# Torres Strait Islanders and fisheries: an analysis of economic development programs

#### **Bill Arthur**





Centre for Aboriginal Economic Policy Research
The Australian National University
June 2005

#### TITLE:

Torres Strait Islanders and fisheries: an analysis of economic development programs

#### **COPYRIGHT:**

© Department of the Environment and Heritage 2005

#### **DISCLAIMER:**

This report was prepared by the Centre for Aboriginal Economic Policy Research, Australian National University as an input to the regional marine planning process for the Torres Strait. The views expressed in this report are not necessarily those of the Australian Government. The Australian Government does not accept responsibility for the contents of this report.

#### **SOURCING:**

Copies of this report are available from: The National Oceans Office Level 1, 80 Elizabeth Street, Hobart GPO Box 2139 Hobart TAS 7001

Tel: +61 3 6221 5000 Fax: +61 3 6221 5050 www.oceans.gov.au

For further information about this report, contact the Public Affairs Officer.

#### **REPRODUCTION:**

Information in this report may be reproduced in whole or in part for study or training purposes, subject to the inclusion of acknowledgement of the source and provided no commercial usage or sale of the material occurs. Reproduction for purposes other than those given above requires written permission from the National Oceans Office. Requests for permission should be addressed to the Public Affairs Officer at the above address.

Published by the National Oceans Office

#### **STATE LIBRARY REF:**

Torres Strait Islanders and fisheries: an analysis of economic development programs ISBN 1-877043-67-2



| Contents  | Page             |
|---|------------------|
| Summary Introduction Aims Methodology   | 5<br>8<br>8<br>9 |
| An analysis of the relationship between Community Development<br>Employment Projects scheme (CDEP) and Islander<br>commercial/community and traditional fishing | 10               |
| An overview of the impediments to increased traditional inhabitant  | 10               |
| involvement in commercial/community fishing   | 13               |
| A limited resource  | 13               |
| Competition Non-Infandors   | 13               |
| Non-Islanders The traditional fishers   | 14<br>14         |
| The traditional fishery An unequal geography  | 15               |
| Licensing and units of ownership  | 16               |
| Infrastructure  | 17               |
| Freezers  | 17               |
| Accommodation   | 18               |
| Fishing units   | 18               |
| The petrol rebate   | 18               |
| Market knowledge and responsiveness   | 19               |
| How fisheries management and industry development and employment  |                  |
| programs can be 'better aligned' for the benefit of Islander involvement  |                  |
| in commercial/community fishing in the Torres Strait  | 20               |
| More specific policy aims   | 20               |
| Islander aspirations  | 20               |
| Policies, programs, coordination and responsibility   | 21               |
| The PZJA network  | 21               |
| The non-PZJA network  | 22               |
| Data  | 24               |
| Unequal or equal development?   | 24               |
| Aquaculture and new species   | 25               |
| Increasing efficiencies  The DNC traditional inhabitants of Tornes Strait   | 25               |
| The PNG traditional inhabitants of Torres Strait  | 26<br>26         |
| Strategic planning for the fishery  | 26               |
| The gaps and overlap in the industry development and employment programs in the Torres Strait in the promotion and support of Islander                          |                  |
| involvement in commercial/community fishing   | 27               |
| Training issues   | 27               |

| Tax and administration   | 27 |
|--|----|
| Boat handling  | 27 |
| Fishing and fish handling  | 27 |
| Resource management skills   | 28 |
| Thursday Island State High School and TAFE   | 28 |
| Loans and grants   | 29 |
| Conclusions  | 31 |
| Appendix A: Extracts from the PZJA Annual Report 2001-02 on policy and programs relating to the participation of traditional inhabitants in the Torres Strait commercial fishery | 32 |
| References   | 35 |
| Tables   |    |
| Table 1. Indigenous population, 2001   | 11 |
| Table 2. Possible expansion of the fishery by species  | 13 |
| Table 3. Sectors and fisheries   | 14 |
| Table 4. Per cent of species caught and sold commercially, in the Protected  |    |
| Zone islands, 1994   | 15 |
| Table 5. Daily Islander catch in kg, by location, by species, 1991-1993  | 16 |

#### Summary

Torres Strait is a complex region not least because it straddles the international border with Papua New Guinea and is subject to the rather unique Torres Strait Treaty (the Treaty) arrangements with that country. The Treaty (ratified in 1985) has multiple objectives which include within its spirit the economic benefit or development of the traditional inhabitants (for the purposes of this project Torres Strait Islanders) through involvement in the region's fisheries.

