

1. Profiling outcomes

In developing the ARC linkage project *Indigenous Community Organisations and Miners: Partnering Sustainable Regional Development* between the Centre for Aboriginal Economic Policy Research (CAEPR) at the Australian National University (ANU) and Rio Tinto, it was noted that the number of agreements between mining companies and Indigenous community or regional organisations had grown substantially over the past two decades. It was also noted that a degree of optimism prevailed in the early 1980s that agreements such as these, many with significant financial benefit packages, would make a difference to the marginal economic situation of Indigenous beneficiaries. However, research to date indicates that for a complex set of reasons, Indigenous economic status has changed little in recent decades – dependence on government remains high and the relative economic status of Indigenous people residing adjacent to major long-life mines is similar to that of Indigenous people elsewhere in regional and remote Australia. This unexpected outcome was clearly demonstrated in the Kakadu Region Social Impact Study (KRSIS) (Taylor 1999), and more recently in regional profiling work associated with the Argyle Diamond Mine Participation Agreement (Taylor 2004a).

According to Altman (2001), this situation of stasis partly reflects the limited capacity of Indigenous community organisations both to cope with the impacts of, and take advantage of, large-scale operations. On the other hand, it is also seen that such organisations and the people they represent may have ambivalent responses to the potential cultural assimilation implied by their increasing integration into a market economy and its monetisation of many aspects of social life. A third key factor proposed is the attitudes and responses of mining companies and governments, and their inability to comprehend the extent of historic Aboriginal disadvantage and strain on the social fabric of societies so radically affected by colonisation.

Partly in response to these issues, there has been a concerted effort in recent years by some major mining companies to address aspects of this regional development problem. Of particular relevance to the present study is a growing recognition that sound community relations and the pursuit of sustainable regional economies provide the necessary foundations for a social licence to operate – a factor of rising market significance (Harvey 2002; Trebeck 2003). In establishing this licence, the construction of statistical baseline profiles of social and economic conditions within mine hinterlands (with a focus on establishing the relative situation of Indigenous populations) is regarded as a crucial input by significant players in the mining industry (Harvey 2001; Harvey & Brereton 2005). Accordingly, Indigenous representative bodies (such as Land Councils) have shown interest in supporting such activity as in the case of the KRSIS

(Taylor 1999) and the Argyle Diamond Mine Participation Agreement (Taylor 2004a). Such profiles assist in the formulation and subsequent monitoring of company and Indigenous stakeholder actions designed to increase Indigenous participation in regional economies. Specifically, they help to establish the range and quantum of needs for regional planning, to identify opportunities and constraints for enhanced participation, and to assess the effectiveness of actions undertaken.

The timing of this study, then, is deliberate for two reasons. First, it seeks to respond to the call for detailed profiles of regional populations set within a framework of understanding the dynamics of Indigenous labour demand and supply. Second, it comes at the outset (or somewhat into the commencement) of potentially the largest escalation in mining activity in Australian history that has emerged primarily as a consequence of the successful procurement of export contracts (mostly to China) by Pilbara-based transnational resource companies. Given the scale of planned new mineral output, new infrastructure development, and associated regional multipliers, major social and economic impacts on Indigenous communities in the Pilbara region are to be expected. Admittedly, anticipated developments do not always eventuate, not least in this particular region (Linge 1980), but such is the scale of committed investment and associated infrastructure that even sub-optimal outcomes will make their mark. In order to anticipate, plan for, and subsequently assess the impact of these developments, it is timely that a profile of existing socio-economic conditions in the region be undertaken. Accordingly, this study develops and presents social indicators for the Indigenous and non-Indigenous populations of the Pilbara region. Its aim is to assist in the implementation and subsequent monitoring of company and Indigenous stakeholder activities aimed at meeting particular goals in terms of Indigenous participation in the regional economy.

To this extent, the construction of a statistical profile falls analytically within the realm of Social Impact Assessment, this being an area of systematic inquiry which seeks to investigate and understand the social and economic consequences of planned change and the processes involved in that change (Ross 1990). Analysis of this type has an established history in Western Australia, most notably in the East Kimberley where (as the East Kimberley Impact Assessment Project under the direction of the late H.C. Coombs) it emerged as an essential feature of the public policy response to the initial development of Argyle Diamond Mine (Coombs et al. 1989; Dillon 1990). Surprisingly, given the much larger scale and greater longevity of mining activity in the Pilbara, no comparable assessment work has been conducted in this region.

