The Warai of northern Australia: experiences in small enterprise development

Don Fuller, Lee Parker and Eileen Cummings
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Don Fuller is Head of the School of Economics at Flinders University, Adelaide. His research is concerned with Indigenous small business enterprise in Australia. Lee Parker is Dean of Research in the School of Commerce, University of Adelaide. Eileen Cummings is a senior indigenous traditional owner from the Southeast Arnhem Land region of northern Australia.

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Abbreviations

ABS        Australian Bureau of Statistics
ADC        Aboriginal Development Commission
ATSIC      Aboriginal and Torres Strait Islander Commission
CSIRO      Commonwealth Scientific and Industrial Research Organisation
EEA        Enterprise Employment Assistance
IHANT      Indigenous Housing Authority of the Northern Territory
NARU       Northern Australia Research Unit
NT         Northern Territory
SME        small and medium-sized enterprise
There is substantial evidence that, although there are a variety of responses to the disruption of Indigenous economic systems, the imposition of a dominant form of economic and cultural behaviour is frequently opposed (Ellana et al. 1988; Blunt and Warren 1996). Rather, the most usual response to such an imposition is to be found in the integration of market-based and subsistence-based behaviours and a consequent adaptation of associated social and institutional systems.

It is important to note that individuals within subsistence-based economic systems have generally experienced the most difficulty integrating and becoming involved in the production side of goods and services within a market-oriented economy. On the other hand, individual members of such a subsistence-based economy have demonstrated a desire to become active consumers of the wider range of goods and services made available by market-based economic systems.

Involvement in organisations concerned with the production of goods and services is likely to be of most interest to Indigenous Australians where the underlying methods of production have remained similar between production for subsistence and production for market exchange or cash (Ellana et al. 1988). An example of such economic organisations is pastoral enterprises. Indigenous peoples in remote communities have historically often been closely associated with such economic enterprises. In many cases, they were the first experiences by Indigenous people of a western based economic enterprise. In almost all cases such experiences occurred as members of the workforce of pastoral enterprises.

The problems which have affected the commercial viability of Indigenous enterprise in northern Australia have been outlined by Young (1988b) as

(A) difficulties which confront the operation of all economic enterprises in northern Australia. These problems, which inevitably result in increased costs of production and reduced competitiveness, include
- remoteness from key suppliers
- distance from markets
- access to management skills and skilled labour
- harsh climate and physical conditions.

(B) problems specific to Indigenous enterprise. Such problems may be further categorised, following Young (1988b), into

1. problems stemming from customary behaviour and attributes culturally specific to Indigenous Australians living in remote regions of the Northern Territory
2. those which are of a historical nature and largely the result of decisions taken by non-Indigenous people
3. factors particular to Indigenous culture, including (a) kinship networks, (b) human–land relationships, (c) reciprocal relationships and responsibilities involving the exchange of goods and services, (d) attitudes to economic development, growth, saving and investment and accumulation and acquisition, (e) the relevance of a market-based economic system to the production of goods and services for consumption,
With regard to point two above, many Indigenous enterprises were not established as commercial ventures. Rather, they were mainly training operations, designed to provide Indigenous people with the necessary skills that would enable them to compete in the mainstream workforce as employees in semi-skilled occupations. This, coupled with a lack of financial and managerial training, meant that Indigenous Australians found it most difficult to appreciate the economic concepts central to a market-based system, such as saving, investment, capital accumulation and profit and the importance of research and development. In the case of pastoral enterprises, this was exacerbated by the fact that a number of enterprises that had been acquired by government agencies or land councils on behalf of Indigenous Australians during the previous 25 years were badly run down (Young 1988b).

This paper presents the results of an investigation into opportunities for, and constraints on, a small pastoral enterprise and cattle holding facility run by the Warai, an Indigenous clan in northern Australia, who have attempted to start up an economic enterprise on land granted to them as traditional owners under the ‘Aboriginal Land Rights (Northern Territory) Act 1976’.

Inductive field research methodology

The Warai pastoral enterprise has been investigated by means of inductive field research and therefore is presented as a field-based case study. This is a methodology in the ‘involved’ research tradition whereby the researchers involve themselves directly in the research site, immersing themselves in the world of the ‘actors’ (the organisational participants) and seeking to understand their context, activities, behaviours, attitudes and processes. Field research aims to identify and explain concepts, variables and their relationships inductively as they emerge from observations on site in the field, rather than deductively predetermining them from literature or prior published studies (Parker 1994; Patton 1980). The methodology is inherently multimethod in that it typically employs observations, semi-structured interviews, and document analysis. It does not follow a predetermined script as per a traditional positivist study, being instead flexible in the application of changing methods and procedures according to the data sources identified and findings gradually made on site (Atkinson and Shaffir 1998).

This study of the Warai conforms with Ferreira and Merchant’s (1992) definition of field research in that it has involved the study of real (rather than artificially created) tasks and processes, has employed an evolving (rather than wholly pre-structured) research design, and includes relatively rich descriptions of contexts and practices. The evolving, semi-structured nature of the field research design allows the researcher to be open-minded and ‘surprised’ by data discovered in the field, thereby taking up the opportunity to learn from field observations rather than impose some prejudged framework upon them. The rich descriptions of context, settings and practices provide
potential insights, from a situational perspective, into interactions between actors’ actions and the settings in which they take place.