The Treaty delineates a Torres Strait Protected Zone and the associated *Torres Strait Fisheries Act 1984* (the Act) creates the Torres Strait Protected Zone Joint Authority (PZJA) which gives effect to many of the marine related aspects of the Treaty within or near that Zone (in reality, over most of the area commonly known as Torres Strait). In its earliest form the PZJA was composed of the relevant Australian and Queensland Ministers; more recently it has included the chair of the Torres Strait Regional Authority (TSRA); the only Indigenous regional authority in the country. The PZJA is supported by a system of advisory committees and working groups made of representatives drawn from the worlds of fisheries research and industry (Islander and non-Islander) and its secretariat is the Australian Fisheries Management Authority (AFMA). One of the PZJA's advisory groups is the Torres Strait Scientific Advisory Committee (SAC). The SAC's role has been to advise the PZJA on relevant research and a major funder of this research has been AFMA. The SAC has generally (though not entirely) directed research at issues to do with the health of the stock of the marine resource.

In the last few years the SAC has been merged with the 'CRC Reef', a cooperative research centre based in Townsville, so forming the Torres Strait CRC (TSCRC). This has injected a new set of researchers and funders of research into the Torres Strait which is now part of the system providing advice to the PZJA. The TSRA is a partner and funder of the new TSCRC. In this way the TSRA is now a member of the PZJA (alongside the Ministers) and a member (and funder) of the group advising the PZJA on directions and priorities for research. Concurrent with these structural changes has been a proposed change in direction for the SAC and the TSCRC so as to include more fully the field of socio-economics and thus to engage with the developmental aspects of the Treaty, noted above.

The Torres Strait fishery itself is made up of a number of species (prawns, tropical rock lobster [TRL] beche de mer [BDM] mackerel, and various reef fish). The extent to which these species and others are part of the fishery is variable and depends on market demand. The fishery is made up at least two sectors based on ethnicity (Islander and non-Islander). It also has two major sub-divisions: a commercial fishery (involving Islanders and non-Islanders) and a traditional or customary fishery (involving only Islanders) within which species are taken not for sale but for consumption by Islanders).

The overall aim of this project was to investigate the factors that appear to hinder the furtherance of the aims of the Treaty and the Act and the programs operating in Torres Strait that appear to further (or not as the case may be) these aims.

More particularly the aims of the project fall into four areas:

- one is associated with the relationship between Islander commercial and traditional fishing and an Indigenous-specific program of the Australian Government called the Community Development Employment Projects (CDEP) scheme (this is ostensibly a 'work-for-the-dole' scheme);
- a second is associated with impediments to the increased involvement of Islanders in commercial fishing;
- a third is associated with the possible way(s) in which programs might be better aligned to increase Islander involvement in commercial fishing; and
- a fourth is aimed at identifying gaps or overlap in programs that might promote Islander involvement in commercial fishing.

The project was carried out by issuing a questionnaire to the relevant agencies and service providers in Torres Strait and by interviewing a number of these. The following is a summary of the principal findings as they relate to the four project aims.

The CDEP scheme operates as a form of income support for Islanders and so effectively relieves pressure on the fishery; the rationale being that if the scheme did not exist then Islanders would have to increase their take to achieve their present incomes. The scheme should be retained and wherever possible it should be used to up-skill Island fishers.

The report proposes several possible impediments to Islander involvement in commercial fishing. Principal among these are that the fishery appears to have limited potential for expansion and that Islander commercial fishers must compete with non-Islanders and possibly with their own traditional fishery. It is also noted that the species are not distributed equally across the region, so advantaging some islands and disadvantaging others. In this regard a major policy decision might be whether to focus the developmental effort on the islands that are disadvantaged.

