9. Implications for regional development

The analysis in the preceding chapters details the relative social and economic status of the Pilbara Indigenous population at the commencement of major expansion in the mineral resources sector and associated regional impacts. In the immediate context, it provides an essential quantum to discussions of need, aspirations, and regional development capacities for Indigenous, corporate, and government stakeholders. In future contexts, it provides a benchmark against which the success or otherwise of intended and unforeseen impacts may be measured. Inevitably, and purposely, it constitutes a cross-sectional representation of conditions at the beginning of the twenty-first century, although, where possible, comparison is drawn with the prior situation of Indigenous people at the outset of the contemporary period of Pilbara mining development in the 1960s.

The basic message conveyed is that little has been achieved over the past four decades in terms of enhancing Indigenous socioeconomic status. Progress is now possible on the basis of planned economic development and corporate interest in pursuing Indigenous engagement, but major efforts are required from all three broad stakeholder groups (Indigenous organisations, miners and governments at all levels) in order to ensure that this occurs. The primary dynamic dictating this imperative is the fact of sustained Indigenous population growth against a background of low Indigenous economic status and limited human capital for mainstream economic participation.

Demography

It goes without saying that Indigenous people have by far the longest and most enduring presence in the Pilbara. It is equally true that, aside from the initial upheavals and demographic impacts of sustained contact with Europeans that commenced in the late nineteenth century, the period since the 1960s has seen major shifts in the demographic make-up of the region. For one thing, viewing the Pilbara as a whole, Indigenous people have now become a minority in their own lands following the influx of a predominantly non-Indigenous industrial workforce. For another, significant distributional change has occurred insofar as a formerly widespread Indigenous population has become relatively concentrated in coastal towns and urban centres, though with some recent return to traditional lands. However, the key issue at present, and increasingly into the future, is that regardless of what transpires in terms of regional economic fortunes, the Indigenous population of the Pilbara is set to expand for decades to come. Numerically, the focus will be in growth at younger ages; proportionally,
it will occur mostly at older ages. In combination, these expanding cohorts present major challenges for social and economic policy.

As for the non-Indigenous population, major questions surround future (and even current) numbers. The primary variable here is labour demand as dictated by mining and related economic developments, together with the composition of associated workforces in terms of construction-phase, FIFO, and resident components. While the indications are for a renewed increase in non-Indigenous numbers (after recent decline), current demographic parameters indicate that despite this the Indigenous share of the regional population will increase over the next decade to a point approaching one-fifth of the total.

Jobs and economic status

Despite 40 years of substantial economic development in the Pilbara region, the labour force status of Indigenous Pilbara residents has barely altered. While the numbers in work have undoubtedly increased, so has the size of the working-age population. As a proportion then, the Indigenous employment rate remains well below 50 per cent. This contrasts sharply with the rest of the Pilbara population whose primary reason for being in the region is to work. It is even more stark when set against the FIFO and temporary components of the regional workforce whose social and economic allegiances lie elsewhere – a situation not lost on many local Indigenous people as noted in a number of the interviews.

Also apparent from many of the interviews, and confirmed to some degree by the age distribution of labour force status, is a sense that the past 40 years have witnessed a generational attrition in terms of economic engagement as the trades skill-base is relatively focused on older adults, while many younger people find themselves ill-equipped for workforce participation due to low literacy and numeracy, lack of qualifications and work experience, substance misuse and, consequently, low motivation (see also George 2003).

A number of crucial questions arise out of all this for both the mining industry and Indigenous stakeholders. First of all, is the local supply of Indigenous labour sufficient to meet the employment targets that have been set? Second, what is the composition of potential labour supply in terms of human capital and related work-readiness? Finally, what is the scale and nature of intervention necessary to raise the level of Indigenous economic participation in the face of growing numbers moving into the working-age group? In short, what does the future Pilbara labour market look like, and where, in terms of numbers and composition, are Indigenous workers likely to fit?

There is a further question that is more universal in scope than the specifics of labour force participation, but it nonetheless arises out of the poor employment status that has been revealed because of the links between this, low incomes, and consequent high welfare dependency. This issue concerns the cost to
government, and to people themselves, if social and economic conditions remain the same as currently experienced. Basically, the impost in terms of providing income support and other welfare payments, as well as program support in areas of health, housing and CDEP in particular, and the endless churning through the criminal justice system, will simply escalate in line with the growth in population. On the other hand, if Indigenous people had more jobs at higher occupational levels, then they would be able to meet many of the basic needs that governments now provide for, from their own incomes, with the added bonus that many of the more negative fiscal expenditures would diminish.