This particular single case study has descriptive, exploratory and explanatory dimensions. It offers descriptive detail in its outline of the background and present operations and circumstances of the Warai enterprise. In addition, it explores the Warai case with a view to identifying and clarifying key strategic issues and it attempts to explain why some outcomes observed among the Warai have occurred (Johnson 1975; Scapens 1990; Yin 1989).

Selection of, and entrée to, the case study site is greatly facilitated by the researcher’s pre-existent linkages to, and familiarity with, an appropriate organisation. Since case selection is a matter of obtaining access to an organisational type that represents the particular category of organisation, operation and issue being studied, purposeful selection is the order of the day. The more foreknowledge the researcher has of a particular case setting, the more appropriate it may be as a subject of study—offering easier site access and affording the researcher greater familiarity with the organisation’s history and context (Jorgensen 1989; Silverman 2000).

In the case of the Warai, both Don Fuller and Eileen Cummings have had a long-term personal association with senior members of the Warai clan, as well as strong connections to other senior Warai project stakeholders. Such past connections were crucial to accessing the Warai pastoral enterprise, given the cultural tradition that, for access by any researcher, an invitation must be extended by senior Indigenous members of a community.

This field study of the Warai pastoral enterprise has employed multiple methods—physical site inspection, interviews and archival document analysis—all conducted at various points in time over a longitudinal period. In the qualitative research tradition, this affords the opportunity for more extensive data access, lessened observer bias, and triangulation which enhances the validity and reliability of findings (McKinnon 1988, Atkinson and Shaffir 1998, Creswell 1998, Silverman 2000). Thus, cross validation of data, as well as the combination of contextual and temporal observations with actors’ interpretations and social constructions of their work and roles obtained from interviews, is facilitated. Application of these multiple methods also allows the researcher to gain access to tacit knowledge inherent in organisation members’ daily routines and implicit in their working knowledge about the way in which an enterprise operates. This is gained directly from enterprise members and from the researcher’s own direct observation of physical artefacts, activity and documentary records, and is done with a view also to penetrating the substance, context and politics of organisational activity (Dawson 1997).

The increasing importance of achieving commercial viability for Indigenous pastoral organisations

During the 1980s, accountability for the achievement of economic-based objectives and performance criteria became an increasingly important policy of the
Commonwealth Government. A major objective of the Aboriginal Development Commission (ADC), formed during this period, was to provide financial support mainly to those pastoral properties considered likely to achieve financial viability.

During this decade, considerable emphasis was placed upon European management and financial regimes (Hanlon 1985). This was primarily due to the importance given to the objective of ‘commercial viability’, even though there was an obvious lack of a clear definition as to what actually constituted commercial viability. In particular, it was not clear whether commercial viability was to be defined in terms of revenue, net income, net profit, or how allowances were to be made for major capital and developmental expenditures, or whether indeed commercial viability was to be regarded as equivalent to economic viability. Importantly, the timeframe relevant to the receipt of incremental returns and the achievement of economic viability measured in terms of, for example, the concept of net present value of the enterprise, lacked a clear definition. The objective was therefore not capable of clear and objective measurement. This undercut significantly one of the principal requirements of a business research and planning approach.

From what was originally a harvest operation, founded on the basis of extensive land area and cheap labour, the pastoral industry in the north of Australia became increasingly capital intensive with minimal use of labour (Hanlon and Phillpot 1993). It also required wide use of contemporary technology in production methods designed to increase economic efficiency by reducing cost per unit of production. Further, the high dependence of the northern Australian pastoral industry on export markets meant that it was vulnerable to changes in economic activity in overseas markets.

Many Indigenous pastoral properties may be characterised as more activity than enterprise based (Hanlon and Phillpot 1993). In this sense, Indigenous pastoral organisations place more emphasis on employment maximisation, traditional land ownership, food self-sufficiency and the communal ownership of assets compared with profit maximisation. A high value is often placed on the receipt of immediate income returns rather than future income streams. That is, future income streams tend to be discounted at relatively high rates of interest due to the associated high levels of risk. An important effect of such high discount rates being ascribed to future notional income streams is to discourage saving and investment in capital equipment and infrastructure development. This is clearly related to the difficulties Indigenous individuals have experienced in becoming involved in the production, rather than the consumption, of goods and services within a market-based economic system.

With regard to the assessment of economic outcomes, Dodd (1993) recognises that economic analysis is required to assess the commercial feasibility of any proposed land-use activity and that any assessment of project performance is heavily biased toward financial performance, with success or failure determined in terms of financial viability.
However, Dodd (1993) also argues that it is important that economic analysis look at both priced and unpriced benefits and that non-financial benefits accruing to a project need to be assessed. In some projects, these may prove substantial where the opportunity to engage in an enterprise results in benefits such as

- import replacement
- increased employment opportunities
- decreased welfare dependency
- opportunities for training and experience in an organisation involved with the wider market-based economy
- opportunities for training and experience in dealing with public sector instrumentalities and funding agencies
- reduced alcohol consumption and substance abuse
- reduction in crime and violence
- decreased use of institutional services such as hospitals, police, legal advisers and correctional services
- increased health and community wellbeing, confidence and self-esteem.

