Senate Inquiry: Impact CSG on the Future of Australia's Food Security

The Ugly Side of Resource Development

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Introduction

Much is being made of benefits from resource development. Regional, state and national growth potential is assumed to overcome all difficulties associated with resource discovery and subsequent large injections of capital, industry, and labour. Whilst Federal, State and Local Governments view resource development as the elixir of life for the economy, rural areas hosting resource development hold a diversity of views ranging from welcome to downright opposition. Rural areas exposed to resource exploration and development is directly experiencing insecurity of land tenure, labour supply difficulties, infrastructure inadequacies, and potential salinity and aquifer damages.

As the author's skills are not in science, the issue of salinity and aquifer depletion is best left to those qualified to discuss these areas of concern. However, there are other important aspects of mineral exploration and development that do fall within economics. Those important areas will be discussed in some detail. They are in effect just as serious to rural and regional stability and viability as salinity and aquifer depletion which seem to have caught the imagination of certain sectors of the media and a number of political activists.

Food security

So far, political and urban media interest in rural Australia has concentrated upon infrastructure shortfalls and protection of iconic farm land. Whilst infrastructure inadequacies cannot be ignored, iconic farm land has certainly caught the imagination of urban media. Iconic farm land whatever that term might mean, is a successful political campaign mounted by a handful of farmers to draw attention to their land being engulfed in resource development. In terms of food security, iconic farm land is a nothing issue contributing little to sound policy debate. It is national food security which transcends narrow sectional interests from both rural and urban communities

Food security depends upon four concurrent conditions: certainty of land tenure, cleared land, adequate water either by rainfall or irrigation, and profitable farm gate output prices. Natural rainfall districts with 600mm rainfall and higher should retain cleared land for intensive agriculture. Drive around Australia and observe the types of land that produce quality output in substantive volumes. Most soils are low in fertility; but, are cleared and fertilised within suitable rainfall regions. Overseas, deserts have been managed to produce volumes of food. The Australian fragile soil debate therefore becomes a politically motivated negative contribution to national food security.

This discussion will deal with three impacts upon food security that flow from resource exploration and development: certainty of tenure, farm profitability; and, supply of labour

Certainty of tenure

Certainty of land tenure is critical for investment. The more the tentacles of environmental legislation and native title encroach upon 600mm rainfall districts, the more threatened becomes food security. Extensive mineral exploration and development in agricultural districts significantly

erodes certainty of land tenure. In situations where tenements overlap, uncertainty of tenure is compounded generating property market failure. Property market failure becomes a major economic problem affecting farm solvency and socio economic well being of regions. Uncertainty of land tenure is the unrecognised ugly side of resource development

Exploration and mining tenements are granted by State Governments for different exploration purposes: coal, gas, and other minerals. Often tenements for different exploration rights overlap. For example, on my property in the Surat Basin, we have overlapping tenements for coal and natural gas exploration. Compounding these overlapping tenements are two separate pipeline easements that will carry gas from the Surat basin to Gladstone processing plants. Companies claim that compensation is paid based upon legislation for necessary easement access through private property. Companies offer a miserly one off payment based upon some "market" value of recent sales in the area. This "market" value is then discounted because the easement holder allows the land owner to carry on certain agricultural activities that meet the easement holder's approval. Meanwhile, for the duration of the project, State, Commonwealth, Local Governments and gas companies reap billions of dollars yearly from gas flowing through the pipe lines.

Under Queensland legislation, an easement concept of a market value is a political definition not an economic value. There is no market. In economic terms, market structures are classified into neat definitions of monopoly, oligopoly, monopolistic competition, and pure competition. With rural property, two markets structures are in conflict over easement negotiation: monopoly v purely competitive. The energy company is a monopsonist with full legislative backing of Government legislation to force a decision upon a reluctant landowner. The other side of the "market" negotiation is the purely competitive landowner effectively deprived of the right to say no under the Petroleum and Gas (Production and Safety) Act 2004. In the name of growth and development, the Petroleum and Gas (Production and Safety) Act 2004 waters down property rights within a purely competitive property market whilst strengthening property rights of the monopolist.