Some estimate of this opportunity cost to government of simply continuing business as usual is provided here in the form of welfare dependency rates and associated estimates of dollar amounts. What is not costed though, is the potentially greater public impost of excess disease burden, infrastructure replacement, and foregone educational outcomes due to the continued and growing marginalisation of Indigenous people within the regional economy. It is important to recognise that the policy options for addressing this situation are not cost neutral – expenditure will grow either in response to declining economic status, or in order to enhance it. Whatever the case, a fiscal response is unavoidable.

An essential component of the drive to open up areas of the regional labour market to Indigenous employment is the need to tackle much deeper structural hurdles if Indigenous people are to successfully compete for skilled mainstream jobs with other residents (and potential in-migrants, both Indigenous and non-Indigenous). These include poor literacy and numeracy levels, which in part reflect low school participation and attendance levels. Also for noting is the fact of continuing high adult morbidity and mortality – if a 15-year-old Indigenous male in the region has only a 50 per cent chance of reaching retirement age, then the physical limitations on prolonged and full participation in the workforce become all too apparent, especially if we add to this the high rates of morbidity and disability that are prevalent throughout the prime working ages. One very practical implication of this premature mortality is a reduction in lifetime earning capacity, including the accumulation of superannuation. This diminishes the ability to accumulate assets and reduces the flow of intergenerational wealth, thereby perpetuating poverty traps.

Of course, not all regional aspirations point in the direction of mainstream workforce participation. With growing access to traditional lands, many people are making lifestyle choices and placing their emphasis on continuing ties to country, and the customary social and economic activities that stem from this. Where this intersects with mining activity, as in the case of heritage work, this may provide a source of meaningful engagement along with intermittent income. However, there is a need to explore other means of commercialising the customary
sector in ways that require, rather than hamper, its sustainability. The arts industry and cultural education are obvious examples, but land management and work in the Indigenous organisation sector may provide more labour intensive and potentially widespread opportunities. Elsewhere in remote Australia, this combination of work in the private, public, and customary sectors has been referred to as a hybrid economy (Altman 2005). Whatever the case in the Pilbara, against the background of an expanding working-age population, the additional work opportunities generated by such activities should be seen as an essential component of the overall push to raise the level of Indigenous labour force participation. It is unlikely that the mining industry can achieve this alone.

The targets that have been set by Pilbara Iron and others in the region to enhance the level of Indigenous employment are difficult to translate into a whole-of-region estimate of labour demand due to the lack of a comprehensive database incorporating information from all key employers in the region. However, from the information provided by Pilbara Iron, and from what can be gleaned from BHP Billiton public documentation, it appears that these two largest employers combined require an additional 665 Indigenous workers over the next eight years in order to meet their targets. If achieved, this would double the present (2006) number of Indigenous people employed full-time in the mainstream Pilbara labour market. The supply-side questions that stem from this concern the limits to achievability, and the implications (even if achieved) for overall socioeconomic status.

**Education and training**

The polarisation of employment opportunity in the Pilbara between Indigenous and non-Indigenous people has many of its antecedents in relative educational status. While the historic reality is that many older Indigenous adults in the region have never attended school, it is equally true that many of those presently of compulsory school age do not attend school on a regular basis. Also apparent is a relative lack of progression through the school system to the crucial years of matriculation. While indicative data exist, one concern is that data on the practical outcomes of low school participation, as measured by literacy and numeracy achievement, are not publically available at the geographic scale of even the whole Pilbara, let alone that of its sub-components. Of course, the Western Australia Department of Education knows the details along with individual school boards and parents, but from a regional planning perspective where an attempt is being made to establish the overall quantum and composition of needs, as well as the interconnections between human capital variables and economic outcomes, this presents a significant gap in public knowledge.

Despite relatively low school participation, it remains the case that an estimated 2800 Indigenous adults in 2006 would have had some level of schooling through
to Year 10 or above (although only 604 would have achieved Year 12). While the appropriate cross-tabulation has not been established, it seems reasonable to assume that the other estimate of almost 2100 Indigenous adults in work in 2006 (including CDEP) would be drawn from this ‘educated’ group, leaving some 700 individuals with Year 10 or above either unemployed or not in the labour force. It also means, of course, that an additional 1500 or so individuals also exist who have schooling levels below Year 10 and who therefore (with prevailing school attendance rates and literacy/numeracy achievement) present a sizeable remedial group if they are to be prepared for mainstream workforce participation.