Regarding the better alignment of programs, at a general level, programs that might further the aims of the Treaty and the Act (as given by the PZJA) appear hampered by the fact that these aims are not specific either with regard to the fishing industry in general or to the species that make up the industry. The aims are stated at a quite general level and take the form of maximising, increasing or encouraging Islander involvement in fisheries. The goals of the Act and the PZJA should be made more specific for each fishery and given a schedule or time line. This should be integrated with the aspirations of Islanders and with the final version of the TS SAC strategic plan. The links between the PZJA structure, and other structures and agencies that are involved with employment and training programs seem quite weak and consideration should be given to exploring how these might be better integrated.

Formerly, Islander commercial fishing (community fishing) was relatively free of regulation. Islanders are now obliged to comply with more regulations (for example those associated with the taxation regime) making the fishery more like mainstream commercial fishing. The survey revealed that this may be creating an obstacle to Islander

involvement. It is suggested that Islanders are provided with training that would enable them to comply with the relevant regulations.

Associated with all of the above, the survey revealed that data on the involvement of Islanders in the fishery is not good. It would seem difficult to mount, or indeed design, programs that aim to deal with the subject of change without reliable data and it is recommended that a comprehensive data system be developed.

#### Introduction

A common objective of the Torres Strait Treaty (hereafter the Treaty), the Torres Strait Fisheries Act 1984 (hereafter the Act) and the policies of the Torres Strait Protected Zone Joint Authority (PZJA) is to promote the economic development of Torres Strait Islanders<sup>1</sup> within the regions fishery (hereafter the fishery).<sup>2</sup> These policies as given by the PZJA are in Appendix A. The Torres Strait fishery can be characterised in a number of ways. One characterisation for Torres Strait Islander (Islander) fishers (under the Treaty and Act) is the distinction between fishing for product to sell, and fishing for product to consume. Under the above legislation, Islander fishing for consumption (at home and at celebratory events) is called traditional fishing and Islander fishing that is for sale is termed community fishing. As noted below, this project has aims that involve both forms of fishing. Further, the 'aims' term fishing for sale as 'commercial/community' fishing. This is no doubt because when the Treaty and Act came into effect, Islander fishing for sale (community fishing) was relatively unregulated, but regulations and records are now being introduced, thereby making community fishing more like commercial fishing. The term commercial/community fishing captures the somewhat dual status of Islanders' fishing for sale as this now sits somewhere between community fishing and commercial fishing. In the body of the report where the expression 'commercial fishing' is used with reference to Islanders it means fishing for sale. This point is discussed further below.

#### **Aims**

With the above legislation in mind, this project has the following aims (as given in the terms of reference):

- Provide an analysis of the relationship between the Community Development Employment Project (CDEP) and Islander commercial/community and traditional fishing.
- Provide an overview of the impediments to increased traditional inhabitant involvement in commercial/community fishing.
- Recommend how fisheries management and industry development and employment programs can be 'better aligned' for the benefit of Islander involvement in commercial/community fishing in the Torres Strait.
- Identify the gaps and overlap in the industry development and employment programs in the Torres Strait in the promotion and support of Islander involvement in commercial/community fishing.

<sup>&</sup>lt;sup>1</sup> The Treaty places Torres Strait Islanders within the category of 'traditional inhabitants' who reside in Torres Strait, who are Australian citizens and who maintain some traditional or customary associations with areas in or near the region called the Protected Zone. For the purposes of this project, unless otherwise stated, traditional inhabitants means Torres Strait Islanders (Islanders) in Torres Strait.

<sup>&</sup>lt;sup>2</sup> The fishery is composed of a variety of species and where reference is made to a particular species it will be by the commonly used terminology, eg the prawn fishery. The commercial sector is presently made up of the species in Table 2.

#### Methodology

The only new research for this project included a questionnaire to government departments and the Torres Strait Regional Authority (TSRA) regarding programs related to commercial fishing, and follow-up interviews. Other data were drawn from previous research. The following have been heavily drawn on (Arthur 1990; Mapstone et al 2003; Begg and Murchie 2004; Harris et al 1994). Other sources utilised included the TSRA Annual Report 2003–04 and the Island Coordinating Council (ICC) Annual Report 2003–04 and the references cited.