Whilst it is fair to say that the East Kimberley work occurred largely at the insistence of local Indigenous communities (Dillon 1990), it is equally true that the need for monitoring of Indigenous and regional social and economic

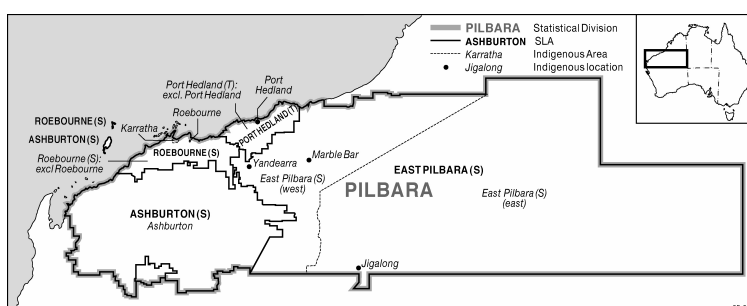
conditions is now enshrined in Rio Tinto policy governing relations with local communities (Harvey 2002), and is implicit in the forward planning strategies of companies such as Pilbara Iron as expressed in its Indigenous Employment Strategy (Aboriginal Training and Liaison unit (ATAL) 2005). Likewise, the content of Indigenous Land Use Agreements across the Pilbara between mining companies and traditional owners invariably include stipulation of opportunities for employment, training, education, and enterprise development. Accordingly, the current political economy of mining in the Pilbara demands that Indigenous communities are positioned to more fully avail themselves of economic opportunities as they emerge (Harvey 2002). The strengthening of activities by Hamersley Iron's (now Pilbara Iron's) ATAL unit is one important manifestation of this structural change that has relevance to the current exercise.

In line with these developments, the focus of social scientific research on Indigenous peoples and the mining industry has shifted somewhat in recent years away from solely impact assessment towards supporting a social sustainability/regional development agenda that was first mooted by Cousins and Nieuwenhuysen (1984) in their pioneering and wide-ranging analysis of the position of Indigenous people in relation to the Australian mining industry. This paradigm shift is in line with recent corporate restructuring aimed at bolstering the social licence to operate, and it also reflects enhanced Indigenous stakeholder interest in securing increased participation and sustainable benefits (Trebeck 2003). Thus, the task of profiling is now more applied than before with greater focus on establishing the range and quantum of needs for regional planning, and identifying the opportunities and constraints for enhanced participation. For example, a common fallacy is that Indigenous labour force participation in remote areas is low because remote areas have no labour market. The fact is, a substantial mainstream labour market does exist in remote Australia (not least in the mining industry), and the reasons for low Indigenous participation are complex (Taylor 2005a). In attempting to understand this disparity between labour demand and supply, it is necessary to quantify basic components of the regional economy such as those already in work, those who might be employed, and those who (for a variety of reasons) are unlikely to acquire mainstream employment.

The framework for such an exercise in the Pilbara has been the emergence of significant land use (mining) agreements between Rio Tinto (and others) and Indigenous stakeholders, within which there is an increasing recognition that realisation of the benefits of mining to local populations, both in the production phase and beyond, requires the development of a sustainable mixed regional economy. This, in turn, necessitates the inclusion of an enhanced Indigenous capacity to engage and participate in the regional economy either through direct mainstream employment or more traditional pursuits. Such intent necessarily widens the scope of any impact analysis beyond the relatively narrow geographic

focus of individual mining agreements, or company areas of impact, to encompass a more functional definition of 'area affected' based on some measure of regionally integrated social, economic and administrative interaction. The appropriate scale at which this integration is captured for the present study is the Pilbara Statistical Division (SD) incorporating the four Shires of Ashburton, East Pilbara, Roebourne, and Port Hedland (Fig. 1.1). This more or less represents the northern jurisdiction of the Pilbara Native Title Service (PNTS) which is the Native Title Representative Body for the Pilbara under the umbrella of the Yamatji Marlpa Barna Baba Maaaja Aboriginal Corporation (Yamatji Land and Sea Council). It also defines the spatial extent of a population from which any future Indigenous regional labour force is to be mostly drawn.