Of course, age at leaving school, and even highest year of schooling completed, does not necessarily equate with grade level achievement. As the indicative WALNA data show, at best barely two-thirds of Indigenous Year 7 students in very remote parts of Western Australia achieve national benchmark levels in reading. On top of this, 286 Indigenous students in Year 8 to Year 10 regularly attend school, while only around one-third of these will continue on to Year 12 (95 students). If even a fraction of these are achieving at below standard levels, then this means that the numbers exiting the Pilbara education system with competencies at Year 12 level are almost certainly less than 100 each year. Against the estimated requirements for Pilbara Iron and BHP Billiton alone for an additional 665 Indigenous workers by 2013 to meet Indigenous employment targets, this suggests that the local flow of individuals with capacity to compete in the mainstream labour market is barely sufficient to match labour demand.

Somewhat similar calculations can be made in regard to VET sector output, although here the indications are more promising. While module load completion rates do not provide a direct measure of successful final outcomes in terms of producing qualified individuals, if the Indigenous rate observed for the mine hinterland is applied to Indigenous enrolments, then this suggests a potential future output of around 300 individuals emerging from the VET system, mostly at certificate levels I to III. While this would convert to an increase in the current estimate of 130 Indigenous adults in the region with post-secondary qualifications, many of these may well be the same people. Also, it is not known how many of those engaged in training already form part of the regional workforce, either with jobs in the mainstream or via CDEP.

**Health status**

Reference has been made already to the economic impacts of poor health status and high adult mortality. In the social epidemiology literature, this is a well-established self-reinforcing relationship (Berkman & Kawachi 2000; Marmot & Wilkinson 1999), and at least part of the project to enhance Indigenous participation in the economy of the Pilbara is a need to address the effects of low socioeconomic status on ill-health, as well as the other way around, especially in terms of ensuring an adequate start in life (Zubrick et al. 2004). Estimates
generated here of the numbers likely to be excluded from regular (or even any) employment due to poor health point to a figure that could be approaching the size of the mainstream Indigenous workforce. There is imprecision here owing to data and time constraints, but given the potential enormity of this observation, more work needs to be done to establish the true scale of health impacts, much in the same way that Rowbottom et al. (2003) were able to derive a regional estimate of diabetics.

With reference to the life expectancy estimates for Indigenous people in the Pilbara – 52 and 55 years for males in the East and West Pilbara, and 60 and 63 years for females in the East and West Pilbara – the physical limitations on prolonged and full participation in the workforce become all too apparent. If we add to this the fact of relatively high Indigenous morbidity rates commencing in young adulthood and rising throughout the prime working ages, then a pattern emerges of severe physical constraints on the ability of many in the community to engage in meaningful and sustained economic activity. From a labour market perspective, it is likely that these negative effects of poor health status commence long before individuals are eligible to join the workforce, as suggested by relationships, long-established, between the poor health status of Indigenous people and below average school performance. There is also the likelihood of less direct impacts on workforce participation such as the prospect that many individuals do not seek work due to responsibilities in caring for sick relatives.

Among the issues underlying health status, this study emphasises the significance of ongoing backlogs in achieving adequate environmental health infrastructure, of the need for improved outcomes from education and training, of the difficulties of achieving better nutritional status in the population given the high cost of food and low incomes, and of the ongoing debilitating effects and social disruption caused by excessive alcohol consumption. This latter observation is underlined by the the 1994 NATSIS which revealed that 89 per cent of respondents in the South Hedland ATSIC region regarded alcohol as the main local health problem (the second highest rate in the country) (ABS 1996a: 64). All of these issues reflect on social and economic conditions in the region that are the focus of policy intervention. This notwithstanding, many reported Indigenous health outcomes in the Pilbara remain notably behind the rest of the state and undermine the capacity for participation in regional economic development.

**Crime**

One link between recidivism and the regional society and economy is the degree to which convictions and interaction with police, courts and prisons reduce individual chances of participating successfully in the regional economy. Criminologists have long been interested in the relationship between unemployment and crime, though with a focus mostly on examining the effect
of unemployment on criminal behaviour (Chapman et al. 2002; Weatherburn 2002). In contrast, economists interested in the Indigenous labour market have considered the effect of a criminal conviction on an individual's employment prospects, with Hunter and Borland (1999) finding a strong negative impact of arrest. Certainly, in an industry as safety-conscious as mining, prior conviction and any ongoing substance misuse can be highly deleterious.

