

ASPO-Australia

Australian Association for the Study of Peak Oil & Gas

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Indigenous Communities Working Group

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The Australian Association for the Study of Peak Oil & Gas (ASPO-Australia) Indigenous Communities Working Group welcomes the Senate's inquiry into Australia's future oil supply and alternative transport fuels and makes the following comments in regard to Inquiry reference C

Flow-on economic and social impacts in Australia from continuing rises in the price of transport fuel and potential reductions in oil supply".

Almost all of the debate about peak oil in Australia has been on the rising petrol prices that affect the large proportion of our population that live in urban areas and cities. However, there have already been serious impacts on many Indigenous Australians living in remote and rural communities throughout Australia. Nearly all small remote Indigenous communities in WA and throughout Central and Northern Australia use diesel fuel for power supply as well as transport. Electricity generated by diesel power is almost universal and the electricity powers bore pumps household and workplace appliances and equipment including refrigeration. All food and other freight travels long distances on remote roads which is already factored into higher prices in remote community shops or Stores. In the Western Desert communities their annual municipal grant for diesel purchase from the Federal Government was based on \$1.10 per litre, and they ran out of money in July. A shared responsibility agreement (SRA) has been signed to give the communities additional funds but comes with a whole range of strings attached (<http://www.indigenous.gov.au/rpa/wa/warpanov0501.pdf>). This submission outlines some of the economic and social costs to these communities by the rise in oil prices over the past 3-5 years and discusses the potential future risks if continued volatility in oil markets and price rises eventuate.

Population in Indigenous lands

The particular location and distribution of Indigenous communities is an important aspect of their ability to manage these rising prices. According to the 2001 Census, the Aboriginal and Torres Strait Islander population was estimated to be 458,520, or 2.4% of Australia's population. The median age of Indigenous Australians was a young 20.5 years, compared with 36 years for other Australians and around 25% of the Indigenous population lived in areas classified as 'remote' or 'very remote', compared with only 2% of the non-Indigenous population.¹ Table 1 shows the distribution of the Indigenous population in Australia (ABS 2003) while Figure 1 graphically indicates the different population distribution for Australia's Indigenous population compared to Australia's total population.

Table 1- Estimated Indigenous population of Australia – 30 June 2001

Jurisdiction	Indigenous population	Proportion of Indigenous population	Proportion of jurisdiction population
ACT	3,909	0.9%	1.2%
New South Wales	134,888	29.4%	2.0%
Northern Territory	56,875	12.5%	28.8%
Queensland	125,910	27.4%	3.5%
South Australia	25,544	5.6%	1.7%
Tasmania	17,384	3.8%	3.7%
Victoria	27,846	6.1%	0.6%
Western Australia	65,931	14.4%	3.5%
Australia	458,520	100%	2.4%