As noted above, in this report community fishing - as described in the Treaty and Act - is called commercial fishing and means fishing for sale. The terms subsistence, customary or traditional fishing are used here to mean the same thing, namely fishing for home consumption and or for ceremonial purposes. Fish or marine produce that is fished for trade or barter, say with people from Papua New Guinea (PNG) is not considered here as data on this feature is very poor and the practice is probably quite localised. For example, Harris et al (1994: 14) report that the northern islands trade akul with visitors from Western Province (see also Arthur 1990).

Those approached re their programs are listed below. Those who replied to the survey form are marked \* and those who took part in follow up interviews are marked #.

Miya Isherwood of the Natural Resource Management planning team, who is located within the TSRA, provided invaluable assistance to distribute the questionnaire and arrange interviews.

| TSRA *#               | Centrelink             | ICC#                   | TAFE#              |
|-----------------------|------------------------|------------------------|--------------------|
| Australian Fisheries  | Australian Customs     | Qld Education#         | Workplace Health & |
| Management Authority  | Service *#             |                        | Safety#            |
| (AFMA)                |                        |                        |                    |
| Department of         | Torres Strait Regional | Queensland Fisheries   | National Bank      |
| Education Science and | Employment Committee   | and Boating Patrol     | (Thursday Island)  |
| Technology (DEST)#    | (TSREC) *#             | (QF&BP)                |                    |
| Australian Quarantine | Department of          | Department of          |                    |
| Inspection Service    | Employment Training    | Aboriginal and Torres  |                    |
| (AQIS)*#              | and Youth Affairs      | Strait Islander Policy |                    |
|                       | (DETYA)                | (DATSIP)#              |                    |
| Industry Training &   |                        | Cairns Region Group    |                    |
| Employment Council    |                        | Training (Bamaga)      |                    |

<sup>\*</sup> Those who responded to the survey form

<sup>#</sup> Those interviewed

### An analysis of the relationship between the CDEP and Islander commercial/community and traditional fishing

CDEP is the Community Development Employment Projects scheme, in which Indigenous people agree to forego their unemployment benefits for an approximately equivalent wage usually paid by their community for the completion of community-related work. CDEP wages are at award rates and so work is usually part-time. In Torres Strait, workers normally work on CDEP on alternate weeks. CDEP workers may also undertake training while on the scheme. CDEP is the largest Indigenous program in the country. It has existed since the mid 1970s, though it only became widespread in Torres Strait in the late 1980s. The program is funded in two main components one of which is wages, and the other is on-costs and equipment. It can be used to stimulate or be part of a business; to provide a training wage and to subsidise training and some employment. It is a very flexible program and in many respects its uses are limited only by the imagination of its managers.

Islanders' earned income<sup>3</sup> is from the following main sources: CDEP work and community council employment; employment outside island communities; commercial fishing; and traditional fishing (import substitution). In 1990 it was estimated that, over the whole region, commercial fishing and subsistence fishing contributed some 15 per cent and 11 per cent of Islanders' earned incomes respectively.<sup>4</sup> These proportions are now likely to be quite different as the Islander share of the commercial fishery and the CDEP scheme have increased.<sup>5</sup>

Table 1 shows that CDEP is not in Port Kennedy. In the most general terms CDEP and traditional fishing are likely to be more prominent features in the Outer Islands where formal employment is quite limited (Arthur 1990). There, earned income is likely to come from a mix of CDEP, commercial fishing and traditional fishing. Mixing CDEP and commercial fishing is possible because of the part-time nature of the scheme; people usually work week-on week-off and they can fish on their week-off. In the earlier period of the scheme it was suggested that it may interfere with fishing as fishing is dependent on tides, good weather etc and these may not always coincide with people's week-off (see Arthur 1991). The extent to which this issue has been resolved is not clear. In any event, the suggestion is that many Islander fishers mix several activities to obtain their income and one of these is CDEP.

As the CDEP scheme is work other than fishing, it means that it potentially relieves pressure on the fishery. The commercial fishery plus CDEP can provide an income for a number of part-time fishers, or the commercial fishery alone (without CDEP) can provide a similar income for a smaller number of full-time fishers. In addition to this, it is

<sup>&</sup>lt;sup>3</sup> Earned income excludes welfare-related income for which the recipient does no work.