Given full power of the Government legislation (Sections 126 and 174; SDPWO Act), the judicial arm of Government, The Land Resources Tribunal, administers the relevant Act to ensure the mining companies' access to government owned underground minerals. The landowner's property rights become the legal barrier between State Government royalties, GST revenue, Commonwealth income taxation, local government rates and charges; and company profits. Should disagreement occur over value between the energy company and the landowner, the Land Resources Tribunal arbitrarily determines "fair" value" finalising the dispute. This effectively transfers certain property rights from the landowner to the energy company by judicial sanction. In effect, a de jure acquisition of property rights, not a market transaction, takes place. Whilst the combined interests of various levels of governments and private company profits are circumspectly discussed as disinterested entities, the reality is that the combined activities of governments and the private company would be more accurately described as PPP (private public partnership). Viewed as PPP's, conflicts of interests lined up against the landowner within Legislation applied by the Land Court system become more easily appreciated.

The second major issue surrounding resource exploration and development is overlapping tenements. A tenement is a lease for exploration granted to a resource company to explore for minerals underground. Tenements are restricted to particular exploration and development

activities. For example, a gas exploration company is granted a lease or tenement to search for underground reservoirs of gas, whilst a coal exploration lease or tenement restricts exploration activities specifically to coal deposits. It is common for gas and coal tenements to overlap on a single property. There is no requirement for tenement holders to explore and finalize findings. Failure of legislation to require disclosure of findings on a property, land tenure uncertainty quickly converts to market failure for the duration of a tenement.

Whilst exploration tenements remain in place, land tenure is rendered high risk and valueless. No sensible buyer would purchase a property lying within a tenement. As there is no defined time for development of the tenement, a property buyer does not know how long ownership will be retained once proven commercial deposits of minerals are found. The existing owner then remains owner at the "pleasure" or discretion of one or more exploration companies and duration of a tenement which has the potential to remain in place for fifteen years. It is ownership uncertainty that strips land of normal "market" value.

Development of underground mineral projects can take years to effect. If the land owner happens to be of retirement age or approaching retirement, then quality of life over remaining years of healthy ageing becomes a real social issue. Sale of the property at a value that would allow enjoyment of retirement years might well be denied because of the tenement holders commercial objectives. A lower quality of life over retirement years is then forced upon the powerless landowner unlucky enough to own the property in the first place. Growth and wealth accrual to the local community become meaningless to the unfortunate landowner. Security of retirement income is a Commonwealth policy area that must embrace uncertainty of retirement income for this type of dislocation in resource rich regions.

Farm Viability

Farm viability depends upon farm gate output prices rising in line with prices in the wider community. Of particular concern to farmers and rural policy is the long term decline in industry terms of trade (ratio of prices received to prices paid). In 1979/80 before structural reforms began, farmer terms of trade had an index value of 162.7. In 2009/10, the same index value was 91.5. Structural reform has overseen farm terms of trade decline by 43.8% or 1.9% compound annually. Real net value of farm production has declined from a peak index value of 278.7 in 1979/80 to a low of 105.4 in 2008/09. Prior to 1980's structural reforms, farm debt was 34.3% of the gross value of farm production. By 2009/10, farm debt was 154% of the gross value of farm production. By any common sense measure, rural structural reform has been a failure and now threatens national food security.

Rural policy has failed Australia because a well know law in economics has been ignored by free traders. Engel's Law is the work of the nineteenth century economist Christian Engel and states that in a mature growing economy expenditure on food declines as a percentage of income. Engel's Law can be found as a topic in modern microeconomic text books. The law applied quantifies the relationship between consumer's income and expenditure on commodities. The operation of Engel's Law in Australia is easily demonstrated from household final consumption expenditure. Expenditure on food expressed as a percentage of total consumption expenditure is as follows;

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Year	Food Percentage		
1949/50	24.4%		
1969/70	19%		
1989/90	15.1%		
2009/10	11.1%		

Structural reforms of rural industries of the 1980's and 1990's sought to overcome Engel's Law through international competition, efficiency, and productivity improvements. Serious policy failure has been the result.

Labour Dislocation

The fragility of rural Australia depicted in the above statistics compounded by the resources boom has produced a toxic alchemist's mixture within regional Australia. The ability of rural industries to pay reasonable real wages sufficient to attract labour to agricultural regions is constrained by fragility of the sector. Consequently, cashed up mining and exploration companies easily secure tradesmen be they town or farm based.