¹ www.aihw.gov.au/indigenous/

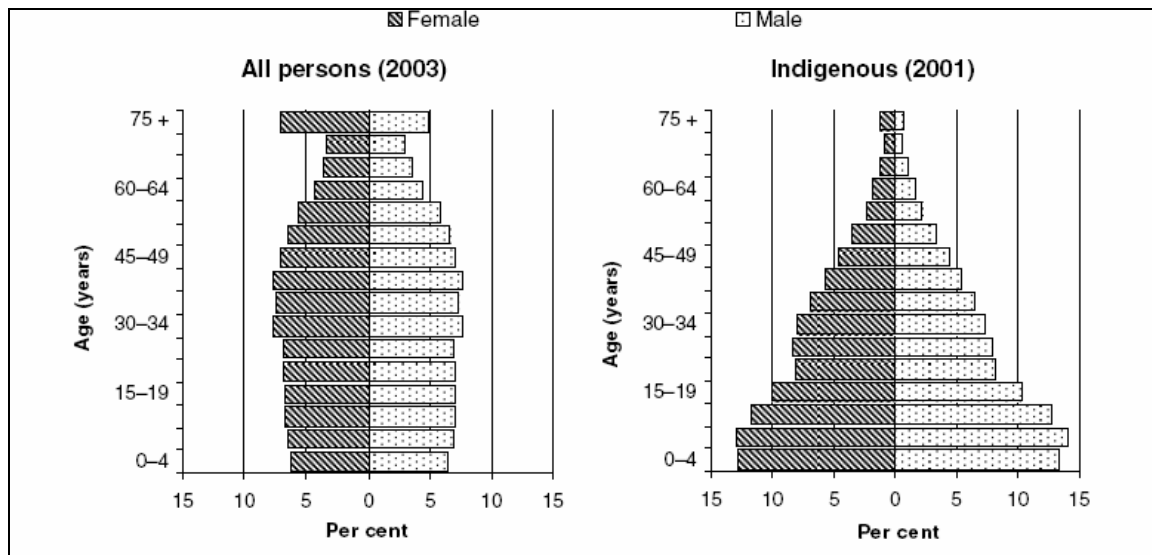


Figure 1- Australian population distribution by age and sex (ABS 2004b)

Taylor used data from the Australian Bureau of Statistics *Community Housing and Infrastructure Needs Surveys* (ABS 2000) (CHINS) report to identify future challenges to these Indigenous communities. For example, he (2002 13) projects that over the next 10 years the Indigenous population in the remote Australian desert (or arid zone²- see Figure 2 below) will grow by about 10,000 people to nearly 45,000.

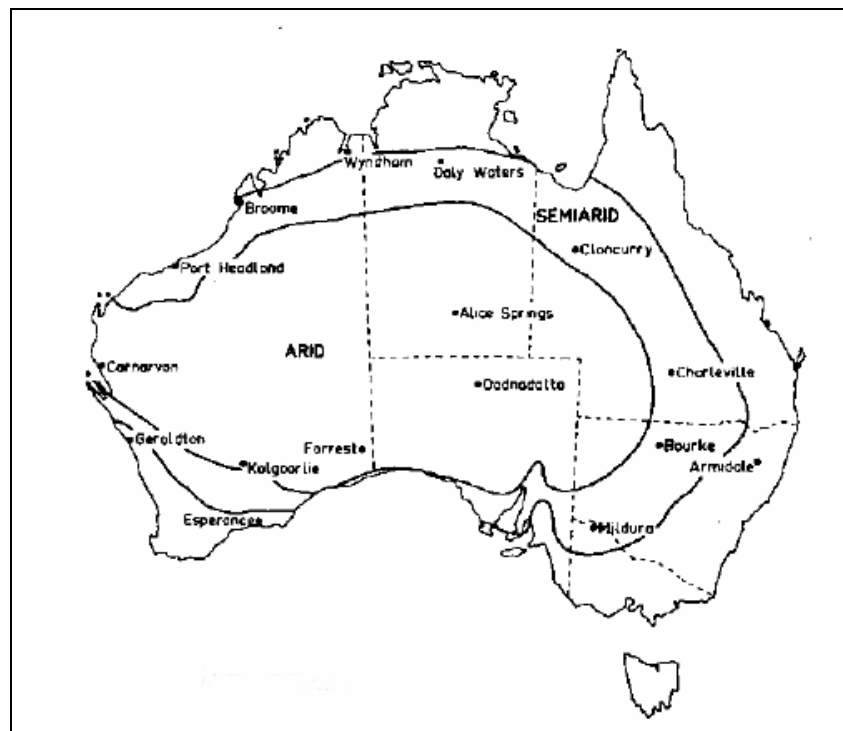


Figure 2- Location of arid and semi-arid regions of Australia (Taylor 2002 2)

Half of this increase will be in the prime employment age groups (eg 24-65) where population numbers will increase by 35% over this period. In a later publication, Taylor (2004 98) suggests that high Aboriginal fertility will lead to sustained and rapid population growth and a high proportion of infants and children in these communities. In the Northern Territory this will lead to a doubling of the Aboriginal population within a generation with a high potential for continued growth beyond that. Unlike the issue of population decline and ageing that is a problem in many parts of urban Australia, the problem in many regions with significant Indigenous communities will be how to accommodate

² The arid zone amounts to 3.5 million km², or 45 per cent of the Australian land mass (Taylor 2002 4).

this population growth and a burgeoning youthful population profile and how to ensure they will be able to access cost-efficient transport services.