<sup>&</sup>lt;sup>4</sup> In the past a small amount of income has been generated from the sale of art and artefacts.

<sup>&</sup>lt;sup>5</sup> At early 2005, there were a total of 2013 people participating 18 CDEP schemes across Torres Strait in the locations shown in Table 1. The average annual wage per participant was \$10,786.

<sup>&</sup>lt;sup>6</sup> Altman (2001) has characterised such situations as the 'hybrid economy'.

possible that the income so provided may be adequate to meet most needs and that some fishers may only fish to meet particular and pressing financial commitments. This latter practice has been likened to a form of 'target working' (Arthur et al 2004). The impression gained from the above is that, in part because of CDEP, the Islander fishery may not be (or need to be) as intensive as the non-Islander fishery. In addition, this survey revealed that CDEP labour is used to construct infrastructure related to fishing, such as live tropical rock lobster (TRL) tanks, and for the operation and management of freezers on Outer Islands.

Table 1. Indigenous population, 2001

| Inner islands      | Outer Islands   | Cape Islander communities | All Indig.,<br>2001 | Indig. 15-<br>64 years | Nos on CDEP, |  |
|--------------------|-----------------|---------------------------|---------------------|------------------------|--------------|--|
|                    |                 |                           |                     | old, 2001              | 2005         |  |
| Port Kennedy       |                 |                           | 836                 | 503                    | 0            |  |
| Thursday Island    |                 |                           |                     |                        |              |  |
| Tamoi, Rose Hill,  |                 |                           | 809                 | 443                    | 148          |  |
| Waiben, Quarantine |                 |                           |                     |                        |              |  |
| (TRAWQ)            |                 |                           |                     |                        |              |  |
| Thursday Island    |                 |                           |                     |                        |              |  |
| Horn               |                 |                           | 284                 | 147                    | 65           |  |
| Hammond            |                 |                           | 195                 | 93                     | 62           |  |
|                    |                 |                           |                     |                        |              |  |
|                    | Boigu           |                           | 245                 | 123                    | 95           |  |
|                    | Dauan           |                           | 105                 | 73                     | 56           |  |
|                    | Saibai          |                           | 229                 | 123                    | 105          |  |
|                    |                 |                           |                     |                        |              |  |
|                    | Mabuiag         |                           | 198                 | 100                    | 97           |  |
|                    | Badu            |                           | 516                 | 285                    | 250          |  |
|                    | St Pauls        |                           | 186                 | 101                    | 110          |  |
|                    | Kubin           |                           | 166                 | 87                     | 69           |  |
|                    |                 |                           |                     |                        |              |  |
|                    | Yam and Coconut |                           | 275                 | 133                    | 175          |  |
|                    | Warraber        |                           | 207                 | 116                    | 90           |  |
|                    | Yorke           |                           | 244                 | 141                    | 138          |  |
|                    |                 |                           |                     |                        |              |  |
|                    | Stephen         |                           | 61                  | 44                     | 0            |  |
|                    | Darnley         |                           | 278                 | 157                    | 144          |  |
|                    | Murray          |                           | 408                 | 247                    | 138          |  |
|                    | ·               |                           |                     |                        |              |  |
|                    |                 | Bamaga                    | 638                 | 335                    | 187          |  |
|                    |                 | Seisia                    | 110                 | 59                     | 84           |  |
|                    |                 |                           |                     |                        |              |  |
| Total              |                 |                           | 5990                | 3310                   | 2103         |  |

Source: Australian Bureau of Statistics 2001; TSRA pers. comm. 2005.

In most regions of the country, CDEP is administered at a regional level by a particular body and in Torres Strait this is the TSRA. Community councils apply to the TSRA for funds and then administer these at the community level. The community organises its CDEP workers and is a de facto employer. The community prepares community plans

and projects. These may be associated with fishing, but at a level other than the selfemployed fisher. Such a project might be associated with a community freezer and might draw CDEP funds for its construction, or for training or management (as noted above).

