 July.

**We are determined to make an environmentally positive contribution to Broken Hill on National Tree Day – we are working out what we can do without, at this stage, having a ready supply of plants to plant out. We are considering a native seed sowing working-bee on the day, but we may be able to do more.**

Our proposed community nursery will propagate plants from seeds and cutting, but there is a natural lag time between sowing seed and having a plant large enough and strong enough to plant out. The lag time before plants are ready to plant out may be about a year to 18 months – too long for keen community volunteers wait!

How are we to get enough trees to plant out in the short term?

Landcare Broken Hill is investigating sourcing some plants to plant out on these special days

**Schools Tree Day – Friday 25 July**

**National Tree Day – Sunday 28 July**

[**https://treeday.planetark.org/**](https://treeday.planetark.org/)

We will be seeking sponsors to assist us to buy pre-grown native plant stock for this year.

**Next public meeting to provide an update on *GREENING THE HILL MK.2* and continue of consultation with the community**

**Centre for Community, 200 Beryl Street, 7.00pm Thursday 25 July**

***ALL WELCOME!***

Want to become a Landcare Broken Hill member?

**LandcareBrokenHill@gmail.com**

**FACEBOOK**

**www.facebook.com/LandcareBrokenHill/**