Accordingly, the summary statistics from police records, court records, and prison records for residents of the Pilbara presented here allow for some estimate of the population for whom contact with the police and a criminal conviction might represent a barrier, or at least a brake, on social and economic participation. Research on the factors underlying high arrest rates among Indigenous people and the effect of these on employment prospects indicates that if governments are concerned about Indigenous social and economic wellbeing then a priority should be to ensure that they stay out of the criminal justice system (Hunter 2001; Hunter & Borland 1999). Clearly, in the Pilbara, this has yet to be achieved as the statistics indicate high levels of recorded contact with police and subsequent conviction via the courts system.

Among the more telling facts are the following: the total number of unique Indigenous individuals arrested in a year (1047) is almost the same as the number in mainstream employment; virtually half of all Indigenous males aged between 15 and 34 years of age are arrested at least once each year; and around 313 Indigenous adults are subject to some form of detention or supervisory order at any one time. These represent quite substantial impacts on regional participation. However, if just three categories of offence were eliminated (traffic, public order, and offences against justice procedures, all of which are regulatory in some way), then cases brought before the criminal justice system would be halved.

Among the factors that contribute to high arrest rates among Indigenous people, high unemployment (or lack of meaningful work) and poor educational achievement have been identified as the most prominent (Hunter 2001), although the effects of drugs and alcohol and a breakdown in adherence to rules of customary law are also factors that emerge from the regional interviews and resonate with the findings of Pilbara-based research by the Law Reform Commission of Western Australia (Trees 2004). As we have seen, all of these pre-requisites for high arrest rates are prominent among Indigenous people in the Pilbara.

For example, from the hospital separations data it is apparent that excess use of alcohol is prevalent, so it is not surprising, as already noted, that 89 per cent of respondents to the NATSIS in the South Hedland ATSIC region identified alcohol as the main local health problem (ABS 1996a: 64). At the same time, high rates of injury reported in hospitalisation data are consistent with levels of assault reported to police, as is the fact that 72 per cent of NATSIS respondents
considered family violence to be a major problem (ABS 1996a: 70). Such observations point to a cycle of social dysfunction at the family and community level that is reflected in the level of interaction with the criminal justice system and in the statements of many interviewees.

One line of argument suggests that by deliberately seeking incarceration via their actions, Indigenous youth are engaging in an alternative rite of passage to manhood (Biles 1983), although Ogilvie and Van Zyl (2001) view detention not as a rite of passage but rather as simply another venue for the construction of identity among marginalised and bored adolescents who are desperate for change to their routine. Whatever the case, there is no doubt that individual efforts to break into the regional labour market will be hampered by the lack of a steady and progressive acquisition of work skills and experience that are so necessary for successful engagement.

The future

Despite unprecedented labour demand in the Pilbara, the capacity of local Indigenous people to benefit from this remains substantially constrained by their limited human capital. Not that mining employment is the universally preferred option, with other avenues and priorities expressed for participation in the regional economy. The point here, though, is that wherever participation is sought via the mainstream labour market, then many in the Indigenous population will continue to experience structural disadvantage in the absence of substantially enhanced intervention to redress historic exclusion.

Of course, in pursuit of a social licence to operate, major corporates are already active in engaging Indigenous workers. But such is the depth of supply-side disadvantage, that a major challenge lies ahead if they are to meet stated targets (certainly in a collective sense) given that they will come close to exhausting the available supply of local employable labour without investing further in remedial training and possibly lowering the ‘fitness for work’ requirements. Even then, if current targets were to be achieved, the additional jobs created in fulfilling employment quotas would suffice only to keep pace with the growth in Indigenous working-age population. Thus, while much might be accomplished by the mining sector in the years ahead in terms of enhanced Indigenous engagement, little change might be discernable in overall regional economic status, with a large component of the population remaining detached from mainstream opportunities.

The constraints on participation implied by this scenario range across the spectrum of social and economic conditions. To indicate the scale of some of these that have been quantified using public access data, Table 9.1 provides estimates of labour force exclusion in 2006, bearing in mind that the adult population for that year is projected to be 4759. What this underlines is that the
vast majority of Indigenous adults in the Pilbara do not have full schooling, or a qualification, around half of adults remain outside the labour force, many are hospitalised at any one time, others are subject to chronic conditions requiring strict management regimes, many again (especially young males) are arrested and incarcerated, and feeding into this adult realm are relatively low achievers from the education system. In any event, the potential for prolonged and productive workforce participation on the part of young people is severely curtailed by premature mortality.