The CDEP is a transfer of government funds that can, at one level, be viewed as perpetuating welfare dependence. However, in Torres Strait it is also a form of income support and as such it effectively reduces pressure on the fishery and so makes the fishery more sustainable. The CDEP may also be used for elements of training and for construction associated with fishing.

#### Recommendation

The CDEP scheme appears to meet the objectives of policy and should continue to be utilised for projects related to commercial fishing.

### An overview of the impediments to increased traditional inhabitant involvement in commercial/community fishing

A number of possible impediments are discussed under individual headings. It should be noted that a full assessment of this issue would require a full and detailed study in its own right and would proceed on a species by species basis as well as on a regional level. It would include issues of economics, social traits and governance, and would involve interviews with fishers. The following can only be indicative.

#### A limited resource

The quality of the data on the stock of each species is variable. Table 2 shows AFMA's estimates of possible expansion by species. Although not quantified, we can see that the possibility of expanding the take of the fishery seems very limited. Neither of the high value species (prawn and TRL) can be expanded. Of the species that might be expanded and that involve Islanders (beche de mer [BDM], trochus shell, barramundi, crab, line fishing, and mackerel) only BDM and trochus shell can be expanded with certainty. Therefore, the scope for expansion seems limited and even in those cases where expansion might be tolerated; the estimate is based on poor data.

From the above, impediments include the apparent limited potential for the resource to be further exploited, and a lack of adequate data for planing, management and development purposes.

Table 2. Possible expansion of the fishery by species

| Species       | Significant Islander | Possible increase | Notes                   |
|---------------|----------------------|-------------------|-------------------------|
|               | involvement          |                   |                         |
| BDM           | Yes                  | Yes               | Low value species       |
| Trochus shell | Yes (when operating) | Yes               | Not presently a fishery |
| Barramundi    | No                   | Limited           |                         |
| Crab          | Yes                  | Limited           |                         |
| Line fishing  | Yes                  | Maybe             | Limited data            |
| Mackerel      | Yes                  | Maybe             |                         |
| TRL           | Yes                  | No                |                         |
| Prawn         | No                   | No                |                         |
| Pearl shell   | No                   | No                |                         |

Source: AFMA Thursday Island pers. comm. 2004

#### Competition

The fishery has several sectors as shown in Table 3. This shows that each sector may use the fishery differently and that there is competition between the sectors and between the commercial and traditional fisheries. Present estimates of the share of the catch taken by the various sectors are limited.

#### **Non-Islanders**

As the sectors compete for the catch, an impediment to expansion of the Islander sector is the competition from the other sectors, such the non-Islander sector. The possibly of reserving parts of the commercial fishery for Islanders is presently being considered by the Australian and Queensland Governments and is not discussed here. However, recent estimates by AFMA suggest that a 50 per cent reduction in the Australian non-Indigenous sector would allow the Australian Indigenous sector to be expanded by almost 100 per cent.

A potential impediment to Islander fishing is competition from the non-Indigenous sector. The extent of this competition is not clear.

Table 3. Sectors and fisheries

| Sector                           |            | CDEP        |              |     |
|----------------------------------|------------|-------------|--------------|-----|
|                                  | Commercial | Traditional | Recreational |     |
|                                  |            |             |              |     |
| Aust Indigenous                  | YES        | YES         | NO           | YES |
| Aust non-Indig resident          | YES        | NO          | YES          | NO  |
| Aust non-Indigenous non-resident | YES        | NO          | NO           | NO  |
| PNG Indigenous                   | YES (n.d.) | YES (n.d.)  | NO           | NO  |
| Illegal fishers                  | YES (n.d.) | YES (n.d.)  | NO           | NO  |

Notes: n.d. = no data

#### The traditional fishery

There is also potential competition between the commercial and the traditional sectors of the fishery. The extent of this issue is presently unclear, for example in some cases it appears that the commercial and traditional fisheries may be made up of different species and so, there should be little competition (Mapstone et al 2003: ii; Begg and Murchie 2004: 3). However, Table 4 from Harris et al (1994) shows that the same species can appear in the commercial and the traditional fisheries.<sup>7</sup> The work presently being carried out by Busilacchi as part of the Torres Strait CRC is intended to clarify this issue with respect to eastern reef-line fishery.

