

## **MY SUBMISSION TO THE SENATE SELECT COMMITTEE ON AGRICULTURAL AND RELATED INDUSTRIES.**

March 22nd 2009

### **BIOCHAR PRODUCTION**

It is vital that the Federal Government supply generous funding for research into biochar production. There are many companies worldwide (too numerous to mention here but easily accessible via Google) and in Australia who have carried out important research which has proved the viability of this process. It has been a commonplace agricultural process in the Amazon region for centuries and would be an excellent means of turning not only green urban waste (thus sparing our landfill sites) but also agricultural waste (which might be burnt thus polluting the atmosphere with CO<sub>2</sub>) into a product which would provide a source of income to the manufacturer from sales of char and also be carbon negative in the process.

This is a truly amazing product. Slow Pyrolysis of this material creates 2 main products;

- gas (methane and hydrogen) which can be used as an energy source to run the plant
- and char that contains roughly 60% of the carbon contained in the original waste product

**Char itself is inert and highly porous, enabling soil to retain both water and nutrients and if then sold as a soil improver, not only sequesters carbon, becoming 'carbon negative' in the process, (vital if we are to reduce the amount of carbon in the atmosphere) but also provides an income to its manufacturer while at the same time improving degraded and arid areas of farmland in Australia.**

### **NATURAL SEQUENCE FARMING**

It is also very important that the Federal Government provide ample funds to Peter Andrews to carry out further research on his natural sequence farming methods. I have been informed by several Federal Government Departments to whom I had written on this topic that only \$1 million has been allocated to this research over the past 4 years. This is a pathetic amount and (in view of the fantastic results he had achieved in a very short time improving the degraded farmland on his properties in NSW), must be increased exponentially.

### **ORGANIC FARMING**

We have to encourage farmers to use organic methods and there has to be a moratorium on the use of chemical sprays such as herbicides and pesticides. Here in Tasmania there are many occasions when rural dwellers have had not only their properties but themselves sprayed with these deadly chemicals. Aerial spraying is particularly dangerous as the mist can spread over a wide area, not just the target zone.

### **HEMP PRODUCTION IN TASMANIA**

In view of the increasingly unlikely commencement of Gunns' pulp mill project, production of industrial hemp, trialled as a crop here in Tasmania since the 1990's, should be ramped up thus ensuring Tasmanians a new and lucrative source of wealth and jobs without compromising the environment. Hemp is an amazing plant; grown in rotation with legumes it can produce crops for fibre or seed. Due to its growth habit it needs no pesticides or herbicides and only moderate irrigation; perfect for organic farmers. Its potential for value adding is enormous as it can be utilised for not only paper but textiles, bio-fuel, plastics, animal feed, mulch, building materials, car parts, medicines and even, according to recent trials in NSW, to clean up sewage effluent.

### **RENEWABLE ENERGY USE ON FARMS**

A useful source of income for farmers living in a suitable position for a wind farm would be the very lucrative rent paid for each turbine from Roaring 40's. There are also much smaller domestic versions of wind turbines available on the market which could be installed. Agricultural green waste could be turned into biochar which could increase the productivity of thousands more hectares of Grade 4 agricultural land converting it to highly profitable Grade 3. Farmers should also be encouraged to install water tanks and solar power units.

### **ABOLISHMENT OF MANAGED INVESTMENT SCHEMES FOR FORESTRY PLANTATIONS**

Abolishment of the iniquitous Managed Investment Scheme for Forestry Plantations should be immediate. Too much of our farmland has been lost to the 'fat cats' tax breaks causing massive environmental problems,

Here in Tasmania rainfall is considerably less than it used to be and that, combined with the increase in forestry plantations using 50% more water than the equivalent native forests during their peak growing period has had disastrous effects on Tasmania's water supplies. It does not make sense to encourage these forestry companies to set up new plantations, many of which have already converted valuable farmland into monoculture plantations as we are losing the capacity to manage our water resources in a sustainable way.