Table 9.1. Summary select Indigenous indicators of the scale of labour force exclusion: Pilbara region, 2006

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population aged 15+</td>
<td>4759</td>
</tr>
<tr>
<td>Has no post-school qualification</td>
<td>4200</td>
</tr>
<tr>
<td>Has less than Year 10 schooling</td>
<td>1500</td>
</tr>
<tr>
<td>Not in the labour force</td>
<td>2190</td>
</tr>
<tr>
<td>Hospitalised each year (all Indigenous persons)</td>
<td>2800</td>
</tr>
<tr>
<td>Has diabetes (25 years and over)</td>
<td>1020</td>
</tr>
<tr>
<td>Has a disability</td>
<td>1020</td>
</tr>
<tr>
<td>Arrested each year</td>
<td>1050</td>
</tr>
<tr>
<td>In custody/supervision at any one time</td>
<td>310</td>
</tr>
<tr>
<td>Achieving Year 7 benchmark literacy (current school attendees)</td>
<td>60%</td>
</tr>
<tr>
<td>15 year old males surviving to age 65</td>
<td>&lt;50%</td>
</tr>
</tbody>
</table>

From a policy perspective, levels of economic exclusion on the scale indicated here raise questions about the adequacy of government resourcing to meet the backlog of disadvantage that has so obviously accumulated in the Pilbara region. Analysis elsewhere in remote Australia has found this to be substantially wanting in important areas of capacity building such as education (Taylor & Stanley 2005). From a grass roots perspective, they raise questions about how Pilbara Indigenous peoples view their future prospects, and what factors they perceive to be contributory. Though inevitably partial at best, [two] final comments from members of the Pilbara Indigenous community provide some insight:

**Interview segment 59**

The future really comes back to what we are going to do now to fix the foundations up. If we are going to let it go as it is, and keep taking all the power away from parents, keep taking the power, and they need to restore our law, and they put that spirit and head back into the people and then I think you’ll see a whole lot different … start to give em power back so they can contribute to their mob, their tribe, to try and curb the way everything is going at the moment. So on two sides, on the local side here, I’m trying to restore, in the community, all the foundations, fix all that so we can have a good foundation and grow again. The way that history has taken that foundation out from under us, that tree is dying, and it will keep dying if we let it keep going. It’s about us now altogether, government. Government is the main one, I can do all I can
here, but if government, if it’s not coming from the top then I am fighting a losing war. And that has to be not just in one community it has to be across the board, giving the authority back where it should be.

We need to go back to that 200-year business, going back and sitting on equal terms, and then we’ve got a bright future, all of us because we’ve dealt back here and fixed this foundation. If we don’t then we haven’t got a good future because its just going to carry on the way it is and things will get worse. Where is our economy going then? My people might just go bad. You hear talk of it, people sit around drinking and stuff, they are talking sort of things. Why don’t we go and do this, they all ripping our country up and we getting nothing back from it, just chicken feed. It’s society now, the metropolitan areas and even the Pilbara are getting bigger, and what’s happening to our community here, and where is all the ore coming from, here. Everything, all the mining company, what are they giving back to the people? We are missing out on the luxury that is coming from our land, and other people are enjoying it.

Interview segment 60

The economy is growing here and there is so much that could be done, so much. I’ve always found that the Pilbara has always been just mining and Aboriginal. If you take out all the local businesses and local town that doesn’t deal with mining you are buggered, its just mining exploration, and it’s the economy for the Australian people, but you can’t get away from the fact of the traditional Indigenous owners, so you will always find Indigenous and mine people hand in hand, and that’s part of our lifestyle since early 1960s whenever it started. The history of mining Indigenous relationships is sad, less access to land, less access to jobs, and we don’t have the skills, the skills from the education and the school area, they’re the major problems. I’ll be frank, I’m in my forties, and I look at what’s behind of me. I was taken away and I went to school. But education here is at a low level, and its nowhere near what our future has to have here, and that’s mining rights and knowing about the land, and what you have to do with the mining, and the government. Unfortunately the education failed us, it did, it failed us big time. So we have to continue on living until we are 60 years of age to continue working because our generation doesn’t have that skill. And that’s where we need to get that skill upgraded for our future.

We have elders and that age bracket of people who are 40 upwards who have the knowledge and education of working with mining. They are the ones that are speaking for the people and their children, instead of us being out there and talking to them and training them so they can understand what’s expected of them when we die. We are doing it in our tradition and culture and ceremonies, but not, in what I call it, the Western world. But what of the education system of working our people, in knowing what you are about, what do you do, what do they do, what’s their input into it. We know it’s all survey and heritage, why
haven’t we got Aboriginal anthropologists, why haven’t we got any Aboriginal person sitting up from our country in that mining company, being our liaison officer? Why isn’t that so? You see what I am saying? It’s not being handed down to the next one, it’s not happening, I don’t see it happening.