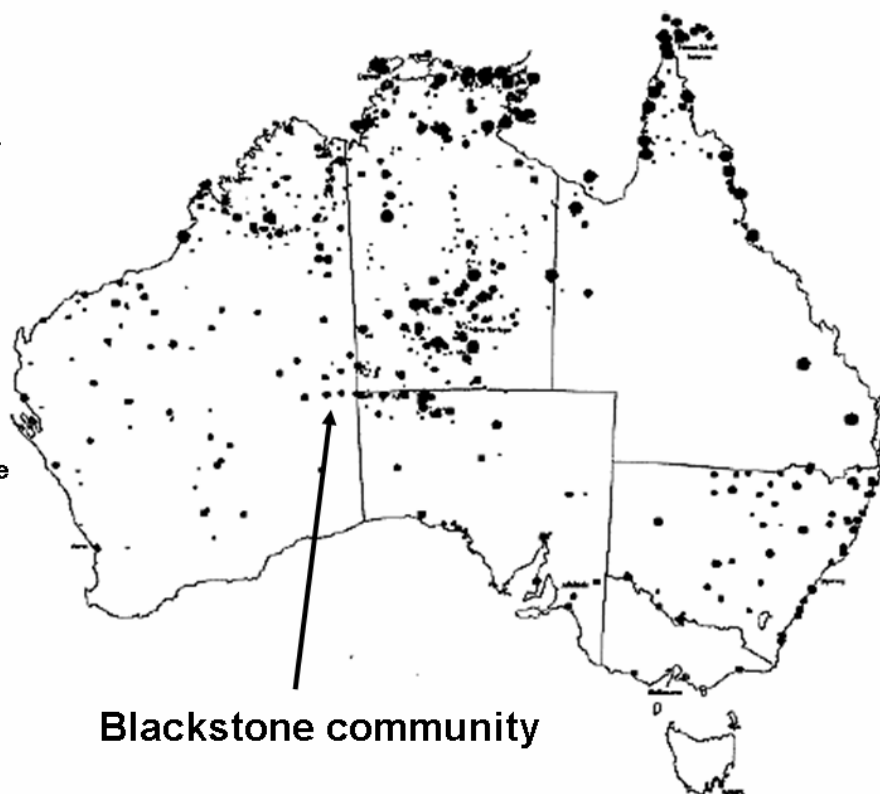
Indigenous communities

Blackstone community transport details

ROAD ACCESS:
800 km to Alice Springs. 1110 km to Kalgoorlie

Weekly police patrol visits by vehicle from Laverton, 750 km to the West

Twice weekly small aircraft from Alice Springs to Kalgoorlie



The largest dots indicate 500 people or more, the smallest less than 50

Fig 2(a). Location and size of Indigenous communities in remote Australia with some details of the Blackstone community.

The substantial land transfer in the arid and semi-arid zones resulting from the land rights and native title processes since 1975 is an important element of the population transformation in Australia's rangelands (Taylor 2002 5). Indigenous attachment to their land has resulted in the emergence of a distinct settlement structure involving the formation of numerous dispersed, small, and discrete Indigenous communities, especially in the Northern Territory, Western Australia and the far north of South Australia (Cane & Stanley 1985) (see figure below). These demographic factors have resulted in quite different residential settings for Indigenous and non-Indigenous populations in the desert region. In 1996, only 26 per cent of desert Indigenous people lived in the four major urban centres of the arid zone—Alice Springs, Port Hedland, Kalgoorlie and Broken Hill. The housing and infrastructure requirements necessary in remote areas to meet these population trends will face further challenges in a future environment of higher oil and fuel prices where flow on price rises for materials and transport and construction are significantly increased.

Indigenous Communities Need for Power

Many remote Indigenous communities across Australia lack grid power or have intermittent power. A 1997 study of environmental health needs in 210 Aboriginal communities found that 5 per cent have no electricity supply. Among communities that do have electricity, about 40 per cent have regular interruptions to supply.³

In the Northern Territory, the Power and Water Authority (PAWA) provides essential services (electricity, water and sewerage) to about 60 major Indigenous communities. Because the

³ Senate Employment, Workplace Relations, Small Business and Education References Committee; *Katu Kalpa – Report on the inquiry into the effectiveness of education and training programs for Indigenous Australians*; Commonwealth of Australia; March 2000; chapter 8.3. (citing Australian Bureau of Statistics, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*, 4704.0. 1999.)
http://www.aph.gov.au/senate/committee/EET_CTTE/indiged/

services in these communities are stand-alone (not connected to any larger or more generally available services) it costs about 4 to 5 times as much to produce a unit of essential services in these locations compared with the main population centres. Such services are high cost, high risk and high maintenance. Response times to rectify faults can be extended if local expertise is not available. Isolation due to wet season flooding can leave communities without essential services for prolonged periods. [NT Government 2001] ⁴