Figure 1.1. Statistical geography of the Pilbara region



Methods

Two main tasks are assumed under the present exercise. The first is a monitoring role enabled by the provision of a baseline profile of existing conditions against which an assessment of past and future change can be made. The second is a predictive role, or at least an anticipation of the possible effects of proposed developments. Both of these require statistical profiling, which in turn involves analysis and measurement of the social and economic conditions of the population as defined. While these tasks might seem clear enough, the manner in which they have been carried out in particular cases has varied (Coombs et al. 1989; Kakadu Social Impact Study (KRSIS) 1997; Kesteven 1986; Taylor 1999, 2004a; Taylor, Bern & Senior 2000). In the present study, the aim is to establish the relative socioeconomic status of Indigenous people in the Pilbara and to consider the prospects of likely impact on this over the establishment period of current mining expansion (roughly to 2016).

In constructing this statistical profile, a range of data are compiled from a variety of published and unpublished sources including the Census of Population and Housing, and administrative data sets held by Commonwealth and Western Australian government departments, Pilbara Iron, and other regionally-based institutions. Because of the specific focus on generating statistical information,

reference to literature that describes aspects of social and economic life in the region, both past and present, is limited to instances where this provides a key source of statistical data or assists in its interpretation.

The scope of the profile is limited to several key areas that form the basis of policy interest and potential intervention. These include the demographic structure and residence patterns of the regional population, labour force status, education and training, income, welfare, housing, justice and health status. For each of these categories, the aim is to identify and describe the main characteristics of the population and to highlight outstanding features in the data. As far as possible, time series are also compiled to establish the trajectory of recent socioeconomic change. Also, where appropriate, comment is made on the adequacy of coverage and robustness of available data, while comparison is drawn with non-Indigenous people in the region as well as with Indigenous people elsewhere in Western Australia.

In profiling the circumstances of Indigenous and non-Indigenous Australians, analysts rely heavily on census data for many key indicators. This has a number of advantages given the comprehensive scope of coverage and the application of standard measures. However, there are drawbacks too, especially for the Indigenous population. First of all, an over-reliance on five-yearly census data means that information on Indigenous populations required, say in 2006, is five years old. There is also a problem of coverage, both in terms of population numbers and population characteristics. Overall in Australia, the undercount of Indigenous peoples is estimated to be around 6 to 7 per cent, although this varies geographically. Unfortunately, no direct estimate of this variation is established in sparsely settled areas. Non-response to census questions also occurs, with relatively high rates observed for many Indigenous population characteristics. While little can be done about this loss of information, the ABS does establish post-censal estimates of the Indigenous population in an attempt to adjust for undercount and non-response to the Indigenous status question, and herein lies a solution to the first problem of coverage raised above.

The approach taken here is to view the census as a very large sample survey, with the key output being population rates rather than population levels. Rates established net of non-response (on the assumption that the latter are evenly distributed for each population characteristic) can then be applied to population estimates – initially to the estimate for the census year, and then to population projections from the census year on the assumption that the observed rates remain constant. While this assumption of constancy might be seen as unrealistic, it should be noted that one of the (unfortunate) features of many Indigenous social indicators in Western Australia (and more generally) over the past two decades (such as labour force status, income, education, and housing) has been their relative stability (Hunter 2004; Jones 1994; National Centre for Social

Applications of GIS 2003; Taylor 1997; Taylor & Roach 1994). It is also true that social indicator rates, by their very nature, are unlikely to drastically alter over short periods of time requiring, as they do, a substantial shift in levels in order to effect change. This is especially so among rapidly growing populations, such as that found in the Pilbara.

Perhaps more telling, from the point of view of data quality, are concerns about the capacity of census (and other) data to provide a meaningful representation of the social and economic status of Indigenous people in the region. With census data, for example, there are concerns about the cultural relevance of information obtained from an instrument principally designed to establish the characteristics of mainstream Australian life (Smith 1991; Morphy 2002). Thus, having observed the 2001 Census count first hand at a Northern Territory outstation, Morphy (2002) has described the process of enumeration as a 'collision of systems' and concludes that census questions lack cross-cultural fit and can produce answers that are often close to nonsensical. Equally, while social indicators report on observable population characteristics, they reveal nothing about more behavioural population attributes such as individual and community priorities and aspirations. In short, when set against mainstream outcomes they describe the relative condition of Indigenous people, but contain no Indigenous voice.