Such benefits are likely to be high where communities are experiencing conditions of poverty and ill-health.

Project viability would therefore be improved substantially when such benefits to a community are included in any evaluation. For example, a shift from dependency on welfare as ‘sit down money’ may be an important reason to fund a project because of the many associated benefits that are likely to flow. In any detailed analysis of the costs and priced and unpriced benefits of preferred enterprise options, therefore, it is very important that the ‘full economic equation’ be considered for the proposed activity. While the potential social benefits accruing to the project may be difficult to quantify, it is essential that such benefits be assessed and considered.

Background to establishment of the Warai Pastoral Enterprise

The Finniss River Land Trust Area granted to the Indigenous traditional owners—the Maranunngu, Kungarakany and the Warai—under the ‘Aboriginal Land Rights (Northern Territory) Act 1976’, and its relative geographical location can be seen from Figure 1. As can be seen, the Finniss River Land Trust Area has been divided into areas one, two, three, four and five. Areas one and two have been granted to the Maranunngu. Areas three, four and five have been granted to the Warai and Kungarakany clans. The Warai Pastoral Enterprise is located on approximately 20km² in area five. This is 15 kilometres north of the township of Adelaide River and 100 kilometres south of Darwin.

This research presents the results of information collected using a structured questionnaire based on the suggestions of Dodd (1993) and Stafford-Smith et al. (1994) to assess both the priced and unpriced benefits associated with a potential land-based economic enterprise. The information collected enables a critical evaluation of the economic research and assessment processes followed in establishing the first Warai economic enterprise. As a result of information collected in this study, a number of proposals may be advanced in relation to
future directions for improving the commercial potential of Indigenous business enterprises.

The Warai pastoral enterprise is owned by the Warai association which is, in turn, managed by the traditional owners of the land. The Warai clan is estimated to consist of approximately 70 people aged 18 years and over and a further 50 aged under 18 years (Dixon 1998). While the main priority for the Warai was to become established on their ‘own country’, the second, fairly immediate priority was to establish an economic base. The Warai initially thought that they would grow and fatten cattle on areas of land granted to them within the Finniss River Land Trust Area. It was thought that, after fattening, the cattle could be delivered to abattoirs located in either Batchelor, around 30 kilometres from Warai land, or at the township of Katherine, about 250 kilometres away.

Figure 2 shows the numbers of live cattle exports from Darwin by destination, over the period 1993–98. This diagram shows a rapid growth in live-cattle numbers exported through Darwin before the onset of the East Asian financial crisis in late 1997. This crisis had a major impact on the number of live-cattle exported. Australia’s live cattle exports increased four-fold until 1997, but this was followed by a 40 per cent decline in 1998. Whilst the share of the Port of Darwin in these exports had been declining, there was relatively rapid growth in the absolute numbers of live cattle exported through the port over the period 1993–97. Indonesia had been the most important export destination since 1996, when 59 per cent of live cattle exports shipped through the Port of Darwin were destined for that country. The East Asian crisis resulted in a sharp decrease in this figure to nine per cent in 1998.

Before proceeding further, the Warai decided to consult a pastoral agronomist at the Northern Land Council, the organisation responsible for approving development on Indigenous lands. According to the Warai, the consultant advised that the land had a number of potential locational advantages. Important locational advantages for a livestock holding facility on area five of the Finniss River Land Trust Area, it was argued, included the relative proximity to the Port of Darwin. With year-round road train access on the main Stuart Highway, it was felt that the site would make a good holding and potential fattening area for cattle destined as live exports to Asian markets. Such access becomes important in the wet season when dirt roads, however well maintained, often become impassable. While the year-round access provided by the Stuart Highway was seen to be very important, it is likely that the importance of this strength took precedence over other important factors associated with the commercial viability of the small to medium-sized enterprise (SME).

Before the commencement of the project in 1992, a feasibility study was undertaken with respect to the economic potential of such an enterprise. However, the individual undertaking the study possessed neither the business skills nor the necessary experience for such a task.
Figure 1  Areas 1–5 of the Finniss River Land Trust Area
Establishment of the Warai Pastoral Enterprise

The country had previously been used mainly for the mustering of feral, unrestrained cattle and buffalo prior to the introduction of tuberculosis and brucellosis control measures in the late 1970s and early 1980s. These measures required cattle and buffalo to be held in controlled situations behind wire fences. As a result of the previous lack of control over the breeding and grazing of cattle and buffalo, the land was assessed by traditional owners as only in ‘average’ condition prior to being returned.

According to Warai traditional owners, a pastoral consultant from the Northern Land Council assessed the physical capabilities of the land as ‘good’. This was supported by officers from the Commonwealth Bureau of Rural Resources. An application for capital funding support was lodged with the Bureau of Rural Resources in 1992–93 under the Aboriginal Rural Resources Initiative in order to construct the cattle holding facility. On receipt of the funding, the construction of the cattle yards commenced during 1993. The total amount received from this source was $447,000.

