

The Australian National University



Centre for
Aboriginal
Economic
Policy
Research

Discussion Paper



**Indigenous economic development
in the Torres Strait:
possibilities and limitations.**

W.S. Arthur

No.4/1991

ISSN 1036-1774
ISBN 0 7315 1166 2

SERIES NOTE

The Centre for Aboriginal Economic Policy Research (CAEPR) was established in March 1990 under an agreement between the Australian National University and the Commonwealth of Australia. In accordance with the Agreement, CAEPR operates as an independent unit within the University's Faculty of Arts. CAEPR's principle objectives are to undertake research with the following aims:

- to investigate issues relating to Aboriginal employment and unemployment;
- to identify and analyse the factors affecting Aboriginal participation in the labour force; and
- to assist in the development of government strategies aimed at raising the level of Aboriginal participation in the labour force and at the stimulation of Aboriginal economic development.

The Director of the Centre is responsible to the Vice-Chancellor of the ANU and receives assistance in formulating the Centre's research agenda from an Advisory Committee consisting of senior ANU academics nominated by the Vice-Chancellor and Aboriginal representatives nominated by the Chief Executive Officer of the Aboriginal and Torres Strait Islander Commission and the Secretary of the Department of Employment, Education and Training.

CAEPR DISCUSSION PAPERS are intended as a forum for the publication of refereed papers on research that falls within the CAEPR ambit. These papers are produced for discussion and comment within the research community and Aboriginal affairs policy arena prior to more formal publication. Limited copies of each CAEPR DISCUSSION PAPER are available from the Centre Administrator, Centre for Aboriginal Economic Policy Research, Faculty of Arts, ANU, GPO Box 4, Canberra, ACT, 2601 (Phone: 06 249 0587).

As with all CAEPR publications, the views expressed in this DISCUSSION PAPER are those of the author(s) and do not reflect an official CAEPR position.

Jon Altman
Director, CAEPR
Australian National University

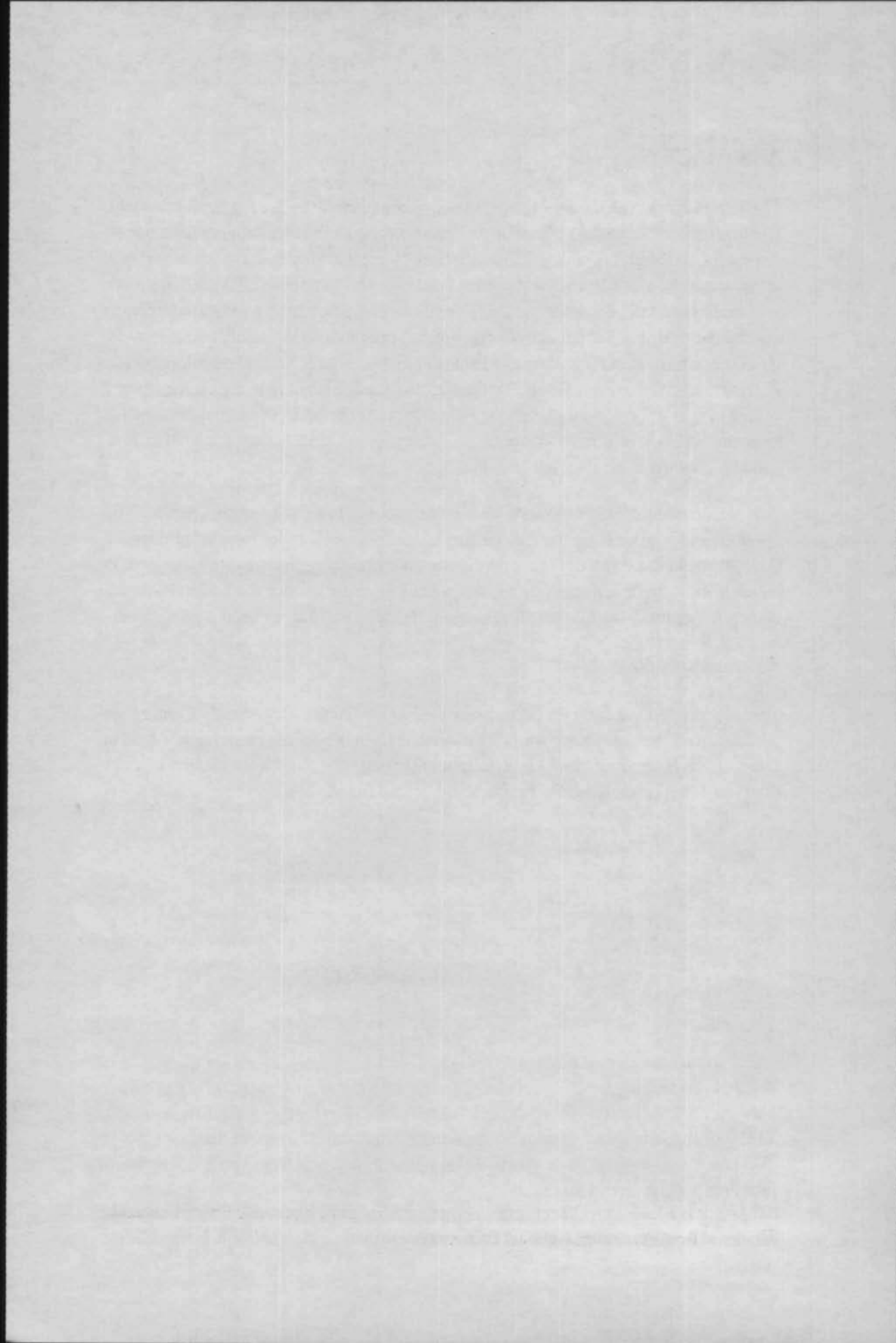
ABSTRACT

The Torres Strait is an archipelago populated predominantly by Torres Strait Islanders, officially recognised by the Federal Government as Australia's other indigenous minority. At present, the Strait's economy is characterised by significant public and private service sectors, and by a productive sector based entirely on commercial fishing. There are pressures from Islander interests and from Federal Government policies to decrease dependency on the public purse by increasing the opportunities for Islander employment. However, in the context of the region's fishing industry, these policies appear ambiguous. Furthermore, expansion is limited by the size and availability of fish stocks. A corollary of this is that in regions such as the Torres Strait, Federal Government policies for indigenous people may have to accept that there are real limits to the economic growth that can occur from primary production alone.

This paper summarises the social and economic characteristics of the region. The possibilities for expanding the non-welfare economy as well as for increasing Islander involvement in it and some of the apparent constraints to these changes are examined. In conclusion, some policy implications of this analysis, especially for the Federal Government's Aboriginal Employment Development Policy (AEDP), are raised.

Acknowledgements

This is a revised version of a paper presented at the Torres Strait Study Conference 'Sustainable Development for Traditional Inhabitants of the Torres Strait Region' held in Cairns 19-23 November 1990. I gratefully acknowledge the comments made on earlier drafts by Jon Altman, Kingsley Palmer and Michael Dillon.



The first comprehensive study of the socio-economic and political status of the Torres Strait was carried out in 1974 by a team, headed by E.K. Fisk, from the Research School of Pacific Studies, Australian National University (see Fisk 1974). Following calls from Torres Strait Islanders in early 1988 for political independence, the Federal Government set up an Interdepartmental Committee to examine Islander concerns regarding their disadvantaged status in Australian society. One of this Committee's recommendations was for further research into the contemporary economic situation in the Strait from an Islander perspective, and for a regional development plan to be prepared (O'Rourke 1988: 2). The primary economic data collection and analysis was carried out through the Australian Institute of Aboriginal Studies, and a baseline report prepared for the Island Coordinating Council (see Arthur 1990). A team from Sydney University began the regional planning process in late 1989 (see Lea et al 1990).