The traditional fishery has few regulations, and no system of recording the catch (Mapstone et al 2003: 21). Other work has shown that the traditional catch is substantial (Arthur 1990; Johannes and MacFarlane 1991). If sustainability depends on being attentive to the entire product taken from the seas, then having a system for recording and managing the traditional fishery may be as important as having one for the commercial fishery. There were few if any systems for regulating traditional fishing in the past (Arthur 2004). As suggested by Mapstone et al (2003) any introduced system would need community support; it would also need community design. A system exists in New

<sup>&</sup>lt;sup>7</sup>As regards the TRL traditional component, Harris et al (1994: 13) note that the TRL heads were consumed at home, fed to livestock or used for bait.

<sup>&</sup>lt;sup>8</sup> Technical regulations do apply to the taking of turtle, dugong and TRL.

Zealand to record the Maori traditional catch and this may provide some useful information for Torres Strait.

Table 4. Per cent of species caught and sold commercially, in the Protected Zone islands, 1994

|            | % Weight sold commercially       | % Weight in the traditional fishery |
|------------|----------------------------------|-------------------------------------|
| TRL        | 92                               | 8                                   |
| Bivalves   | 63 (pearl shell, akul)           | 37 (akul, clam, cockles)            |
| Gastropods | 84 (trochus)                     | 16                                  |
| Crabs      | 45                               | 55                                  |
| Fish       | 9 (trout, reef fish, barramundi) | 91                                  |

Source Harris et al (1994)

A potential impediment to increased Islander involvement in the commercial fishery is the take of the traditional fishery.

#### Recommendation

The relationship between the Islander commercial and traditional sectors should be clarified.

#### An unequal geography

Table 5 shows the take of various species by each island, from 1994 research. This pattern generally mirrors the one found by Arthur (1990). It shows that Islanders are not accessing the species equally; in fact the pattern is quite unequal. Information from the TSRA in this survey showed the northern islands are less likely to apply for loans or grants associated with commercial fishing than are other islands, so supporting the pattern.

One factor to account for this pattern is that species are not evenly distributed across the Strait. Islanders fish from small boats and this can affect their potential range (Mapstone et al 2003; Arthur 1990; Harris et al 1994). In addition, Islanders also subscribe to traditional property rights, they recognise a notional territory composed of reefs and waters and are not always keen on others (any others) encroaching on this territory (Arthur 1990; Johannes and MacFarlane 1991; Mapstone 2003: 15). This is a fundamental difference between Islander and non-Islander perceptions of the ownership of the waters and their resources. The non-Islander or mainstream approach is to view the waters as being held under common ownership (Ostrom 1990). Clearly any notion of traditional ownership which demarcates 'territories' from which others are excluded, runs counter to notions of common ownership. In this instance, the exclusion referred to is that between groups of Islanders. Therefore, even if fishers had boats of a size that allowed them to access the territory of other and distant islands, they may not necessarily be welcome to do so (Arthur 1990). Native Title may accentuate this factor. However, this survey revealed that Stephen Island has invited Saibai Island to fish in their waters so as

to make the Stephen Island freezer more economically viable, suggesting that a degree of inter-island cooperation is possible.

The uneven distribution of the species combined with the notion of traditional ownership may be an impediment to involvement of some islands in the commercial fishery (see below).