Wage stability in deregulated labour markets can be managed with migration to maintain labour supply sufficiently ahead of demand. To date, 457 visas provide a solution to Australia's skills shortage. This satisfies Australian industrial policy relying upon Friedman's natural rate of unemployment which defines full employment at 4.5%-5% unemployed. The skills debate therefore becomes politically managed when in reality it is about policy failure

The starting point for discussing the complex skills shortage must be time series employment data

Table 1

Employment by Sectoral Percentage.

year	Rural	Mining	Manufacturing	Other
1979-80	6.5%	1.3%	20.1%	72.1%
1982-83	6.6%	1.5%	18.4%	73.5%
1989-90	5.4%	1.35	14.7%	78.5%
1999-2000	4.9%	0.9%	12%	82.2%
2009-10	3.3%	1.6%	9.1%	86%

Source ABARE Commodity Statistics 2010, p. 3

Historic percentage data analysis confirms the changing structure of Australian employment. Over almost three decades, mining employment as a percentage of total employment has remained relatively stable whilst rural and manufacturing sectors have contracted. "Other" has become the

employment growth sector. Employment contraction has occurred in industries which are central training sectors for skills required by the mineral sector. Employment growth in the "other" sector will be dominated by low skilled service sector employment in tourism, wholesale and retail industries. This mismatch of skills and labour demand is a direct outcome of discretionary macroeconomic policy. Failed industrial policy is now expressing itself in labour force conflict across rural and regional areas experiencing mineral exploration and development.

The collapse of skills training sectors accompanied by rising demand for labour in the mineral sector is identified in Table 2. Since 2002-03 rural employment has contracted by 1000 workers and manufacturing by 67,000. At the same time an 85,000 surge in mining labour demand occurred. Given the heroic assumption that all displaced workers flowed to the mining sector, there was still a 17,000 shortfall of workers required in the mining sector. Employment growth in the "other" category (construction, services, finance, and the public sector) proved incapable of training the necessary skilled labour force. What was required since 2002-03 was an expansion not contraction across the skills training sectors: manufacturing and rural.

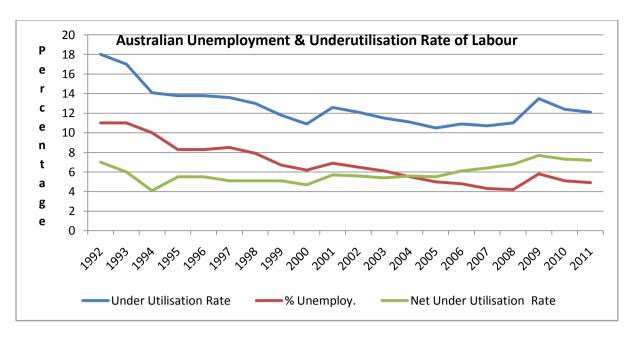
Table 2
Employment ('000)

Year	Rural	Mining	Manufacturing	Other	Total
1979-80	404	81	1242	4460	6187
1982-83	417	96	1163	4645	6321
1989-90	426	104	1152	6141	7822
1999-2000	436	78	1057	7264	8835
2002-03	370	88	1073	7848	9380
2009-10	369	173	1006	9479	11027

Source; ABARE Commodity Statistics 2010, p. 2

Graphs 1 and 2 below provide compelling evidence of failed structural reform of the Australian economy post 1980. Indeed, from graph 2 it can be identified that the underutilization rate of labour was 8%-8.5% in 1978 with an accompanying unemployment rate of 6.2%. In May 2011, the underutilization rate was 12.1% with an accompanying unemployment rate of 4.9%. By any common sense assessment, the labour market performance was abysmally worse than in 1978 when unemployment was considered a major policy issue. All that has changed has been the political presentation of labour market data.