Plantations when clear-felled cause degradation of hillsides, pollution of water from run-off and landslips into waterways, decimation of wildlife caused by 1080 poisoning, drift from aerial spraying causing ill-health to surrounding residents and loss of wildlife habitat. Every autumn here in Tasmania we have to suffer the inevitable clouds of smoke billowing from massive forestry burn-offs.

By keeping our farmers on the land, we will also keep our country towns and communities alive, unlike Preolenna, here in NW Tasmania which died once the forestry plantations were established on what was once prime farmland and the farmers and their families moved away

### **UNDESIRABILITY OF COMPETING WITH CHEAP FOREIGN IMPORTS OF FOOD.**

Farmers and horticulturalists etc must be paid a decent price for their produce. Supermarkets make an enormous profit by paying farmers a pittance and charging consumers 'over the top'

retail prices. It is important to try and lessen the miles food travels from grower to plate, so it is crazy to import say beans and peas from China when we can produce them here. We have to adjust the mindset of both growers and consumers so that this is no longer a problem.

### **GENETICALLY MODIFIED CROPS**

It is vital that the moratorium on GM crops here in Tasmania for the next 5 years be extended and that those mainland states which have allowed trials to go ahead should cease this research immediately. There is just too much at stake. The majority of the so-called research to prove their safety has been carried out by the very companies most likely to gain from this technology e.g. Monsanto. There is increasing evidence worldwide that they are far from being the wonder crops that they have been spruiked. One of the greatest threats is the lack of biodiversity and the calamitous effect on the population of small villages in rural areas of poorer countries. They have been forced to use the GM seeds and only GM so that whereas before they saved some of their crops for the following season as seeds they now have to constantly buy seed from these global giants causing financial hardship.

### **LABELLING FOOD WHICH HAS GM CONTENT**

It should be made mandatory that all foods containing even the tiniest amounts of GM crops should be labelled thus so that consumers know exactly what they are purchasing.

### **FUNDING TO FARMERS TO HELP PROTECT THE ENVIRONMENT**

A fund should be established to give farmers free loans or incentive payments to help them restore degraded areas of their land. i.e. fencing off riparian areas to halt bank erosion; establishing wetlands in marginal low lying areas; planting of a wide variety of trees and shrubs to provide habitat for wildlife and wildlife corridors.

### **UNSUITABILITY OF BUILDING DAMS AND PIPING WATER LARGE DISTANCES FOR IRRIGATION**

While on the surface schemes to transfer water from the wetter west coast of Tasmania to the drier areas of the midlands and south east seems a perfect solution in reality there are many pitfalls. Soils in the midlands are very shallow and already subject to salinity problems. Further irrigation of these areas would only exacerbate the problem. Surely it would be more sensible to think about different ways to use the land. Dry land farming for instance or even to use these wide open spaces to build a solar thermal plant as has been done in Spain. Vast hectares of mirrors are erected and focus the sun's rays onto a tower which converts the heat into electricity. Landowners would be paid a lucrative sum for use of their land.

### **NEED TO ENCOURAGE TASMANIAN FARMERS TO EXPERIMENT WITH NEW NICHE CROPS.**

Wasabi, ginseng and essential oils are some of the more unusual crops already produced in Tasmania. The establishment of a funded 'new ideas forum' to encourage the investigation of other more unusual crops could be productive.

### **BANNING AERIAL SPRAYING OF CROPS**

There should be an immediate ban placed on the use of aerial spraying of crops and forests. There have been too many cases of polluted waterways and deleterious effects on the health of residents from spray drift. In a recent court case in the United Kingdom, Georgina Downs, whose health had suffered for years from these toxic chemicals, has recently won a significant victory. The High Court, by ruling that the Government had not protected people from these chemicals due to its inadequate risk assessment, has set a legal precedent which should ring warning bells for both the Tasmanian and Federal Governments that unless they clean up the whole industry they too could face legal action.

I hope that you implement all my suggestions.

Signed  
Estelle Ross