The discrete communities with a power supply are either connected to the State grid or source electricity from diesel powered community or domestic generators. Those communities with a population of less than 50 (73 per cent) mainly use domestic generators whilst the remaining larger communities are most likely to be supplied with power via the State grid or community generators. According to the ABS CHINS data, there are 133 communities with no electricity supply. Of these, all have populations of less than 50.5 It is clear from these figures that most Indigenous Communities are reliant to a much greater extent than elsewhere in Australia on diesel and petrol to generate electricity. This reliance significantly increases their vulnerability to future cost and availability fluctuations.

Table 2- Indigenous discrete communities – main source of electricity supply

3.11 MAIN SOURCE OF ELECTRICITY, ALL COMMUNITIES AND REPORTED USUAL POPULATION

	Communities with a population of					Total	Reported usual population
	Less than 20	20-49	50-99	100-199	200 or more		
Main source of electricity							
State grid/transmitted supply	42	68	56	43	51	260	36 909
Community generators	204	115	35	35	91	480	84 151
Domestic generators	133	30	3	—	1	167	2 300
Solar	63	22	4	1	—	90	1 514
Solar hybrid	96	25	2	1	1	125	2 060
Other organised electricity supply	10	2	1	—	1	14	470
Total with an organised electricity supply	548	262	101	80	145	1 136	107 404
No organised electricity supply	68	11	1	—	—	80	681
All communities	616	273	102	80	145	1 216	108 085

from ABS 2001 table 3.11

Transport to access services

The main mode of transport used by remote Indigenous communities to access key government and community services is by car. People from 49 per cent of these communities must travel for between 1 and 4 hours to reach such services, and 16 per cent of people report travel times in excess of five hours. Due to variable weather conditions, road access into or out of communities may be cut for periods of up to one week, four or five times per year. In some cases (37 communities), there have been continuous periods of road closure for up to three months or more in the most extreme weather conditions. Such difficulty in accessing remote communities reinforces the value of telecommunications in alleviating isolation; but it also reinforces the difficulty of timely installation and maintenance of telecommunications facilities.

⁴ Northern Territory Government; Submission to the Study; November 2001; p 11.

⁵ Australian Bureau of Statistics; *ABS Catalogue No.4710.0: Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia*; Commonwealth of Australia; 1999; p 17.