Table 5. Daily Islander catch in kg, by location, by species, 1991-1993

| Island/community | TRL   | Crab | Line                      | Bivalves        | Gastropods | Turtle | Dugong | Octopus |
|------------------|-------|------|---------------------------|-----------------|------------|--------|--------|---------|
|                  |       |      | Fishing                   | (pearl          | (trochus)  |        |        |         |
|                  |       |      | (mackerel,<br>trout, reef | shell,<br>akul) | Shells     |        |        |         |
|                  |       |      | fish,                     | Clams           |            |        |        |         |
|                  |       |      | barramundi                | Clains          |            |        |        |         |
| Port Kennedy     | n.d.  | n.d. | n.d.                      | n.d.            | n.d.       | n.d.   | n.d.   | n.d.    |
| Thursday Island  | 11.0. | n.a. | n.d.                      | n.a.            | n.u.       | n.u.   | n.d.   | n.a.    |
| TRAWQ            | n.d.  | n.d. | n.d.                      | n.d.            | n.d.       | n.d.   | n.d.   | n.d.    |
| Horn             | n.d.  | n.d. | n.d.                      | n.d.            | n.d.       | n.d.   | n.d.   | n.d.    |
| Hammond          | n.d.  | n.d. | n.d.                      | n.d.            | n.d.       | n.d.   | n.d.   | n.d.    |
|                  |       |      |                           |                 |            |        |        |         |
| Boigu            | 17.2  | 17.0 | 21.8(1)                   | 15.7            | 0          | 68.1   | 212.9  | 0       |
| Dauan            | 0.1   | 0    | 8.3                       | 0.2             | 0          | 22.4   | 41     | 0       |
| Saibai           | 0.1   | 4.6  | 24.5                      | 13.5            | 0.1        | 29.5   | 8.6    | 0.1     |
|                  |       |      |                           |                 |            |        |        |         |
| Mabuiag          | 75.9  | 0    | 12.9                      | 1.1             | 0.1        | 34.1   | 127.7  | 0.5     |
| Badu             | 48.5  | 0.2  | 58.1                      | 15.1            | 0          | 41.8   | 168.4  | 0       |
| Moa              | 4.4   | 0.4  | 21.0                      | 27.7            | 0          | 51.7   | 51     | 0.1     |
|                  |       |      |                           |                 |            |        |        |         |
| Yam              | 50.8  | 0.1  | 36.3                      | 5.2             | 1.0        | 7.7    | 28.6   | 1.7     |
| Warraber         | 36.7  | 0.1  | 28.5                      | 1.3             | 3.0        | 65.2   | 0      | 0.2     |
| Coconut          | 16.7  | 0    | 59.8                      | 5.2             | 51.3       | 30.2   | 0      | 0       |
| Yorke            | 49.1  | 0    | 48.3                      | 2.1             | 114.6      | 26.4   | 5      | 0.1     |
|                  |       |      |                           |                 |            |        |        |         |
| Stephen          | 20.5  | 0    | 43.2                      | 0.1             | 0          | 1.7    | 0      | 0       |
| Darnley          | 4.1   | 0.1  | 17.3                      | 1.0             | 0.2        | 45.3   | 0      | 0.2     |
| Murray           | 9.7   | 0    | 25.0                      | 3.9             | 0          | 109.2  | 0      | 0       |
|                  |       |      |                           |                 |            |        |        |         |
| Bamaga           | n.d.  | n.d. | n.d.                      | n.d.            | n.d.       | n.d.   | n.d.   | n.d.    |
| Seisia           | n.d.  | n.d. | n.d.                      | n.d.            | n.d.       | n.d.   | n.d.   | n.d.    |

Source: Harris et al (1994)

Notes: (1) Includes barramundi, mullet, threadfin salmon

n.d. = no data

#### Licensing and units of ownership

Three prawn licences were awarded to the ICC on behalf Islanders in the mid 1980s. These have not been utilised and this means that Islanders are not connected to the region's most valuable fishery. It should be noted that the original intention was that the licences would be awarded to communities, not to individuals. A prominent Islander has proposed to me that the licences would never be taken up on this basis. Recent statements

by the TSRA suggest that Islanders do not want to be part of the prawn fishery. Questions such as: why do Islanders not work on prawn boats, why they do not want to be part of the prawn fishery, and why the three licences have not been taken up, appear to be poorly understood.

When the Treaty, Act and PZJA came into existence, the major Indigenous body in Torres Strait was the ICC (a Queensland body) and it had carriage of what we could call 'Indigenous development' (see Arthur 1990). This is why the ICC was given the three licences, noted above. In the intervening period the TSRA was formed (an Australian Government body) and it has become a significant player in the region, if not the major Indigenous player. As has also been noted, it is the chair of the TSRA who is on the PZJA. The outcome of this is that the licences are held by a body that was close to the PZJA initially but is now more distant from it (see below). It may be that this makes it somewhat harder for the PZJA and its structures to engage with issues to do with these licences and their possible development.

#### