Submission Number: 104 Date Received: 20/02/2014

## NORTHERN AUSTRALIA DEVELOPMENT

I have lived 80 years in North Queensland but born in Tenterfield. I have lived on a farm at Mareeba, studied at Emerald Creek School, Mareeba School and Charters Towers. I did my apprenticeship as an electrician and linesman, qualified as an engineer with Cairns Regional Electricity Board. During these years I engineered hundreds of miles of power lines to many farmers in Far North Queensland. While in Townsville I was responsible for the maintenance of the 132 and 275 KV network between St Lawrence and Cairns and retired after 42.6 years. I have carried out 36 years of community volunteering in Townsville. I have travelled throughout North Australia. Consequently I feel confident that what I envisage for North Australia may have some merit.

#### **Cities and Towns**

I believe we should concentrate on major cities such as Normanton in the Gulf with a port at Karumba, Darwin, and Broome with international airports at each city. As Cairns is built in rich agriculture lands its expansion needs to be carefully engineered and perhaps towards Kuranda. Townsville is built on a flood plain, even though it lands are poor it can be subject to cyclones and any affect the climate may change. Consequently consideration should be given to a new major city as the capital of a new state of North Queensland near Macrossan on the Flinders Highway where it crosses the Burdekin River. There was a major airport in this area during the war and the city should be designed clear of this airport. As all these cities will expand as the north is developed, town planners need to be educated to plan these with the future in mind as to new technology. Other towns will also develop such as Kununurra, Derby, Fitzroy Crossing, Halls Creek, Katherine, Georgetown, Cooktown, Hughenden, and Cloncurry.

# **Agriculture**

As the most important industry in this part of Australia will be Agriculture it is important to develop suitable farming areas supported by adequate water supply. It has been stated Australia must develop and sustain an industry that will not only feed Australians but Asia people as well. The danger here is that should we not move like we did over 100 years to build a railway line between Adelaide and Darwin this part of Australia will be taken from us. Suitable crops must be engineered to suit the land but also to feed and cloth the population in Asia and Australia.

# **Mining**

Mining must be continued throughout the area mindful of agriculture as being dominant, and the mining area rehabilitated to prevent pollution. The staff will most likely be fly in and fly out to the major cities but preference should be to support the towns in the mine's vicinity.

## **Infrastructure**

### 1. Roads

It will be of major importance to have international standard roads both north and south of the major cities. This will mean the Bruce, Flinders, Kennedy, Normanton, Barkly and the highway between Katherine and Broome will need upgrading with regard to flooding during the wet season.

## 2. Rail

The rail line between Townsville and Mt Isa will require an upgrade and continue westward to join with Adelaide Darwin Line. In due course it may be necessary to build a rail line between Katherine and Broome or alternate routes to take in the major mines further south of Broome. A duplicate rail line from Brisbane is essential to speed up delivery of freight and reduce heavy motor transport on the road system.

#### 3. Water

Depending on the location of farming lands water will be essential for irrigation, power stations, towns and cities. Consequently it will be essential to build dams and weirs in the river systems with provision for overflow to keep the down river alive with its ecosystem. Good planning is essential for the location of these dams and surplus staff should be trained to investigate these.

An immediate requirement is the Hells Gate dam on the upper Burdekin with hydro power installed for the lands in this area and supply to Charters Towers and the Burdekin and in due course Townsville via a pipe line over Hervey Range to feed a hydro station built at the base of the Range and surplus water fed into Ross Dam. Consideration is urgent to build a dam on the Herbert River as planned many years ago to generate power but also to prevent flooding of Ingham which it does at least every two years.

#### 4. Electric Power

The bias of having a base load power station in North Queensland will need to change and major stations will be required as the area develops and already one is needed urgently in the Townsville area as power lines branch out north to Cooktown, north west to the gulf, west beyond Hughenden, south to Ayr and east to Townsville in some cases extensive distances. Where possible stations can be hydro, biogas, gas, coal, nuclear, solar or wind. Major lines will be needed to connect them to the National Grid. However no system can operate solely on solar and it is necessary to design a relationship between each type of power input. However there is a continued claim solar energy is crippling the present system but many of these power lines were built in the 1950 decade and

maintenance would be extensive in replacing wood poles and upgrading the conductor size to cater for inbuilt loading on the original development.

#### **People**

The immediate requirement for this major project is to have capable staff trained and willing to work in this part of Australia. Many of the people being laid off in Victoria are obvious people to train and helped by professional personal located initially in Townsville. Many of those on the dole can be required to work after training to work the areas as they are approved for development.

# **Townsville**

Of course Townsville will need to upgrade as its population increases. 3 bridges over the Bohle River are essential, 2 to replace flood prone ones on the Bruce Highway and Dalrymple Road and another on the downside of the rail line to give better access along Ingham Road onto the northern beaches via Bushland Beach to improve transport from the north.

If this report helps in some way I shall be pleased but I stress Australia needs to do something urgently as its economy is going down the gurgler. We need to stop overseas aid now otherwise we will be on a par with Central Africa. There is no doubt we have priced ourselves out of the market and overseas countries are taking us for a ride. Our Management wages are exorbitant and many times paid higher than the pay to the Prime Minister who has to run Australia.

Garth Harrigan