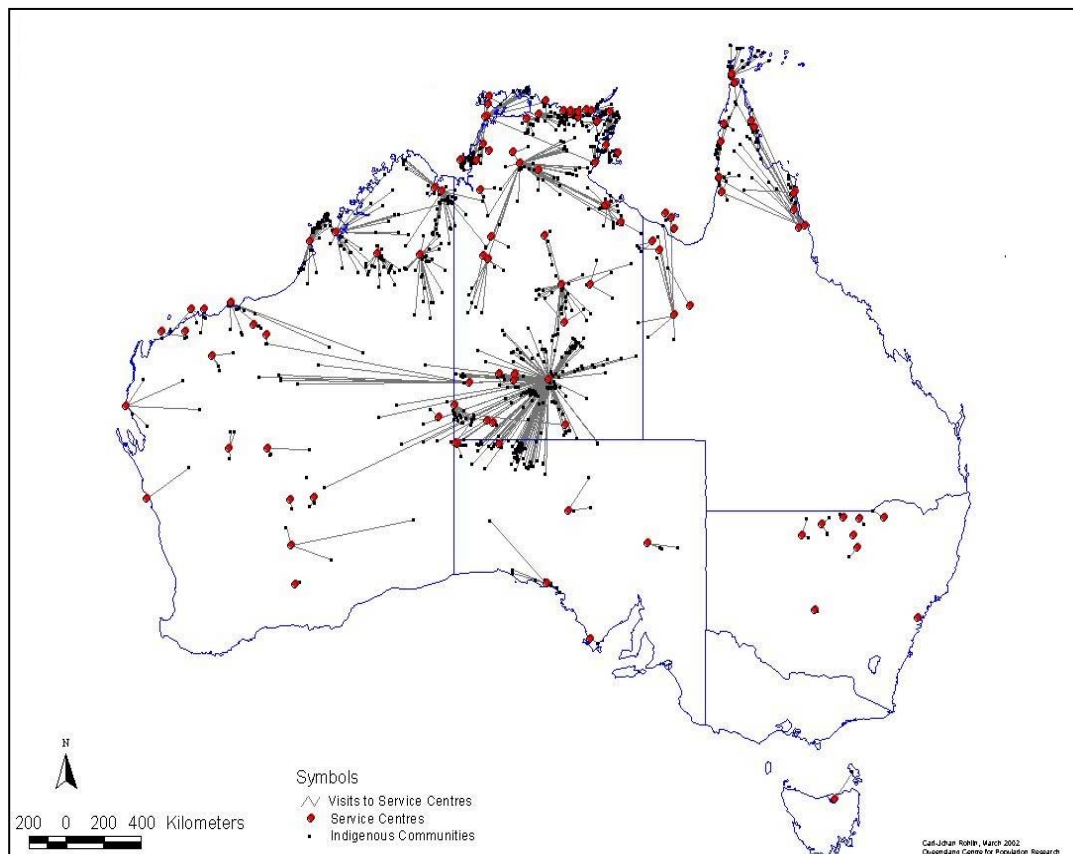


Figure 3- Major Indigenous communities and their economic & social travel needs

Health and access to medical services

High fuel prices also impact on Indigenous health- 895 (69 per cent) of the 1,291 discrete communities are located 100 km or more away from the nearest hospital, with only 53 per cent of these communities having access to emergency air medical services. However, lack of transport can hinder access to clinics, even if distances are relatively short. People from these communities have to travel large distances to access what city dwellers think of as critical health infrastructure. For example, nearly 50% of communities in WA, SA and NT have to travel over 25km to access health centres (see Figure 4 below) (ABS, 2005: 182)⁶.

⁶ 4704.0 The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, 2005
<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4704.0>

10.3 DISTANCE TO NEAREST HOSPITAL AND COMMUNITY HEALTH CENTRE—2001

		NSW	Qld	SA	WA	NT	Australia
Discrete communities located less than 10km from nearest hospital	no.	33	22	11	27	34	127
Discrete communities located 10km or more from nearest hospital							
Distance to nearest community health centre							
Less than 25km	no.	17	48	43	117	254	481
25km or more	no.	10	72	42	139	342	606
Total	no.	27	120	85	256	596	1 087
Total number of communities(a)	no.	60	142	96	283	632	1 216
Total population(a)	no.	7 771	30 961	5 226	16 558	47 233	108 085
Proportion 10km or more from nearest hospital and 25km or more from nearest community health centre							
Communities	%	16.7	50.7	43.8	49.1	54.1	49.8
Population	%	9.9	3.0	14.7	17.4	12.7	10.7

(a) There are no discrete Indigenous communities in the ACT. Source: ABS, 2001 CHINS
Tasmania and Victoria are included in the total.

Figure 4- Indigenous access to health resources

Cultural maintenance and land management

Finally, there is clear evidence that these small communities of Indigenous people living in remote areas are key to the long-term sustainability of their cultures. Figure 5 below (ABS, 2005: 6) clearly shows the importance of traditional lifestyle and living on traditional (remote) lands to the retention of Indigenous languages.