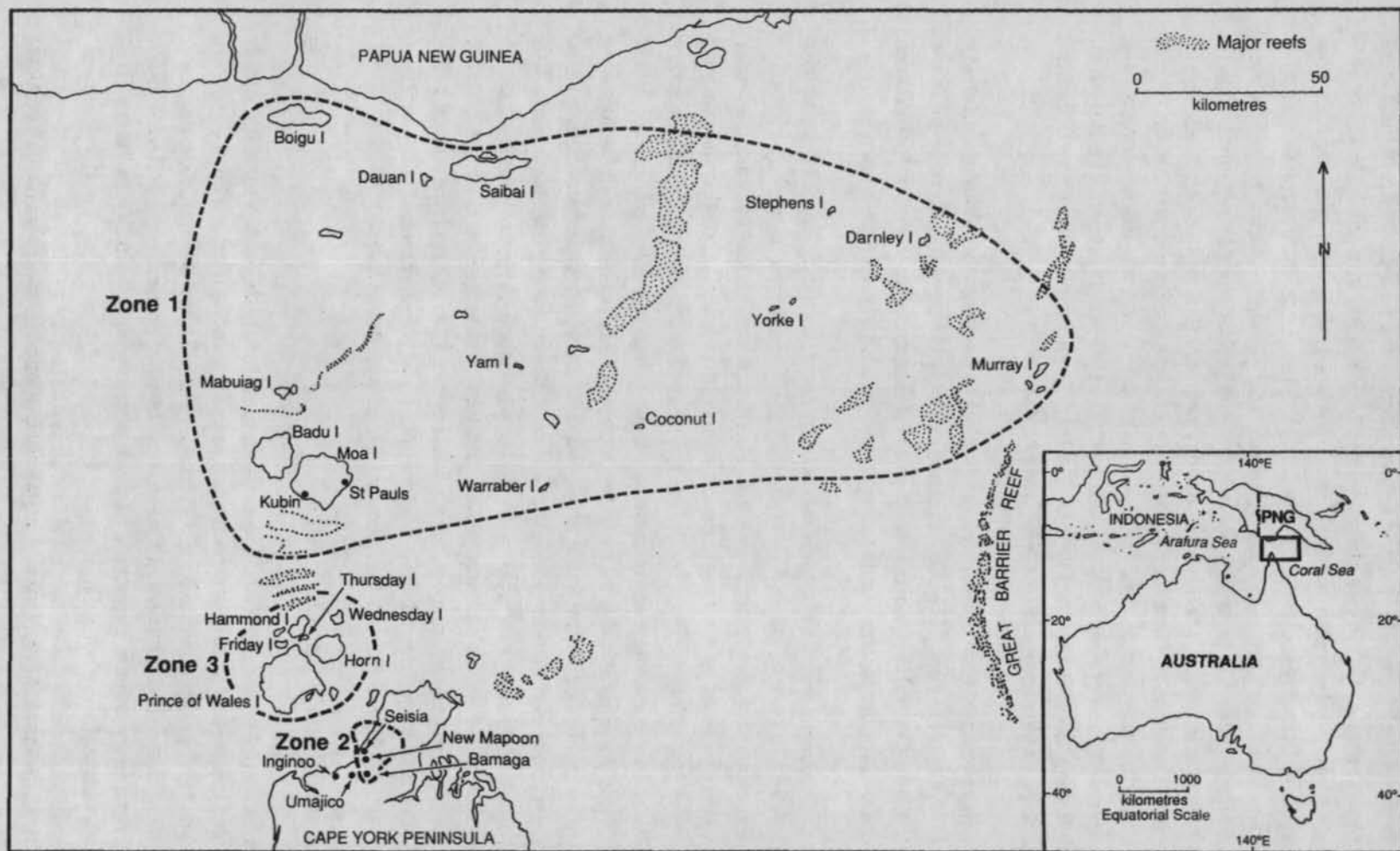
Following the stated objectives of the Commonwealth Government's Aboriginal Employment Development Policy (AEDP), launched in 1986-1987, as well as those of the Island Coordinating Council, a goal of the research and planning during 1989 and 1990 has been to increase Islander incomes and reduce dependency on government funding.

There are several ways such goals could be attained, including, increasing Islander employment in current industries; expanding these industries, as well as increasing Islander employment in them; increasing subsistence income; and increasing Islander non-welfare incomes by other means, such as through a tax levied on other users of local resources (see O'Rourke 1988: 26-27; Lea et al 1990: 62). Considering the data in Arthur (1990), and the recommendations of the subsequent regional development plan (Lea et al 1990), it would appear that increased economic activity could occur in the following industries: public and private sector employment; tourism; artefact production and sale; commercial fishing; market gardening; and subsistence fishing and gardening. This suggests three broad strategies, namely, Islanderisation of waged employment, an expansion of the region's export sector, and import substitution. With the possible exception of waged employment, which exists primarily in the region's service industries, these strategies are all subject to environmental constraints and considerations. This is particularly the case with commercial and subsistence fishing.

Some regional characteristics

There are an estimated 6,245 Islanders residing on sixteen of the Strait's some 150 islands (Table 1), as well as on two incorporated communities on the northern tip of Cape York (Arthur 1990: 3). Approximately 15,296 Islanders also live on the Australian mainland, 13,170 of these in other parts of Queensland (Australian Bureau of Statistics 1987). Therefore, only around 30 per cent of those people who self-identify as Torres Strait Islanders actually live in the Strait.

There is, however, some variation in the socio-economic and political environments



Map 1. Torres Strait Region

across the region, and it is useful for analytical purposes, to divide it into three interrelated zones (Map 1). Zone 1 includes what are referred to as the outer islands; Zone 2 consists of the two Islander communities on the tip of Cape York, and Zone 3 is the group of islands around, and including, the administrative and service centre of Thursday Island, and referred to as the southwestern group.

The outer islands (Zone 1) make up much of the Torres Strait Protected Zone (TSPZ).¹ This area borders on Papua New Guinea (PNG) and contains the majority of the Strait's productive waters and reefs. In addition, it is the only area to which PNG people may legally make 'traditional visits' under the Treaty. Almost 52 per cent (3,240) of the Strait's Islander population and an estimated 175 people of Papuan descent live in this zone in incorporated communities which have their own elected Islander councils.

All of the outer islands, as well as Hammond Island (in Zone 3), and the two Islander Cape communities (Zone 2) hold their land under Deed of Grant in Trust (DOGIT) from the Queensland State Government. The size of each island and their population densities vary significantly (Table 1).

Thursday Island and the other islands in the southwestern group (Zone 3), with the exception of Hammond, are not DOGIT land, but are administered by Torres Shire. Although there is a reserve (Tamwoy) on Thursday Island, there are no incorporated communities in this Zone. Thursday Island has a significant non-Islander and Asian-Islander population and is more socially and racially heterogeneous than either the Cape or outer islands; it resembles a small, mixed-race, rural town, whereas the outer islands are small Islander communities.

The residents of Bamaga and Seisia on the Cape (Zone 2) are in a different environment from the other two zones. They identify as Torres Strait Islanders and are part of the Island Co-ordinating Council (ICC),² but their immediate neighbours are three Aboriginal communities which are members of the Aboriginal Co-ordinating Council, and the newly formed Cape York Land Council. Being part of the mainland, these communities have much greater contact with tourist traffic to the tip of Cape York.

Because the Strait forms Australia's only border with another country, and has an indigenous population with special programs and servicing agencies, there is a significant bureaucratic presence in the region, and a distinct governmental flavour to its social, economic, and political environments.³ The location of the Strait at the cultural and geographic crossroads between Aborigines, Islanders and Papua New Guineans adds to the complexity of this region.

Some features of the regional economy

The regional economy is characterised by significant public and private service sectors. There is virtually no manufacturing or secondary industry in the region, almost all goods

Table 1. Populations and land areas.

Islands	Islander population	PNG population	Others ^a	Area DOGIT leases (ha.)	Population density (persons/ ha.)
Zone 1					
Boigu	340	13		6,630	0.051
Saibai	270	48		10,400	0.025
Dauan	135	0		355	0.380
Kubin	140	0		15,200	0.009
St Pauls	190	0		1,770	0.107
Badu	500	35		10,200	0.049
Mabuiag	180	0		626	0.287
Coconut	130	0		44	2.954
Warraber	165	0		93	1.774
Yorke	300	20		168	1.785
Yam	200	35		145	1.379
Stephen	40	0		36	1.111
Darnley	300	14		570	0.526
Murray	350	10		724	0.607
	3,240 ^b	175	266 ^b		
Zone 2					
Seisia	80	0		178	0.449
Bamaga	600	0	296 ^b	6,660	0.090
Zone 3					
Hammond	170	0		1,660	0.102
Prince of Wales	45	0		20,500 ^c	0.005 ^d
Thursday Island	2,000	n d		260 ^c	13.561 ^d
Horn	110	n d		5,479 ^c	0.036 ^d
	2,325 ^b	910 ^b			
Total	6,245		1,472		

Notes a Those not Islanders or people of Papuan descent; that is principally Europeans.

b Total for this Zone.

c These islands are not DOGIT lease areas.

d Estimated.

Source: Arthur (1990)

being imported from the mainland. The productive sector consists largely of the fishing industry, with some small contribution from tourism and the production and sale of artefacts.

Public sector

There is a high level of public sector employment in the Strait (Lea et al 1990: 20; Arthur 1990). Much of this is focused on Thursday Island and the Cape where government offices, hospitals and secondary schools are located. However, there is also some full-time public sector employment on the outer islands, for example, in primary schools, medical posts, with the Island police, and in community management and maintenance.

The majority of the outer island communities (and those on the Cape) are also involved in part-time employment in the public sector as part of the Commonwealth's Community Development Employment Projects (CDEP) scheme. In this scheme, the equivalent of residents' unemployment benefit entitlements are paid as a lump sum to their community councils, along with a two-part subsidy the purpose of which is to cover administration costs and to enable councils to purchase some project materials. The councils then organise work for their residents who are paid a weekly wage that should at least match their unemployment benefit entitlements. At present, men usually work two to three days per week on community public works under the CDEP scheme, leaving them the remaining time to engage in other activities, such as commercial fishing and subsistence production (see below).

Retail sector

In 1988 there were a recorded forty-five retail establishments with a turnover of \$20.35 million in the Strait (Australian Bureau of Statistics 1988: 20). The retail sector is located primarily on Thursday Island, where a significant number of businesses are owned by residents of mixed Asian-Islander descent. The major player in the retail/wholesale sector is the State-owned Island Board of Industry and Service (IBIS).⁴ Its central office is located on Thursday Island, but it also has a store on the Cape and one on each of the outer islands. There are also usually one or more small privately-owned retail outlets on each of the outer islands. These small operations represent an aspiring Islander retail sector which must compete with the much larger Government-owned IBIS. Although the IBIS allegedly operates as a non-profit making company, it can be argued that it inhibits the development of an Islander retail sector. Consideration is being given to leasing outer island IBIS stores to residents. However it would also be worthwhile considering the transfer of the entire IBIS organisation to Islander ownership over a number of years (Arthur 1990).

Mining

The Commonwealth Department of Primary Industries and Energy (DPIE) considers the

region to have high prospectiveness for gold. However, a mine which started production on Horn Island (in the southwestern group) in January 1988 had closed by early 1990 due to insufficient returns. The multiplier or spin-off to the regional economy from this mine was thought to be very limited, a feature also noted with regard to mining in other parts of remote Australia (O'Faircheallaigh 1985: 56). However Islanders held some 53 positions (or 33 per cent) out of a total mine-site and contracting workforce of 160,⁵ which is a high proportion compared to other parts of the country. For example, a survey of several mines across the country in the mid-1980s suggested that Aborigines and Islanders made up only approximately 2.6 per cent of the mining industry workforce (Cousins and Nieuwenhuysen 1984: 2), with this varying from 0.4 per cent to 7.8 per cent between different mines (see also Cousins 1985). On the other hand, the profile of the Horn Island workforce was similar to the national norm as far as occupations were concerned as Islanders tended to be employed as drivers and heavy plant operators and labourers, rather than as technical, process or managerial staff (Arthur 1990: 87).

Other minerals such as tin, copper, phosphate, mineral sands, and wolfram are all considered to have only low or low-to-moderate prospectiveness. There is a moratorium on sea bed exploration for oil until 1995, but with provision for this moratorium to be extended. Royalties from any mineral development would be subject to negotiation, but presently there is no provision for a royalty or tax to be paid to the region or to local people (DPIE 1988).

Tourism

There is a small tourism industry focussed mostly on Thursday Island and the Cape. It is estimated that 20,000 people drove up to the tip of the Cape in 1988-1989 (Horwath and Horwath 1989), and that approximately 7,000 tourists visit Thursday Island per annum (Lea et al 1990: 25). Presently no tourists visit the outer islands.

As indicated earlier, the outer islands vary in size (Table 1), and any social impact resulting from tourism development would probably be more noticeable on the very small islands, such as Yorke or Sue, than on larger islands, such as Moa and Badu. Although Islanders are not overtly anti-tourism, many indicate that they would prefer development to take place either some distance from their community village, or on uninhabited islands. This suggests that it is unlikely that they envisage a great deal of 'direct' contact or involvement with the industry, a trend noted elsewhere in central and northern Australia (Altman 1988). An additional problem with developments on the outer islands would be the supply of potable water which is scarce on inhabited islands and usually non-existent on those that are uninhabited. Also the uninhabited islands are not held under DOGIT and so Islander control of any development would be very limited.⁶

Island dancing and feasting (Kup Mari) are tourist attractions elsewhere, for example in Cairns, and these, together with the possible sale of artefacts, the natural beauty of the

islands, and the warm winter season, are all possible draw-cards. However, these positives must be weighed against the negative aspects to tourism development in the Strait. For example, the winter tourist season is also the time of the southeast winds when the water becomes rough and dangerous and difficult for diving. As well as this the Strait is a more expensive destination than the Great Barrier Reef islands which have similar natural attractions (Babbage 1990: 20).

Artefacts

Currently, there is very small artefact industry in the region, with an estimated turnover in 1989 of only \$8,000 (Arthur 1990: 28). This could be extended, especially if marketing was improved or regional tourism expanded, though it would probably remain fairly limited. Experience elsewhere has indicated that artefact production alone does not provide employment for very many people, nor does it usually signal a decrease in welfare dependency (Altman 1989); welfare payments are usually the primary source of income support of commercial artists.

The fishing industry

Manufacturing or secondary industry is insignificant in the region (Australian Bureau of Statistics 1988: 20), and in the current absence of any mining, the materially productive sector is based on the exploitation of marine resources. In 1989 the total value (to fishermen) of commercial fishing was approximately \$21 million (Arthur 1990: 40) made up as shown on Table 2.⁷ I will discuss this industry in some detail because it is linked in many respects to the Islander way of life, it is the major export industry of the region, it offers some scope for development, and it has implications for the environment.

Table 2. Value (turnover) of Strait fisheries, 1989.

Fishery	Value \$ million	Islander involvement (per cent)	Non-Islander involvement (per cent)
Prawn	14.00	0	100
Cray	3.90	30	70
Trochus	1.20	100	0
Mackerel	1.10	3	97
Pearl culture	1.20	0	100
Pearl shell	0.05	n d	n d
Reef fish	0.02	n d	n d

Note: nd = no data.

Source: Arthur (1990)

The organisation of commercial fishing varies across the Strait's fisheries.⁸ Not all fishers are involved in the industry to the same extent or in the same way. It is likely that some of the differences in approach and technique relate to the degree to which fishers rely on the industry for their income, which in turn is influenced by their access to fisheries. Those involved in commercial fishing and their sources of income can be conceptually categorised as in Table 3.

This categorisation indicates two types of non-Islander fishers, those from the mainland and those who are residents of the Strait. They are similar in that they largely rely on the industry for all of their income. However, the local fishers tend to be primarily involved in the cray fishery and employ either Islanders or Papua New Guinean residents, and so contribute directly to the local economy.

Table 3. Type of fishers and sources of income.

Category of fisher	Sources of income		
	Commercial	UB or CDEP fishing	Subsistence
Mainland non-Islanders	yes	no	no
Local non-Islanders	yes	no	no
Islanders (type A: full-time)	yes	no	no
Islanders (type B: part-time)	yes	yes	yes
PNG residents	yes	yes	yes
PNG traditional visitors	no	no	yes

On the other hand, fishers from the mainland who are involved in the prawn, cray, and mackerel fisheries, rarely employ local people and consequently there are few spin-offs to the regional economy. This is particularly noticeable with prawning which, with a turnover of \$14 million per year, is the region's most valuable fishery. However, trawlers are provisioned and serviced by mother-ships from the mainland, and so generate little business for local traders. It is interesting to note that because mainland fishers hire almost all their employees, and obtain most of their provisions, from outside the region they probably contribute less to the local economy than did the Horn Island gold mine when it was operating.

There are also two main types of Islander fishers, type A and type B. Type A Islander fishers (and some PNG residents) rely on commercial fishing for all of their income.⁹ However the majority of Islander fishers are in the category, type B, and for them commercial fishing is a part-time activity and is not their primary source of income. Basic income support for part-time fishers from the southwestern islands is derived from unemployment benefit entitlements (UB) and other welfare payments. Those on outer islands get the bulk of their income from employment on community public works carried out under the CDEP scheme as noted earlier, as well as from pension entitlements from the Department of Social Security and the Department of Veterans' Affairs, and from selling small quantities of fish to other Islanders. Imputed (or non-cash) income also comes from subsistence fishing and gardening. The approximate break-up of outer island incomes is shown on Table 4, and indicates that CDEP wages are the largest component.

It can be argued therefore, that the Islanders engaged in commercial fishing on a part-time basis are indirectly subsidised by government transfers (CDEP, UB and other welfare payments). This arrangement has both positive and negative features. On the one hand, CDEP wages provide people with a base-income which largely protects them from fluctuations in the market, and which also allows them to be involved in commercial fishing when, and if, they wish. In this way CDEP wages could be viewed as a form of development subsidy (Arthur 1990). On the other hand, the primary use of the CDEP

Table 4. Source and amount of outer Islanders' incomes.^a

Source of Income	Amount \$ million	Per cent of total
CDEP wages	7.500	42
Social security payments (pensions etc)	4.170	23
Non-CDEP wages ^b	2.400	13
Commercial fishing	2.300	12
Subsistence (fishing and gardening)	1.800	10
Artefacts	0.008	0
Total	18.170	100

Notes a These data refer to outer islands only.

b For example, wages from employment in schools and medical aid posts.

Source: Arthur (1990)

scheme is for construction of community public works, and so it can be argued that it competes with commercial fishing for people's time and labour. For example, in most cases CDEP regulations require workers to be available for work in their community for specific days and in some instances, because of tides or weather, these same days can be the best for fishing. Therefore, CDEP is not used directly to develop fishing, the only major regional export industry, and in some cases, it may actually hinder its development. This last point applies less to those part-time fishers on Thursday Island who are unemployed and receiving UB, because their movements are not restricted in the same way as are those on outer islands who participate in the CDEP scheme.

An additional feature of the CDEP scheme is that there is no mechanism to reduce an individual's CDEP wage in proportion to the amount they may earn in other areas, such as fishing. It can be argued therefore, that this system institutionalises and perpetuates the very dependency which government policy proposes to remove. However, as the CDEP scheme provides a substantial part of Islander income, it reduces the potential pressure on marine resources. This suggests that a finite natural resource, such as the Strait's fisheries, can sustain a small number of full-time commercial fishers who are not dependent on government, or a larger number of part-time fishers who receive other forms of income support. Present Federal Government policies are ambiguous on this issue, that is, they fail to specify whether the preferred outcome is for there to be a small number of people living independent of government support, or a larger number living with government support.

The size of the fishing industry is ultimately limited by the natural stock of marine resources. Although stock size still has to be accurately and rigorously assessed for most fisheries it does seem that the present stocks are not fully utilised, either commercially or for subsistence, and that there may be room for limited expansion. For example, in the case of the mackerel fishery, the 1989 total allowable catch (TAC) stipulated under the Treaty was 500 tonnes, but the actual commercial catch was only 160 tonnes; the fishery was apparently under-utilised by 340 tonnes. The Federal Government's Australian Fisheries Service, who coordinate research into the cray fishery, also considered that the Islander catch could be increased.¹⁰ In 1989 buyers from the mainland approached both the ICC and individual Islanders about establishing a shark and shark-fin fishery and about the possibility of rejuvenating the former beche-de-mer fishery. Inquiries have also been made regarding the possibilities of expanding the scope of trochus, clam and barramundi fisheries through aquaculture.

At the present time there are insufficient data to estimate the commercial viability or potential of any of these ventures (Arthur 1990), but it cannot be assumed that because certain marine resources exist in the Strait then it is economically profitable to utilise them, a point noted for island-nations in the Pacific generally ('Pacific Dreams', *The Economist*, November 24, 1990). The gold mine on Horn Island did not close down because the ore body was worked out, but because the low yields made the operation

unprofitable. In a similar way it may not be commercially profitable to exploit some of the Strait's marine resources.

To date, Islanders have not entered the prawn fishery, although in 1989 a licence for one trawler was reserved for them. Islanders have no fully equipped cray boats, nor mackerel dories, although they are now operating several boats and old luggers to take trochus. The basic 'capital' equipment for most Islander fishing is the aluminium dinghy fitted with an outboard motor. There is no accurate data on the efficiency of this unit, but it appears to vary. Although it may be suitable for cray, in many cases it will not be efficient for either trochus or mackerel and it provides only limited access to those reefs which are distant from inhabited islands (Arthur 1990).

Islanders also have variable access to buyers and to processing plant (freezers). This is not a critical issue in the trochus fishery as the product is easy to manage. However, other produce such as cray, mackerel and reef fish all require careful handling and must be frozen soon after they are taken from the water. As freezing plants are not located on all islands this tends to limit Islander participation. Access to various fisheries is also influenced by the fact that the species are not evenly distributed across the region. The data suggest a correlation between these features and the incomes generated from commercial fishing. For instance, the western islands (Badu, Moa and Mabuiag) which have the best access to equipment freezers and cray reefs, have the highest average per capita income from commercial fishing (\$1166/head/year). The central islands (Yorke, Yam, Coconut and Warraber) with less access, have a lower income (\$953/head/year) and the income in the eastern group (Stephen, Darnley and Murray) where there are no freezers is lower again at (\$554/head/year). Most noticeably the northern islands (Boigu, Saibai and Dauan) which are some distance from all the marketable species, appeared to derive no income from commercial fishing in 1989 (Arthur 1990).

Again, Islanders are hindered by their lack of expertise in some aspects of commercial fishing. They have no knowledge of prawn trawling and have limited experience in fishing for, and handling, mackerel or reef fish on a commercial basis. Although beche-de-mer was a significant fishery until the Second World War, the local knowledge for processing this has been largely lost. There are few tradesmen in the region, and little technical knowledge necessary to maintain boats and freezing plant.

Therefore, a key factor determining Islander involvement in commercial fisheries is access. This can take several forms such as access to capital or human resources, to appropriate equipment (trawlers, boats, dinghies, dories), to processing plant and wholesale buyers and markets, and to specialised technical skills. The significance of this factor may be demonstrated by the fact that the only fishery fully exploited to its total allowable catch by Islanders in 1989-1990 was the trochus fishery. This is a fishery that Islanders have been involved in for most of this century (Beckett 1987) and one in which they have considerable expertise. Trochus fishers do not need access to freezing plant

and unlike cray, beche-de-mer or fin-fish, trochus requires no careful handling and will not spoil; from the production perspective it is a relatively low risk fishery. Trochus can be fished from either boats or dinghies, and can be cleaned, bagged and stockpiled on the islands until picked up by the buyers. Trochus is an example of an accessible fishery and it is this accessibility which accounts for the fact that Islanders took all of the total allowable catch for 1990.

It would seem that the issue of access needs to be addressed if Islander participation in commercial fishing is to be increased, and both Arthur (1990) and Lea et al (1990) proposed some form of development agency to facilitate access. In New Zealand the *Maori Fisheries Act 1989* approached similar problems by setting up a Maori Fisheries Commission which in turn established a commercial fishing company. The Commission is to receive 10 per cent of the total fish quota (or an agreed cash equivalent) over four years until 1992. Fifty per cent of this quota will go to the fishing company, with the remainder to be leased to Maori or non-Maori fishers. In addition the Government granted \$10 million to establish the Commission and the company (Memon and Cullen 1990). It would seem that a similar concept may be appropriate for the Torres Strait. For instance, under the AEDP, the ICC could apply for government funding to establish a regional development agency. In addition, the Federal and State Governments could consider granting all or part of the fisheries quota to Islanders who would then be required to lease this out to Islanders or non-Islanders. The income derived from these leases could then contribute to the agency's running costs and serve as a source of development capital.

A form of royalty on marine resources has also been considered as means of raising scarce development capital (Lea et al 1990: 62). However, this type of payment, which is usually considered in terms of a resource rent tax (RRT), generally applies to excess profits and not to turnover (O'Rourke 1988: 26-27). While there are no accurate financial data for fisheries, it is unlikely that significant excess profits exist to justify a special RRT in the Strait (Arthur 1990: 118; Lea et al 1990: 62). As shown above, the Strait's fishery, with a turnover in the region of \$21 million, is relatively small. As the local industry does not appear to have either a large turnover or excessive profits, it would be extremely difficult to design an efficient and effective RRT regime that will generate sufficient revenue to outweigh associated costs, such as those for administration. Furthermore, an inappropriately designed or applied RRT would run the risk of being counter-productive by having a negative effect on industry participation.

However, even if access to the fisheries and to development capital was improved, the employment potential of the industry is limited by the size of the sustainable stock. This has implications for policies which strive to decrease regional dependency on government funding, as for many Islanders their only option is to increase their fishing effort. Taking the present industry level plus some modest expansion, converting the catch in each fishery into a full-time income of \$20,000, and assuming that Islanders take over all

non-Islander sections, the industry may provide between 250 and 300 full-time jobs¹¹ (Arthur 1990: 19). However, there was an average of 615 (male and female) recipients of CDEP wages and UB entitlements in the outer islands in 1989 and to achieve an unemployment level of 7.5 per cent (for parity with the mainland¹²) would require finding 570 jobs. Therefore, although the number of full-time jobs could be significantly increased, it is unlikely that dependency on government will completely disappear through full Islanderisation of the fishing industry. Further research is needed to more accurately determine how many people could find full-time employment in the region's fisheries.

The extreme volatility of markets for primary produce must also be considered. For example, in the early to mid-20th century the Strait's economy was based on pearl-shell, trochus-shell and beche-de-mer fisheries. This economy collapsed when plastic took over from shell in the fashion industry (Beckett 1987). The recent increase in the value of trochus is due to yet another change in the fashion industry, which may just as quickly change again. The cray fishery, although quite lucrative, is subject to sudden fluctuations in price. In 1988 cray sold for \$25 to \$30 per kilo, but in 1989 this price had fallen to \$15 per kilo, a reduction of 40 per cent. These examples demonstrate the risk of concentrating the region's development on a few primary commodities with unstable prices.

Subsistence

Another component of income is subsistence fishing, and to a lesser extent subsistence gardening, and dependency could also be reduced by increasing these, though again there are environmental limits. The islands do not all have the same gardening potential, and quarantine regulations, which are part of the management of the Torres Strait Protected Zone, restrict the movement of locally produced fruit and vegetables between islands. This reduces the possibility for inter-island trade. However, at a purely subsistence level, that is, growing fruit and vegetables for household consumption, there would appear to be room for expansion without any degradation of the environment, and a survey of the area of land available for gardening on each island and the Cape would provide some useful data for assessing subsistence potential (Arthur 1990).

On the other hand, the level of gardening seems to have dropped dramatically in the islands, where it is now common for people to purchase, rather than grow, food (Arthur 1990). The residents of some islands, for example those on Boigu, and Murray, suggest that one reason that gardening effort has decreased is that the best or most accessible gardening land was used to build airstrips. However, others indicate that they now prefer the wider choice of food that is available from the IBIS store on each island. This is not a new phenomenon, and was noted as early as the turn of century, when some Islanders began to derive an income from the pearl-shell fishery (Beckett 1987: 48), and again in 1974 when a significant proportion of Islander income came from unemployment benefits and other social service allowances (Treadgold 1974: 17; Duncan 1975: 28). It is likely therefore that the current reluctance to garden or to increase subsistence fishing is due,

at least in part, to the secure base-income which many Islanders derive from the CDEP scheme on outer islands and Cape York, and from UB on Thursday Island (Arthur 1990: 53) and the ready availability of imported foods.

The wider economy and possible ramifications for regional development

Since the 1950s there has been a steady movement of Islanders to the mainland in search of work and improved economic status (Fisk 1974; Beckett 1987). There is now a small but noticeable (and as yet unmeasured) flow of Islanders returning to the islands. Some are people who returned for funerals or 'tombstone openings' and then remained. Others indicate that the reason they returned was that the differences in the quality of life between the islands and the mainland has decreased in recent years. They say that the standard of housing in the islands has improved, and that more jobs are now available in community management and fishing. Considering these improvements, together with the down-turn in the mainland economy and the associated increase in unemployment, the Strait has become a more attractive option for some Islanders.¹³

In the past the Strait was a remittance economy (Treadgold 1974; Beckett 1987), but today residents are able to meet requests for money from relatives in the south from their cray earnings.¹⁴ On the outer islands house rents and rates are reasonably low, and considering that people can supplement their incomes from CDEP wages or unemployment benefits with commercial and subsistence fishing, their standard of living is no doubt better than that of an unemployed person on the mainland, an observation made with respect to Aboriginal communities in other remote parts of Australia (see Altman 1987; Fisk 1985: 105).

If this is the case, then as there are improvements in services, such as housing and electricity, and development infrastructure, such as freezers, the Strait may well prove increasingly attractive to Papua New Guineans as well as to Islanders on the mainland, and marine resources will come under increasing pressure to provide an income for these additional people. This may be of particular concern when there already appears to be some degree of suspicion and distrust of fisheries authorities, especially with regard to total allowable catches, and a belief (amongst some locals) that there is little danger of over-fishing.