Source: Australian Meat and Livestock Corporation
Additional finance was provided by the Aboriginal and Torres Strait Islander Commission in the form of infrastructure development and housing, as well as a wages subsidy program. The Northern Territory Government also provided finance to assist in the construction of a sewerage system to service the residential dwellings and workers’ quarters constructed in the area.

Infrastructure development in area five by the end of 1999 included:
- roads
- cattle yards
- five houses
- working men’s quarters
- installation of mains electricity (power was previously provided by a generator)
- bore with holding tanks, piping and water reticulation
- sheds in paddocks for stud-stock horses
- sewerage
- land clearing
- landscaping
- fire protection
- tractor, grader and machinery
- earthworks for the construction of yards
- satellite telephone system.

To date, nearly 40 hectares have been fenced for agistment purposes. This task has been undertaken by the Warai. Warai have also assisted with the construction of power lines and in the provision of trenching to establish water reticulation. They have also undertaken substantial clearing of pastoral areas as well as landscaping of the site.

Following establishment of the cattle holding facility involving significant expenditure upon infrastructure, the enterprise experienced a number of important constraints to successful commercial operation. While there has been considerable debate in the literature (Rauch et al. 2000) about the most appropriate business planning framework for particular types of small to medium sized enterprise, it is argued here that a number of difficulties could have been avoided or minimised had a business research and planning approach been employed prior to construction of the facility. Such research could have been expected to indicate a number of potentially serious problems with the proposal which subsequently have produced major threats to the ongoing viability of the enterprise.

There has, for example, been increased competition from the construction of additional yards and agistment areas for the holding of live cattle prior to export through the Port of Darwin. The Warai manager of pastoral operations estimated that fifteen similar operations had been established within the region during the period 1993–99. Competition became particularly severe from an existing high-quality holding facility at the Port of Darwin which avoided the double-handling of cattle necessary at the Warai facility. There was therefore an important need for a competitor analysis.

The Warai traditional owners began to notice a sharp slowdown in the rate of usage of the yards by live-cattle exporters during 1994–95. Competition increased from alternative cattle-holding facilities as some exporters and pastoral properties began to integrate vertically and construct their own
holding yards. Such vertical integration was undertaken by exporters to reduce the potentially high level of risk associated with the management of live cattle exports and, in particular, the possible risk associated with the need to find a suitable cattle-holding facility in a short space of time. Because of the high demurrage costs (between $8,000–10,000 per day for exporters during 1998–99) in having a ship remain idle at the Port of Darwin, as well as the high capital and running costs involved in operating the large road-trains used to transport the live cattle, it was necessary that holding facilities for the live-cattle exports be located so that minimum time would be lost in loading the ship as soon as it arrived at the Port of Darwin. It was therefore necessary to integrate the road-train delivery of the cattle very closely with the arrival of the live-cattle transport vessel. If holding yards were not available in close proximity to the Port of Darwin, road-trains would be forced to locate a suitable holding facility capable of holding around two thousand head of live cattle in a short space of time. The resultant need for such vertical integration by exporters posed a serious threat to the potential commercial viability of the Warai cattle-holding facility.

Management, business skills and training

The pastoral enterprise is managed by the traditional owners as members of an association with a board of directors. The Warai regard the senior member of the family as equivalent to the Chairman of the Board of a public company. The association consists of a President, Vice-President, Coordinator, Treasurer, Public Relations Officer and two other members of the Executive.

With respect to strategic management, the prime responsibility has rested with the son of a senior traditional owner of the Warai. This person is responsible for the major strategic directions of the business in relation to investment, financing and profit decisions. He is also responsible for day-to-day coordination and management of the operations of the business, including negotiations with suppliers, discussions with the accountant and financial manager, ownership decisions (for example, possible joint-venture operations), as well as pricing, marketing and sales decisions. This individual is therefore responsible for a wide range of functions and activities, many of which depend on a high level of business and commercial knowledge and experience. This son occupies the position of Coordinator of the Warai Association. Another son of a senior traditional owner is responsible for matters related to cattle management, including the technical aspects of animal health, feed, pasture improvement and the operation and management of capital equipment associated with the enterprise.

Members of the management group of the Warai Association have lived mainly within urban centres. Compared to a number of other members of the Warai, they are relatively well educated and possess on-the-job experience within the mainstream economy. There is, however, a significant lack of training and experience with respect to business and management skills, particularly in relation to an enterprise of this kind.
Members of the Warai were asked whether or not they had received training in any of the areas of

- pastoral management
- agricultural management
- resource management
- personnel management
- other types of training.

The coordinator had not received any formal management or business training within these areas. Importantly, no training had been received in the key fields of financial management and control in areas such as accounting, or the associated areas of budgeting, financial planning, access to sources of finance, or investment decisionmaking. An accountant is utilised to produce quarterly income and expenditure reports after details have been provided by the coordinator of the Warai Association. The absence of financial management skills, however, inhibits the ability of the Warai to make the necessary financial and business decisions or investigate the implications of financial options available to the enterprise. On the other hand, the accountant is neither familiar with key aspects of operation of the Warai Pastoral Enterprise, nor involved in important areas of strategic and financial decisionmaking.