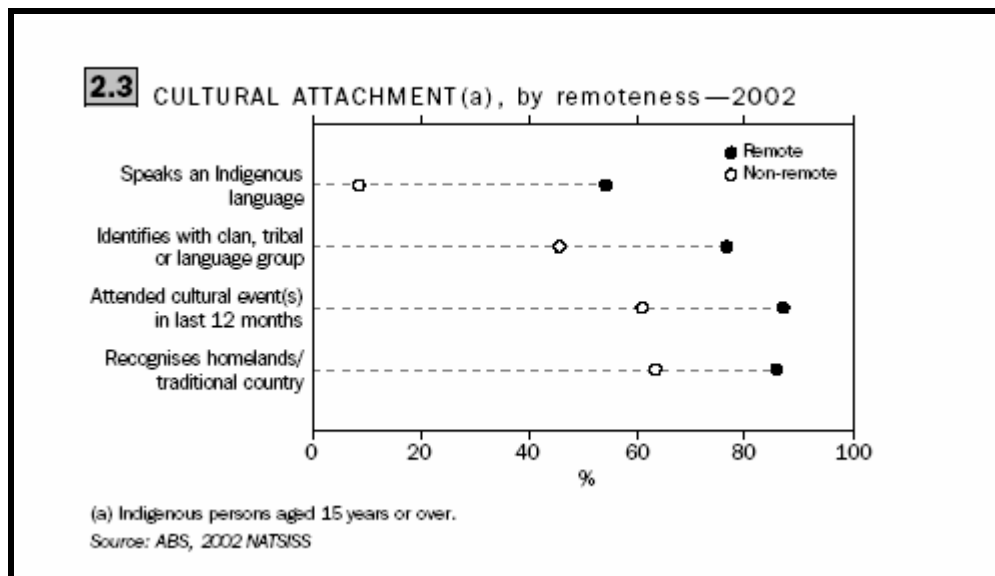


Figure 5- Remoteness and cultural attachment

Despite their strong links to their traditional land, there is anecdotal evidence that some Aboriginals from smaller remote communities in WA have begun to leave their land and move into larger settlements such as South Hedland to try and ease the burden posed by diesel prices that have risen by 27% in the past 15 months. The graph below from FuelWatch (http://www.fuelwatch.wa.gov.au/prices/dsp_hist_avg.cfm) charts the rise in diesel prices in the Kimberley. Many smaller roadhouses outside of the main centres have sold diesel for over \$1.80 per litre.