Discussion

Principal aims of the Federal Government's Aboriginal Employment Development Policy (AEDP) are to achieve Aboriginal and Islander equity in income and employment and to reduce dependence on the welfare system. To this end the AEDP includes some programs which focus on increasing levels of Aboriginal and Islander employment by job-matching, and others which aim to increase employment by focussing on job-creation¹⁵

(Commonwealth of Australia 1987a, 1987b respectively). Both types of programs have relevance to the Torres Strait: the former are most applicable on Thursday Island and Cape York where Islanders can be trained to take over available wage positions in the public and private sectors, and the latter appear relevant in the outer islands where demand for formal employment is very limited, and where productive activity is focussed on self-employment in small fishing enterprises. Furthermore, employment in the public and private sectors occurs largely in service industries where expansion is limited by growth in population. There is no manufacturing or secondary industry, and prospects for mining and tourism are limited.

A viable commercial fishing industry already exists in the Torres Strait, and both Islanders and non-Islanders work full-time in this industry and depend on it for their livelihood. But some Islanders also participate in commercial fishing on a part-time basis. This involvement is indirectly subsidised by their CDEP wages, unemployment benefits or pensions. It was suggested earlier that Islander involvement in commercial fishing could be increased. This could occur by utilising CDEP more effectively, and by improving Islander access to infrastructure, development capital and training within a regional fisheries development strategy. However, fishing is normally undertaken by small self-owned enterprises and research has shown that in Australia small businesses are extremely high risk ventures (Williams 1985). In addition, there are limits to the expansion of primary industries such as fishing, imposed by the size of the fish stocks and sustainable yields. Further, it cannot be assumed that because species exist in the Strait it is profitable to fish them, a point which is also of relevance to subsistence activities. In summary, the potential to expand an economy based on fishing is limited. Two broad options exist: there can be a small number of unsubsidised commercial fishers wholly dependent on fishing for their livelihood, or a larger number of fishers, most of whom receive income support as an indirect subsidy, whether within the CDEP scheme context or by some other means.

This highlights a key problem for people living in remote areas with no secondary industry. There are limits to the real household income which can be generated from the market economy. In other words, the economic structure of remote areas inhabited by Aborigines and Islanders imposes a limit on the number who can achieve the income and employment equity which are the central goals of the AEDP (Altman 1990). The fact that industries are not active in such areas suggests that it may not be possible to establish commercially viable enterprises even with a significant injection of funds. The apparent assumption in the AEDP that the present situation can be substantially changed by the Policy's job-creation programs, which are based largely on CDEP, is highly questionable. At best it is likely the CDEP scheme will only represent a form of on-going remote-area income support or subsidy. Indeed, this may well be the scheme's unstated intention as its guidelines do not provide a mechanism to reduce payments to participants within the scheme if, and when, their incomes from other means increase.

This suggests that realistic policy formation may require more sophisticated labour market programs which include a rigorous assessment of the economic development potential of regions and associated capabilities to generate employment opportunities. In those cases where the potential for economic development is low or nonexistent it is probable that the AEDP's goal of income and employment equity could only be achieved by a substantial on-going regional subsidy. Rigorous assessment of regional development potential would allow an accurate estimate of the size of such a subsidy. It must be noted however, that such a subsidy will undermine the other major platform of the AEDP which is to reduce dependency on the public sector, highlighting a possible inconsistency in policy objectives.

Notes

1. The Torres Strait Protected Zone was established under the Torres Strait Treaty between Papua New Guinea and Australia, ratified in 1985. As a condition of this Treaty, Papua New Guineans are allowed to make 'traditional visits' to the islands inside the Protected Zone. In 1989 there were a total of 4,370 traditional visits to the Strait (Arthur 1990).

2. The ICC is a State body established under the *Queensland Community Services (Torres Strait) Act 1984-86*. As the name implies, its principal functions are the coordination of Strait-wide development, which to date has been primarily associated with services and elements of infrastructure, financed by both the State and Commonwealth Governments. The ICC draws its membership from the outer islands and the Cape Islander communities.

3. In some respects, the social and political atmosphere in the region remains colonial (see Beckett 1987).

4. Formerly the Island Industries Board (IIB).

5. The workforce was made up of those employed by the mine owners and by their contractors. Of the 79 people employed by the mine owners 27 (or 34 per cent) were Aboriginal or Islander people.

6. Ironically regulations under DOGIT also limit the possibilities for joint-ventures with tourism developers.

7. Babbage (1990: 20) gives the total value as \$19-\$23 million, made up of: coral trout \$0.2 million; trochus \$0.6 million; pearls \$2-\$3 million; pearl shell \$0.7 million; mackerel \$0.6 million; cray \$4-\$6 million; and prawns \$13 million.

8. Under the Treaty and management of the Protected Zone there are specific categories of fishing, such as 'community fishing' which provide Islanders with dispensation from normal licensing requirements. These are not detailed here (see Australian Fisheries Service 1985).

9. In 1989, in the cray, trochus, and mackerel fisheries, there were approximately 18 type A full-time fishers from the southwestern islands, and 17 from the outer islands, and there were 177 type B part-time fishers across the entire Strait (Arthur 1990). In reality, the type B fishers can be further sub-divided into those who fish regularly and who are also on CDEP; those who fish irregularly when the weather conditions are good and are also on CDEP; and those who may only fish several times per year, possibly when they require some extra income (this category includes students who fish during school holidays).

10. Any expansion in the cray fishery is reserved for Islanders. Scientific data are not yet available to indicate how large this expansion could be, without depleting the stock.

11. These calculations are based on preliminary data and further research is required on the efficiency of the various fishing units in the Torres Strait.

12. The national unemployment level has varied between 7 and 8 per cent for some years. In discussing parity in employment levels for Aborigines and Islanders, government policy does not address the question of the specific level of employment to be aimed at on a regional basis. Nor does the AEDP specify at what jurisdictional level its aim of employment equity is to be achieved (Altman 1990).

13. This movement could also indicate an increase in circular migration. As the air transport services have improved, the towns of Queensland's east coast and the Strait may have come to represent one socio-economic realm for Islanders.

14. PNG cray workers also send money from Thursday Island to their relatives on the northern islands.

15. Job-matching programs are those which attempt to match industry's demand for labour with the characteristics of the labour-force by various strategies, such as training. Job-creation programs are those which recognise that there will not be an automatic demand for labour by industry and that employment opportunities must be created by other means.

References

- Altman, J.C. 1987. *The Economic Impact of Tourism on the Warmun (Turkey Creek) Community East Kimberley*, East Kimberley Working Paper No. 19. Canberra: Centre for Resource and Environmental Studies, Australian National University.
- Altman, J.C. 1988. *Aborigines Tourism and Development: The Northern Territory Experience*. Darwin: Northern Australia Research Unit.
- Altman, J.C. (Chairman) 1989. *Review of the Aboriginal Arts and Crafts Industry*, Report of the Review Committee. Canberra: Australian Government Publishing Service.
- Altman, J.C. 1990. 'The economic futures of remote Aboriginal and Torres Strait Islander communities', *Australian Aboriginal Studies* 2: 48-52.
- Arthur, W.S. (with assistance from V. McGrath) 1990. *Torres Strait Development Study, 1989*. Canberra: Australian Institute of Aboriginal Studies.
- Australian Bureau of Statistics 1987. *Census of Population and Housing: Aborigines and Torres Strait Islanders: Australia, States and Territories*, Cat. no. 2499. Canberra: Australian Government Publishing Service.
- Australian Bureau of Statistics 1988. *Local Government Areas Statistical Summary, Queensland*, Cat. no. 1306.3. Brisbane: Australian Government Publishing Service.
- Australian Fisheries Service 1985. *The Management of Fisheries in the Torres Strait Protected Zone*, Fisheries Paper No. 85/9. Canberra: Australian Fisheries Service.
- Babbage, R. 1990. *The Strategic Significance of Torres Strait*. Canberra: Strategic and Defence Studies Centre, Research School of Pacific Studies, Australian National University.
- Beckett, J. 1987. *The Torres Strait Islanders: Custom and Colonialism*. Melbourne: Cambridge University Press.
- Commonwealth of Australia 1987a. *Aboriginal Employment Development Policy, Private and Public Employment Strategies, Policy Paper No. 2*. Canberra: Australian Government Publishing Service.
- Commonwealth of Australia 1987b. *Aboriginal Employment Development Policy, Community-Based Employment and Enterprise Strategies, Policy Paper No. 3*. Canberra: Australian Government Publishing Service.
- Cousins, D. and Nieuwenhuysen, J.P. 1984. *Aborigines and the Mining Industry: Case Studies in North Australian Experience*. Sydney: George Allen & Unwin.