Resource assessment and planning

As pointed out by a number of researchers (Dodd 1993; Stafford-Smith et al. 1994), it is important that carefully conducted research, assessment and planning be undertaken with respect to the organisation and management of resources likely to prove vital to the commercial viability of Indigenous small pastoral enterprise. Such assessments are required, for example, in relation to the quality of the land, water, flora and fauna. The results of such assessments then need to be compared closely with the overall aims and objectives of the enterprise.

Some assessment of pastoral enterprise resources was undertaken by a pastoral consultant from the Northern Land Council. This, however, was not of a scientific nature and no evaluation was undertaken of the effect of different enterprise development options on the land, water, flora and fauna resources. No formal assessment was undertaken of the carrying capacity of the land. In addition, soil tests, which are necessary in order to determine appropriate land-use options, were not undertaken.

Water resources have been assessed by officers from the Bureau of Rural Resources and the pastoral consultant from the Indigenous Land Council and by a private boring contractor. But these assessments have been of an unstructured and informal nature and have not involved the use of a scientific methodology. To date, animal health issues have not proved to be a significant issue for the Warai, largely because low numbers of cattle have been held at the yards for relatively short periods. In addition, the main responsibility for animal health has rested with the exporter. This is likely to change markedly if cattle are agisted at the property for longer periods. While the nominated manager of cattle operations has attended a tropical cattle management course at a Rural College and has a basic knowledge of animal health, additional specialist skills are required.
These include the ability to identify animal health problems and a capacity for treatment.

The assessments undertaken in relation to the Warai pastoral enterprise related mainly to the location of the cattle yards as a holding facility. Each of the agencies involved—the Federal Bureau of Rural Resources, the Indigenous Land Council, the Aboriginal and Torres Strait Islander Commission and Northern Territory government departments—provided significant levels of resource funding and assistance not only for the cattle yards, but for associated infrastructure. No formal economic research has attempted to evaluate options for business and economic development. This is a serious difficulty because there are a number of important potential alternatives available with regard to small business and economic enterprise which would assist in diversifying the cattle holding facility. The need for such diversification can be seen following the sudden and largely unexpected financial and economic problems experienced in Asia, and particularly Indonesia, during 1998.

Table 1  Capital expenditure

<table>
<thead>
<tr>
<th>Agency</th>
<th>Year</th>
<th>Amount ($)</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Bureau of</td>
<td>1993–94</td>
<td>447,000</td>
<td>Cattle yards, Fencing and clearing, Water reticulation, Tanks, Earth works, Plant and machinery, Roads</td>
</tr>
<tr>
<td>Rural Resources</td>
<td></td>
<td></td>
<td>1 3B/R House, 1 4B/R House</td>
</tr>
<tr>
<td>ATSIC (Federal)</td>
<td>1993–94</td>
<td>105,000</td>
<td>Power and water including bore and reticulation from tanks to yards, Generator and connection of power to houses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>110,000</td>
<td></td>
</tr>
<tr>
<td>ATSIC</td>
<td>1993–94</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>ATSIC</td>
<td>1994–95</td>
<td>120,000</td>
<td>1 Single-men’s quarters</td>
</tr>
<tr>
<td>NT Government</td>
<td>1995–96</td>
<td>43,000</td>
<td>Sewerage system</td>
</tr>
<tr>
<td>ATSIC &amp; IHANT</td>
<td>1996–97</td>
<td>140,000</td>
<td>1 2B/R house and sewerage and bore</td>
</tr>
<tr>
<td>ATSIC</td>
<td>1996–97</td>
<td>10,000</td>
<td>Road improvements</td>
</tr>
<tr>
<td>ATSIC</td>
<td>1997–98</td>
<td>150,000</td>
<td>Mains power upgrade including poles and connections, Water storage and additional reticulation.</td>
</tr>
</tbody>
</table>

Notes: Since 1995, the construction, maintenance, tenancy agreements, and housing needs of Indigenous people in the Northern Territory have been funded by the Indigenous Housing Authority of the Northern Territory (IHANT). This program is jointly funded and administered by the Federal and Northern Territory Housing Authority. The program was introduced in 1995 to improve the quality and availability of housing.
Financial planning and control

Tables 1 and 2 present details of capital and operating expenditure over time at the Warai enterprise.

As can be seen from Table 1, amounts have been allocated by the Aboriginal and Torres Strait Islander Commission for capital expenditure. These amounts, however, have not been determined as a result of the application of capital budgeting techniques, such as present value techniques, or even the less theoretically correct accounting rates of return. Such techniques were discouraged by the practice of establishing a capital budget based simply on a fixed amount, regardless of factors such as potential revenue flows and the cost of capital. Only relatively recently (during 1998–99, according to Warai traditional owners) have funding agencies such as the Aboriginal and Torres Strait Islander Commission requested