Accordingly, this form of statistical profiling using mainstream statistical data sources can be seen as a means of 'rapid appraisal' and rightly criticised as lacking community input thereby restricting its relevance and representativeness, certainly from a cross-cultural perspective (Birckhead 1999; Walsh & Mitchell 2002). Thus, as an adjunct to the compilation of statistical information, the current exercise incorporates qualitative data gathered by semi-structured discussions with randomly selected Indigenous informants. The aim here was to elicit perspectives on the types of opportunities and constraints that local Indigenous people consider significant in terms of their participation in the regional economy. It was initially proposed to undertake these interviews in a number of locations across the Pilbara. However, given the time constraints of just 10 days fieldwork, and the vastness of the study region, a total of just 25 interviews were conducted mostly within the central Pilbara (as well as some coastal centres) close to where the bulk of Pilbara Iron's operations are located.

Despite this geographic focus, interviewees were not confined to land owning groups associated with the operations of Pilbara Iron. Under the umbrella of the CAEPR–Rio Tinto Australia Research Council linkage project, the majority of those interviewed were drawn from the Banyjima, Yinhawangka, and Nyiyaparli language groups who are associated with the Yandi Land Use Agreement. Initially it was also hoped to interview people from a range of age, gender, and socio-economic groups. However, it proved difficult to engage with youth as those in the 18–25 year age group who were approached were unengaged by the

research questions. The style of interview was an open discussion, often conducted collectively with more than one person, with the focus built around issues arising from the main statistical profile of regional Indigenous socio-economic status and opportunities for improvement. In summary, the trends highlighted were a general increase in the Indigenous population of the Pilbara, an increase in non-Indigenous population due to industrial expansion in the region, poor educational and health outcomes for Indigenous people, overcrowding of houses occupied by Indigenous people, poor labour force representation, and consequent low incomes. Discussions then focused on people's own experience of these factors, and their ideas and thoughts regarding their cause and possible resolution. In addition people were asked to outline their aspirations for the future in relation to the preliminary findings of the demographic study. In line with ANU ethics guidelines, permissions for these discussions were sought, and the identity of interviewees and any identifiable characteristics are suppressed.

Obviously, the aim of these narratives was not to present a totality of Indigenous views of life and futures in the Pilbara, not least because more comprehensive and wide-ranging compendiums already exist (Olive 1997; Wangka Maya Pilbara Aboriginal Language Centre (WMPALC) 2001). Rather, it was simply to provide a human frame of reference for the more statistical elements of the regional profile. By means of cross-reference through the text, this blending of quantitative and qualitative data allows some appreciation of the real-life circumstances that lie behind and contribute to the raw statistics.

Statistical geography

It is fortunate that the Pilbara and its constituent sub-regions form a relatively stable geography over time within the Australian Standard Geographic Classification (ASGC) of the Australian Bureau of Statistics (ABS). This provides a basis for some consideration of change in socioeconomic conditions since the modern era of mining in the Pilbara region commenced in the 1960s. As for current indicators, the focus is mostly on the Pilbara SD, given the broad regional remit of the study, whilst the four Statistical Local Areas (SLAs) of Ashburton, East Pilbara, Roebourne and Port Hedland provide the main platform for sub-regional analysis. More detailed geography is provided by the Australian Indigenous Geographic Classification (AIGC) that includes 10 Indigenous Areas (IAs) and 23 Indigenous Locations (ILs) within the Pilbara SD. These various statistical boundaries are shown for reference purposes in Fig. 1.1. Further information at even greater levels of spatial disaggregation is also available from

the 2001 Community Housing and Infrastructure Needs Survey (CHINS) that reports at the level of 33 discrete communities within the Pilbara.¹

The adoption of this geographic frame is not to deny that the social reality, for both Indigenous (and non-Indigenous) people in the region, is one of social, cultural, and economic interconnectedness between this region and elsewhere in Western Australia (especially Perth in the case of the non-Indigenous population). One manifestation of this is the frequent movement of individuals, groups and families into and out of the Pilbara, rendering an unambiguous definition of the regional population problematic. A further constraint imposed by this geography is on any representation of socio-economic conditions according to cultural boundaries – for example, as presented by the configuration of Indigenous-owned lands and native title claim areas – or company geography – for example, as presented by the distribution of particular mine sites and infrastructure networks.

¹ Discrete communities are defined by the ABS as geographic locations that are bounded by physical or cadastral boundaries, and inhabited or intended to be inhabited predominantly by Indigenous people (more than 50 per cent), with housing and infrastructure that is either owned or managed on a community basis (ABS 2002a).