Cousins, D. 1985. 'Aboriginal employment in the mining industry', in P. Loveday and D. Wade-Marshall (eds) *Economy and People in the North*. Darwin: North Australian Research Unit.

Department of Primary Industries and Energy 1988. 'Torres Strait Treaty: offshore exploration and mining', unpublished document, Commonwealth Department of Primary Industries and Energy, Canberra.

Duncan, H. 1974. *Socio-Economic Conditions in the Torres Strait: A Survey of Four Reserve Islands*, Vol. I. Canberra: Department of Economics, Research School of Pacific Studies, Australian National University.

Duncan, H. 1975. 'Life in the Torres Strait: food? you buy it in a store...', *New Guinea and Australia, the Pacific and South-East Asia* 9(4): 22-32.

Fisk, E.K. 1974. *Policy Options for the Torres Strait*, Vol. VI. Canberra: Department of Economics, Research School of Pacific Studies, Australian National University.

Fisk, E.K. 1985. *The Aboriginal Economy in Town and Country*. Sydney: George Allen & Unwin.

Horwath and Horwath Services 1989. Tourism Development Opportunities Study for the Torres Strait Islands, unpublished report, Horwath and Horwath Services, Brisbane.

Lea, J., Stanley, O. and Phibbs, P.J. 1990. *Torres Strait Regional Development Plan 1990-95*. Sydney: Department of Urban and Regional Planning, University of Sydney.

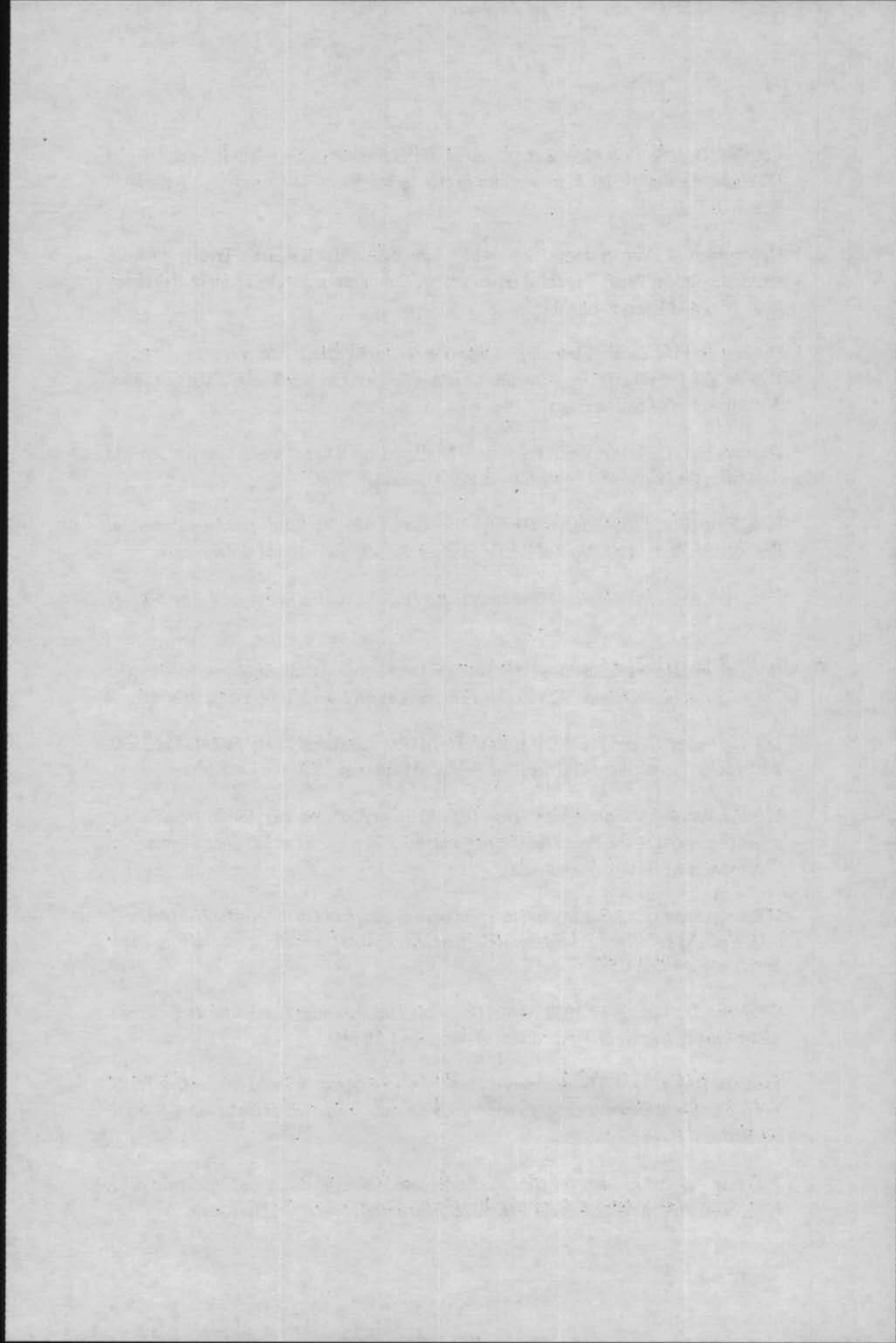
Memon, P.A. and Cullen, R. 1990. 'New Zealand fishery policies and Maori', unpublished paper presented at the New Zealand Association of Economists 1990 Sesquicentennial Conference, Auckland, August 1990.