### Table 2  Main components of operating expenditure allowed by agencies

<table>
<thead>
<tr>
<th>Agency</th>
<th>Year</th>
<th>Amount ($)</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATSIC</td>
<td>1992–93 to present</td>
<td>40,000 pa (est)</td>
<td>Salary for the position of Coordinator of Warai Association. Began at equivalent level to Comm ASO3 up to ASO5 in increments.</td>
</tr>
<tr>
<td>ATSIC</td>
<td>1993–94 to 1996–97</td>
<td>12,000 pa</td>
<td>Estimated cost of fuel and oil for running generator and hire of equipment</td>
</tr>
<tr>
<td>Bureau of Rural Resources*</td>
<td>1994–95</td>
<td>16,000</td>
<td>Manager/Consultant</td>
</tr>
<tr>
<td>ATSIC</td>
<td>1994–95</td>
<td>15,000</td>
<td>Manager/Consultant</td>
</tr>
<tr>
<td>ATSIC **</td>
<td>1994–95</td>
<td>85,280</td>
<td>Wages under EEA Program. Eight Warai employed until program terminated. Rate of $205.00 per week for 52 weeks.</td>
</tr>
</tbody>
</table>

Notes: *Grants were originally funded through the Federal Bureau of Rural Resources. An Aboriginal Rural Resources Initiative commenced in this organisation as a result of the recommendations of the Royal Commission into Aboriginal Deaths in Custody. It has since been terminated.
**Under the arrangements of the Federal ATSIC Enterprise Employment Assistance (EEA) program, wage subsidies were available for a period of one year. Under the requirements of the Indigenous Housing Authority, the coordinator was required to charge rent to the Warai staying in the working men's quarters. An amount of $20.00 per week was therefore deducted from wages. A further $20.00 per week was deducted for food. This left the Warai a wage of $165.00 per week. During this period the dole payment for a single male was $147 per week, and the average weekly earnings of males in the Northern Territory was $666.80 per week (Australian Bureau of Statistics 1995). This therefore amounted to a wage marginally above the dole payment. The $20.00 was insufficient to pay for food for the workers. It was therefore necessary to 'top-up' the amount from Association funds.
capital expenditure requirements over a period further than one year out. Capital expenditure bids are now sought over a three-year period. The capital budgeting techniques used to assess the economic viability of such expenditure nonetheless remain deficient.

No formal assessment methodology, such as decision analysis, has been used. Such a methodology may be used to help identify the preferred option in terms of enterprise development. A recognised technique in this area is cost–benefit analysis. In addition, decision analysis can be undertaken under states of (1) certainty (2) risk, and (3) uncertainty. The strategy chosen will be the one which leads to the highest payoff (Kerzner 1995). A profile of development costs over time has never been prepared for the enterprise, despite the importance of such a profile. Such data should have been linked to an investment and decision analysis, as well as forecasts of income and expenditure items over time, and a cash budget. This would have enabled an economic assessment of the main options for development over time. Thus, it is not possible to construct the major financial statements essential to the financial management of an enterprise without undertaking a profile of development costs.

Importantly, no provision exists for depreciation. The enterprise was initially judged by the traditional owners and their advisers to be potentially profitable, due in part to the belief that operational expenditure was expected to be low. This was because the exporter was responsible for providing labour for loading and unloading the cattle and also feed. The absence of a strategic business planning approach, however, meant that this expectation was overly optimistic. Operational expenditure is in fact relatively high. This is principally due to the high level of capital equipment and infrastructure required because of the relative remoteness of the site and the low level of economic infrastructure and development initially available to the enterprise. This in turn requires a high allowance for plant replacement as well as operational expenditure in the form of repairs and maintenance. Capital assets deteriorate quickly in the harsh physical conditions of northern Australia. An allowance should therefore be made for depreciation and maintenance. Unless this is done, it is likely that assets will deteriorate to such an extent that they become unusable, leading to the loss and write-off of substantial capital items. It is far more likely that such factors would have been detected if a business planning approach had been adopted. An important component of such an approach would have been a financial management plan.

According to senior Warai, payment of the coordinator’s wage is supposed to be strictly for administrative purposes in dealing with Warai Association matters and not for activities associated with the enterprise. An operating budget for the enterprise is therefore required. While substantial funds have been spent on capital and infrastructure, insufficient funds have been made available to allow for the operation of this capital and infrastructure. This is a serious difficulty because it does not facilitate the generation of revenue.
through the utilisation of capital and infrastructure and inevitably acts as a major obstacle to the enterprise becoming commercially viable. An operational budget is essential for implementing the strategies necessary for generating a stream of revenue.

An external audit is carried out by a chartered accountant on an annual basis. Somewhat surprisingly, no profit and loss statements have been prepared for the enterprise. While it may be argued that a similar statement is available in the form of the income and expenditure report, a profit and loss statement would be most helpful in establishing the main categories of cost, including depreciation. In addition, it is necessary to monitor important aggregates such as maintenance as well as the main components of operating costs. Such a financial statement would also enable the construction of financial ratios as well as the application of other important financial diagnostic techniques, such as cash budgets and financial forecasting. There was no evidence that such important financial management techniques had been applied. Rather, the income and expenditure statement was mainly used as an administrative tool for acquitting expenditure.

In summary, there has been a lack of integration of the operational and capital expenditure components of the enterprise budget by responsible funding agencies. With no funding available for the administration and accounting needs of the enterprise, it has been necessary to utilise funding made available to the association for purposes other than economic enterprise.

The Warai argue that they should not have been placed in this position due to inadequate support for financial planning. This, they argue, would have indicated a clear need for operational expenditure to support the capital and infrastructure expenditure already undertaken. In addition, it should have been clear to funding agencies that amounts would have been necessary for financial management and administration of the enterprise, as distinct from the Association. For example, major expenses were incurred to pay for fuel to generate electricity for the houses and working men’s quarters as well as for lighting at the cattle yards. Such difficulties serve to demonstrate a lack of appreciation of the close linkages that often exist in Indigenous environments between enterprise and community.

The need for adequate business research and planning

While an economic viability study was approved by the Aboriginal and Torres Strait Islander Commission after funding had been provided by the Bureau of Rural Resources and a consultant had been employed for this task, the business research and planning actually undertaken was not sufficient. No report was ever made available to the Warai. Insufficient resources precluded further follow-up action in this matter.

While a Community Development Plan was also prepared by a consultant, neither of these reports involved the preparation of a Property Management Plan following the recommendations of Dodd (1993). Such a Property Management Plan should include research into
1. Social factors. These include
   • identification of the key players, and an appropriate consultative mechanism
   • how changing goals are to be addressed
   • monitoring and evaluation
   • identified constraints.

2. Physical factors, such as
   • land, water, flora and fauna resource assessment
   • activity options
   • carrying capacity
   • property development which has taken place
   • animal production and health
   • land monitoring and maintenance.

3. Economic aspects, for example
   • what is the activity mix?
   • what are the priced and unpriced benefits?
   • what is the market potential?
   • what are the development costs?
   • what are the prospects of the activity in terms of economic viability?
   • what monitoring and evaluation are needed?

4. Identified constraints?

Not enough revenue has been generated to cover operational costs, such as labour and maintenance, as well an adequate (opportunity cost) return to capital and management. This has been due largely to an inadequate level of business research and planning undertaken before the commencement of the project. It also suggests the need for substantial business research and strategic support during the implementation stage of the economic enterprise in order that sufficient revenue may be generated to cover fixed and variable costs.

No agency was responsible in an overall sense for funding. Nor were the required business planning and resource assessments, which should have been undertaken as a matter of priority, given the levels of funding necessary. With different agencies responsible for fragmented planning and funding arrangements, decisions as to whether they would fund activities associated with the enterprise appeared to depend largely on whether or not another related agency was to become involved, rather than on the economic potential of the enterprise(s).

It appears that no one agency was responsible for helping the project achieve economic viability in an integrated manner.

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Table 3  Source of revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Boatloads of cattle*</th>
<th>No. of Goats</th>
<th>Revenue ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993–94</td>
<td>8</td>
<td></td>
<td>16,800</td>
</tr>
<tr>
<td>1994–95</td>
<td>10</td>
<td></td>
<td>21,000</td>
</tr>
<tr>
<td>1995–96</td>
<td>2</td>
<td></td>
<td>3,200</td>
</tr>
<tr>
<td>1996–97</td>
<td>2</td>
<td></td>
<td>1,200</td>
</tr>
<tr>
<td>1997–98</td>
<td></td>
<td>650</td>
<td>260</td>
</tr>
</tbody>
</table>

Note: * One boatload of live cattle is equivalent to 1500–2000 head.
Rather, it seems that individual agencies had an incentive to continue funding arrangements in a fractured and uncoordinated manner because this allowed each agency the opportunity to shift the responsibility elsewhere when failures and difficulties occurred. This was reflected in the lack of coordination, not only between agencies but also in the planning of funding releases by particular agencies. Thus, no adequate strategic business planning was undertaken prior to funding and the release of funding was uncoordinated, particularly in the earlier stages of development, according to evaluated outcomes.

Agency responsibilities were often altered within a relatively short space of time. This caused particular difficulties when compared with the lead times needed to establish a new economic enterprise involving a large amount of capital infrastructure. Public sector responsibility became so uncertain that the project itself was left in a high state of uncertainty. This resulted in high levels of risk being ascribed to the enterprise. This, in turn, significantly inhibited the ability of enterprise to secure a reputation for quality and dependable service to exporters.

**Revenue profile of the enterprise**

The revenue earned by the enterprise can be seen from Table 3. Revenue was used to pay for fuel for the generator, maintenance of existing capital equipment, and wages to the cattle manager. Maintenance on capital equipment was estimated at $10,000 per annum. The wages of the cattle manager were $30,000 per annum. As a result, it was not possible to pay these items in full from earned revenue in any of the periods under study.

By 1993–94, the expenditure on capital assets was estimated at $712,000. Assuming a rate of depreciation of 10 per cent, this would suggest an amount required for depreciation of $71,200. By 1994–95, the value of capital expenditure had increased to $832,000, and this grew further to $941,000 by 1995–96. This further increased to $1,091,000 in 1996–97 and $1,231,000 in 1997–98. By 1995–96, revenues had dropped substantially, to a cash amount of $3,200. In 1996–97 they dropped further to $1,200 and to the relatively insignificant level of $260 in 1997–98.

Economic theory would suggest that, if the price falls below some critical level, the profit maximising action would involve shutting down production (McTaggart et al. 1996). A firm’s shutdown point will be the level of output and price where the firm is just covering its total variable cost. At the shutdown point, therefore, the firm will incur a loss equal to its total fixed cost. This loss is the largest that the firm should incur.

**Potential revenue scenarios for the Warai Pastoral Enterprise**

Potential best and worst-case revenue scenarios for the Warai enterprise have been constructed in an attempt to gauge the likely commercial viability of the enterprise, based on assumptions of market share and numbers of live cattle exported through the Port of Darwin over the period 1993–98. Pricing data has been based on actual prices received by the Warai for the holding of live cattle.

Annual expenses have been assumed at $120,000 for depreciation, $70,000 for wages and $25,000 for purchases of inputs, giving a total of $215,000. It should be noted that
this cost estimate is relatively conservative and the actual figure is likely to exceed this figure in any particular year.

**Best-case scenario**

The peak year for live exports through the Port of Darwin was 1997, when a total of 430,335 cattle were exported. The pricing data assumes a best price of $1 per head held at the cattle-holding facility for the first day and $0.40 for the second and subsequent days.

**Further assumptions**
- The Warai cattle yards will attract 20 per cent of the total exports of live cattle exported through the Port of Darwin per annum = 86,067 head per annum.
- Each head of cattle will be in the yard for two days.

Total estimated revenue = 86,067 x $1.40

= **$120,494 per annum**

**Worst-case scenario**

In 1998, live exports through the Port of Darwin dropped rapidly, largely due to the East Asian financial crisis. In 1998, 219,439 were exported through the Port of Darwin.

The lowest price established by the Warai to attract cattle to the yards was a flat $0.40 per head per week.

**Further assumptions**
- The Warai yards will attract 15 per cent of the total exports = 32,916 head per annum.
- Each head of cattle will be in the yard for less than one week.

Total estimated revenue = 32,916 x $0.40

= **$13,166 per annum**

**Summary**

Assuming a best-case scenario, a revenue outcome of $120,000 suggests that
- revenue may not fully cover operating costs after allowance for depreciation and the opportunity cost of labour.
- if operating costs were covered, the return available on capital invested would be relatively insignificant.

Assuming a worst-case scenario, there would be insufficient revenue to cover operating costs based on economic criteria, and, other things being equal, the enterprise should be shut down.

**Summary and conclusions**

It is argued here that the construction of such a relatively simple model during the initial planning stages for the enterprise would have provided important indications as to the potential to achieve rates of return for both capital and labour involved in the enterprise. Such calculations may, for example, have suggested the need for lower levels of capital investment.

It is necessary that an adequate balance be achieved in the allocation of resources between business research and planning, and human resource development given the significance of physical property development and the application of new technologies in the development of small to medium-sized enterprises (SMEs). This is an area that policy and funding agencies concerned with Indigenous economic development have failed to address adequately to this point in time. Inadequate resources have been allocated to human capital investment and the development of
core competencies relating to the research, planning and development of economic enterprises by Indigenous Australians. This is supported by Langton (1999), who has noted that few accredited training programs are available to assist resource workers, managers and planners to apply established knowledge to contemporary resource management and planning. An absence of such skills formation is particularly evident in the case of Indigenous landowners, even though increasingly large areas of land and marine resources in the north of Australia are owned and controlled by Indigenous people.

Within the case study of the Warai, serious deficiencies were found in business research and planning skills as well as skills related to financial management and control, organisational and human resource management and marketing. A lack of such skills severely inhibited the potential economic viability of the enterprise. In addition, while some opportunities were available from funding agencies for external skills formation and training to facilitate research and development, required training courses had not been delivered when they were most required, which was before the business and development process commenced and before funds were released for these purposes.

It is necessary that the aims, aspirations and objectives of Indigenous people be fully understood through appropriate research and consultation. It is also necessary, however, that Indigenous people receive adequate research and technical assistance if many of their SMEs are to become commercially successful. The required technical skills exist largely in the non-Indigenous community. It is therefore necessary that much of this input be provided by members of the non-Indigenous community. Ideally, according to Dodd (1993), a ‘bottom-up with top-down input’ approach is required. Such an approach would best ensure that the scale of the enterprise adopted is in harmony with the developing skills and involvement of the community. Any realistic strategy needs to be sufficiently flexible to incorporate a community’s social and economic goals within the range of land-use goals and the existing physical aspects and levels of physical development, as well as human resource capabilities.

The relationship between the level and type of skills available for research and development, as well as the application of new technologies, is a key factor determining the scale and nature of operations. A major reason for the commercial failure of SMEs lies in the implications associated with expanding the scale and technological complexity of operations beyond the skill levels of the managers and operational personnel. This would strongly suggest that, given current skill levels within remote and rural Indigenous communities, Indigenous pastoral enterprises should follow lower stocking rates. Such rates are likely to accommodate better other important goals and aspirations of Indigenous Australians, as well as their communities, at this point in time.
The Warai of northern Australia

Fuller, Parker and Cummings

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