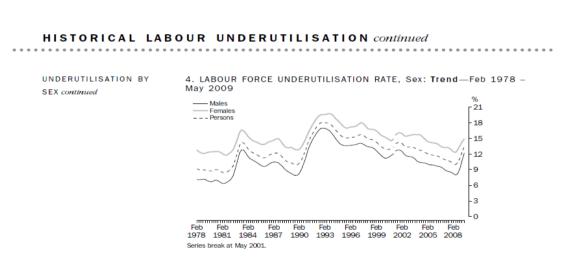
Graph 1



Compiled from ABS Labour Market Statistics 6105.0, various issues

The important curve in Graph 1 is the net underutilization rate. This curve captures the failure of Australia's work for the dole and earn or learn polices. More importantly, it identifies both an inefficient use of labour a pool of labour from which skills can be developed over time with more appropriate labour market policies. More appropriate policy can provide skilled labour to meet the skills short fall in both rural and mining from Australian workers.

Graph 2



Analysis of the difference in trend labour force underutilisation rates over time reveals that most of the difference between the rates for males and females is a result of the different levels of underemployment for these two groups. Graph 5 reveals that the female trend underemployment rate has been on average 3.7 percentage points higher than the rate for males. This is largely explained by the greater and increasing participation in part-time employment by women relative to men, since the majority of underemployed people are employed part-time. During the period an average of 41% of

Real incomes of the under employed and unemployed rise when they live in environments in which there is ready access to publically provided services such as transport, education, health, and larger retail distributors of food. Farmers have difficulty in providing nominal incomes attractive enough to encourage workers away from real incomes available to urbanised pools of underutilized labour. Meanwhile, cashed up mining enterprises, "buy" available skills wherever they are available. In rural communities, this becomes a source of labour dislocation and sectoral friction.

Industry itself is not without blame in the skills shortfall. Inherently, there is a hangover from the high unemployment levels of the 1980's and 1990's. In those times industry did not have to train apprentices, they simply rang the CES and pulled tradesmen off the unemployment heap. A business culture of expecting unemployed tradesmen on tap appears to have evolved .Now industry stridently demands that skilled labour should be waiting the pleasure of business. Industry demands that either the taxpayer train workers or they must use 457 visas. This culture must be addressed at Commonwealth policy level.

Economic Philosophy

At the centre of all this analysis sits economic philosophy. In December 2005, Bill Pritchard wrote: "During the 1960's and 1970's there was a seismic shift in the intellectual environment of-----agricultural economists. The discipline ---became more centred on the influence of the Chicago School paradigm. By the 1980's these views had inculcated key policy arenas within the Australian Government"

Prichard

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Milton Friedman's modern monetarism became the genesis of structural reform of not only agricultural policy; but, also industrial and monetary policies.

Friedman's economic philosophy now poses a threat to not only national labour skills; but, also national food security. Post 1980's rural policy concentrated upon the top 20%-25% of farmers producing 70% of production. As structural reforms move Australia inevitably towards becoming a net importer of food, the threat of emerging Australian *food insecurity* brings into sharp focus the need to dramatically change policy direction. Policy must move beyond its narrow focus upon a hand full of farmers and large mineral companies. Skilled labour will be required to ensure the other 75% - 80% of farmers continue to produce the final 30% of production. The fragile farm sector will be unable to meet the real income demands of labour necessary to secure a reliable rural work force. Income distribution must also engage the interests of federal parliamentarians

Conclusions

Beyond media and political agitation, underlying mineral exploration and development are substantive economic and social issues that deserve as much consideration as salinity and aquifer health. These issues have been briefly canvassed within this discussion and comprise: Food security, certainty of tenure, farm viability and labour force dislocation. It is hoped that the Inquiry will agree

with these views and consider the implication contained within the discussion. Any sound solution must embrace a change in policy direction. Policy directional change will in itself require a review of contemporary economic orthodoxy which has at its centre Milton Friedman's modern monetarism.

From 2002-03, two decades of structural reform have proven incapable of adjusting the economy to the needs of changing industrial growth patterns particularly in labour markets and regional resource allocation. Commonwealth policy has fudged the truth by opting for 457 visas to disguise policy failure; and, wound up rhetoric of boom times from mineral development. Meanwhile, income distribution has become inequitable and unjust.

Resource allocation and land tenure dislocation emanating from mineral exploration and development has the potential to threaten national food security. Compounded by native title and environmental legislation, the importance of regional agriculture to national food security is subjugated to the rhetoric of national resource boom times. Two decades of structural reforms are now being exposed as incapable of adjusting the underlying economic system to protracted internal dislocations. It is time to reassess the direction of economic policy and the unhealthy reliance upon the resource sector