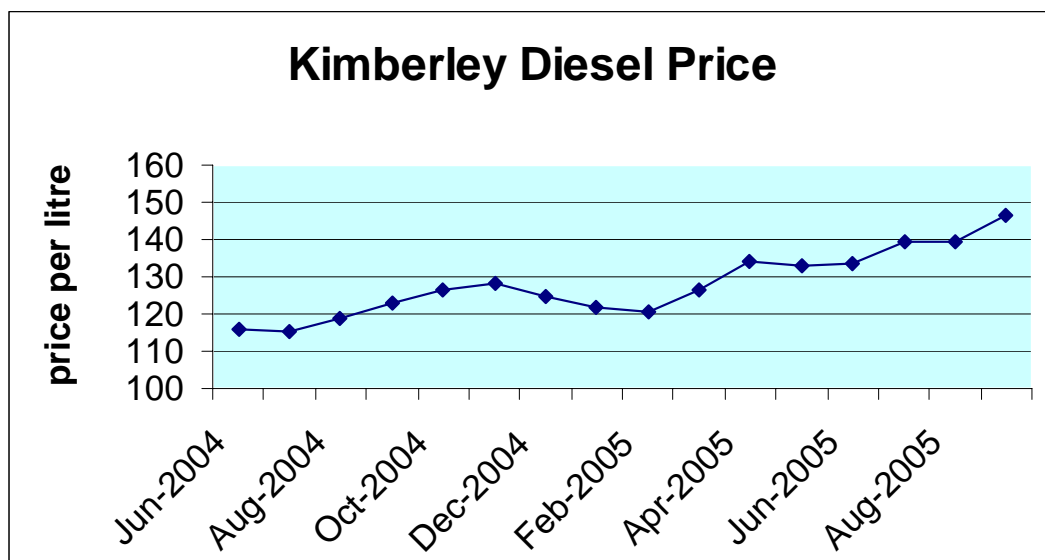


Figure 6- Kimberley diesel prices- Jun. 2004 to Jan. 2006

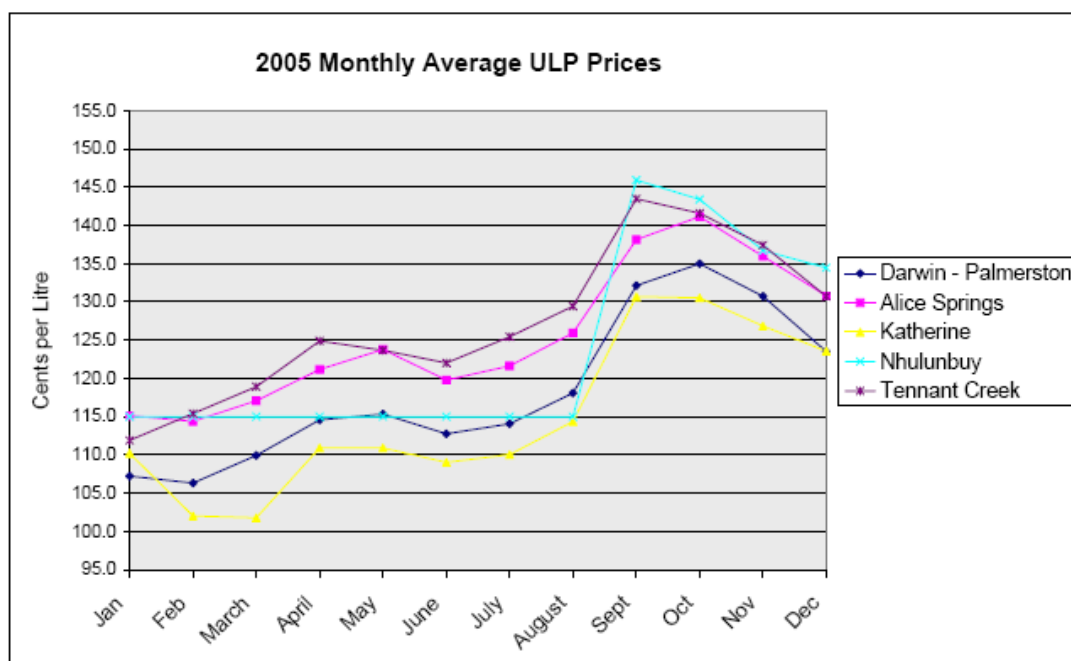


Figure 7- Northern Territory ULP prices- 2005⁷

Information provided by a WA government departmental official reports that the annual budget for diesel in some remote Indigenous communities rose last year from about 20% of their annual maintenance budget to over 80%. This shortfall has had to be made up from elsewhere in budgets, such as maintenance or by passing on costs to other users such as Education & Health. As shown above, many Indigenous communities in remote regions are heavily dependent on oil-based fuels for culture (trips to country), electricity generation, transport and key business inputs (eg tourism, agriculture (fertiliser) and pastoral properties). For example, Sullivan (1988 43) reports the “sudden and massive regional mobilisation” of Indigenous people attending a meeting of the Kimberley Land Council (KLC) in a remote location required a journey of two or three days each way.

Fuels such as diesel form the core economic input for many future economic ventures being considered by Indigenous organisations. For example, the Kimberley NRM plan (2004 93) suggests that the KLC further explore the possibilities of tourism in the desert country. The success of such ventures would be heavily dependent on affordable fuel inputs so that tourist experiences can be priced at competitive price-points compared to local and overseas competition⁸.

⁷ http://www.nt.gov.au/justice/docs/cba/nt_fuel_watch/nt_fuel_watch_summary_graph_2005.pdf

⁸ Roarty & Barber (2004 3) list the following reasons why country petrol prices are higher than metropolitan prices: “A country service station typically sells less than half the amount of fuel of a metropolitan service station. Hence there is less opportunity to reduce the operating margin on fuel sales taking into consideration the

This submission recognises and outlines the dependence of remote Aboriginal Communities and their vulnerability to interruptions to supply and higher fuel prices. These remote places of residence have evolved from traditional practices of ‘living in country’ to become settlements, townships or homelands, generally described as Communities, reliant on flows of diesel and petroleum fuels to support nearly all community infrastructure and functions. This immense cultural change over recent decades faces further significant changes as the effects of oil depletion in Australia and worldwide are imposed. The future sustainability of remote settlements will require considerable research, consultation and evaluation of ways to reduce the dependence on oil derived fuels and transport.

Recommendations

- 1. It is recommended that a Participatory Research and Consultation process be established to evaluate projected impacts and consider options for enhancing sustainability and reducing vulnerability of remote Aboriginal Communities.**
- 2. That the Office of Indigenous Policy Coordination oversee a whole of government approach to collecting data on the impact of oil price rises on remote Indigenous communities.**

While we have provided some sketchy material above, there is very little data being collected at a local, State or Federal level of government on this issue. If left unchecked, further price rises of oil and diesel could see the final surrender of their traditional lands by traditional Aborigines living in remote Australia. The working group welcomes the chance to provide further information to the Committee on this key aspect of the impact of oil prices rises on Australia’s Indigenous Communities via a verbal presentation.

References

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overall viability of the business. Additionally there is higher distribution costs associated with country retail outlets. Furthermore, there are generally lower sales of higher profit non-fuel items in the country.”