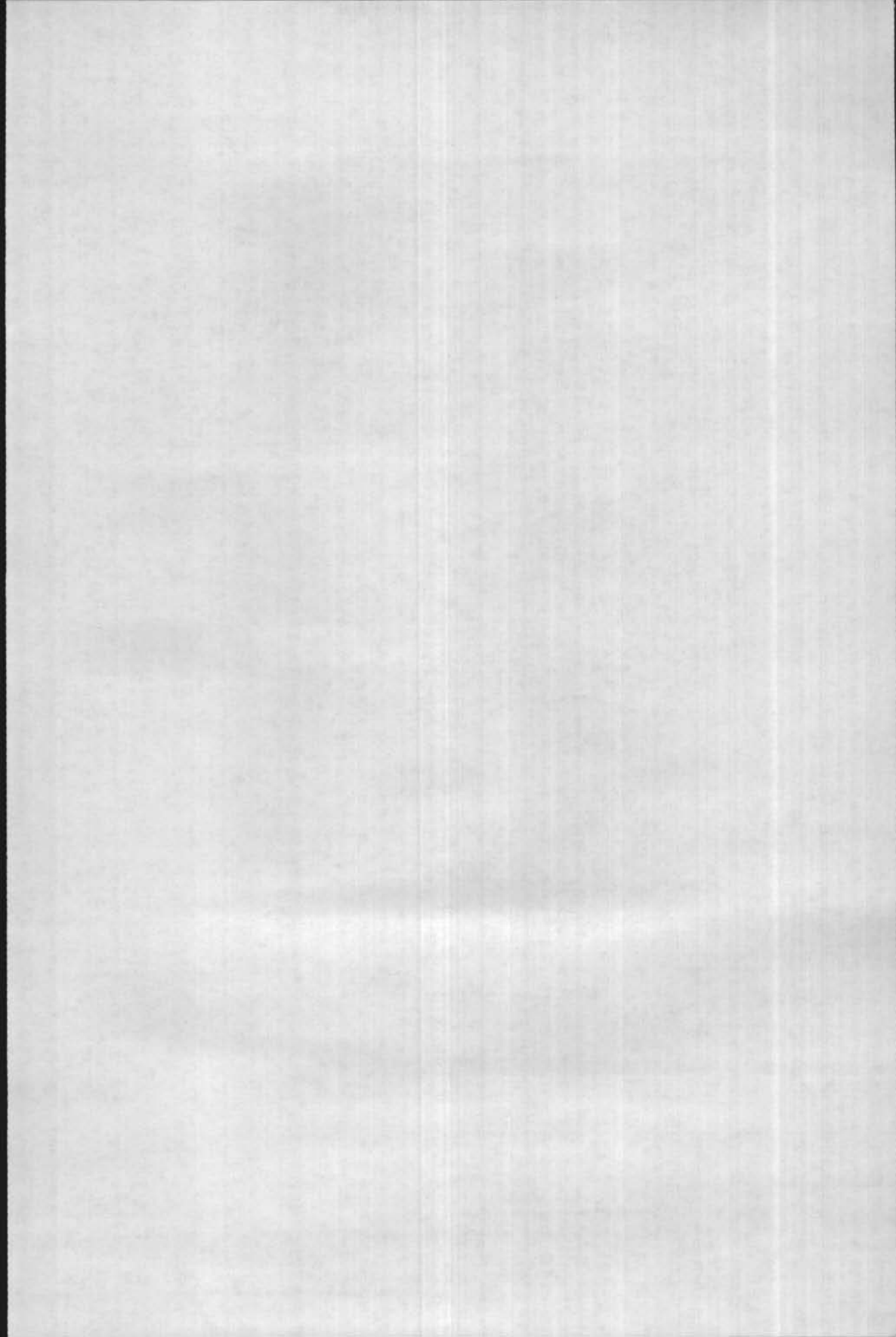
O'Faircheallaigh, C. 1985. 'Mining as a source of employment in the Northern Territory', in D. Wade-Marshall and P. Loveday (eds) *Employment and Unemployment*. Darwin: North Australia Research Unit.

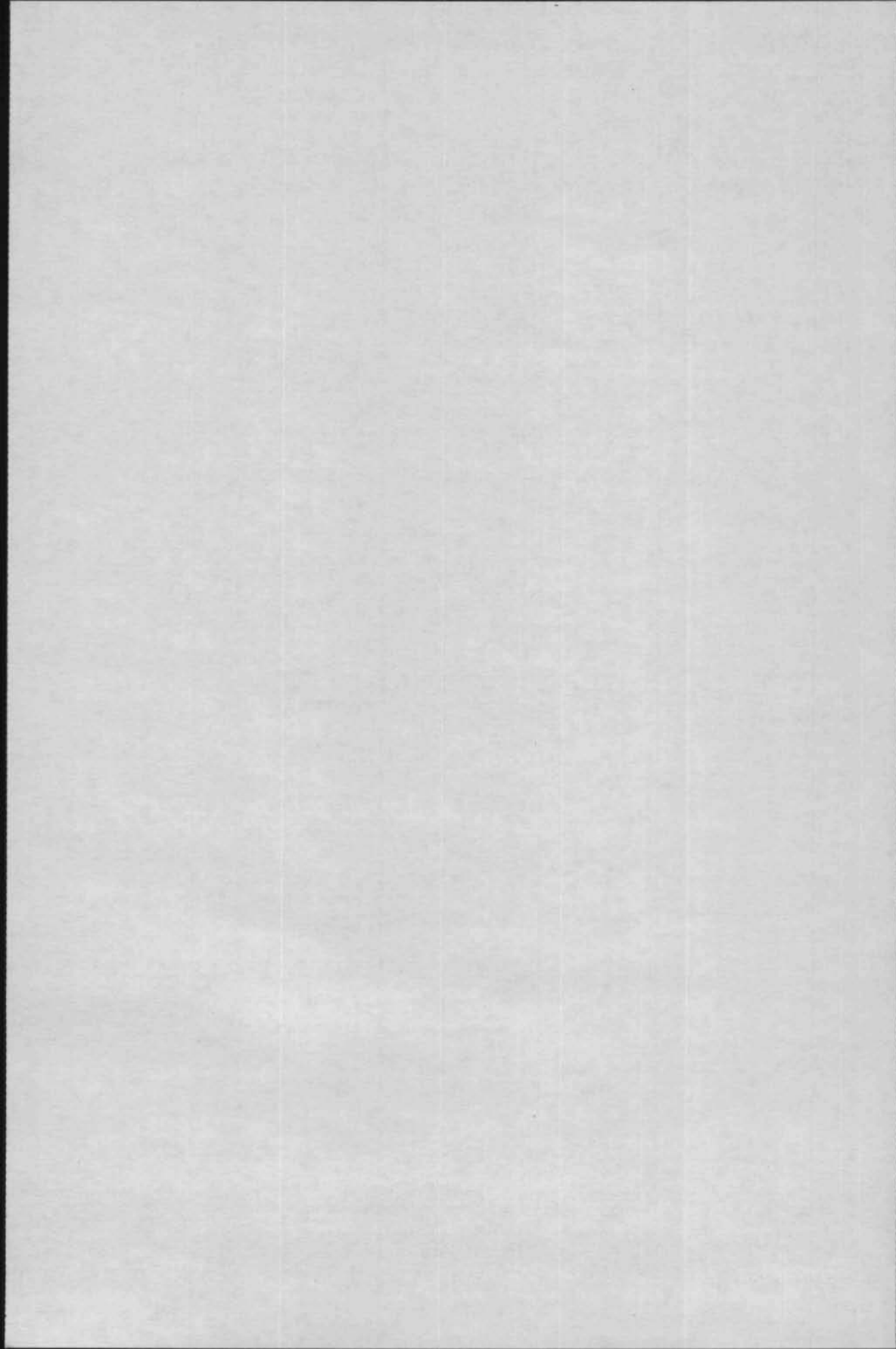
O'Rourke, D. (Chairman) 1988. *Report Of the Interdepartmental Committee on the Torres Strait Islands*. Canberra: Department of Aboriginal Affairs.

Treadgold, M. L. 1974. *The Economy of the Torres Strait Area: A Social Accounting Study*, Vol II. Canberra: Department of Economics, Research School of Pacific Studies, Australian National University.

Williams, A. J. 1985. Characteristics and Performance of Small Business in Australia 1973-1985, unpublished reports, Vols. I and II, University of Newcastle, Newcastle.







**CENTRE FOR ABORIGINAL ECONOMIC POLICY RESEARCH
(CAEPR) DISCUSSION PAPERS:**

1. 'From exclusion to dependence: Aborigines and the welfare state in Australia' by J.C. Altman and W. Sanders (March 1991).
2. 'Geographic variations in the economic status of Aboriginal people: a preliminary investigation' by H. Tesfaghiorghis (March 1991).
3. 'Aboriginal socio-economic status: are there any evident changes?' by H. Tesfaghiorghis and J.C. Altman (March 1991).
4. 'Indigenous economic development in the Torres Strait: possibilities and limitations' by W.S. Arthur (March 1991).

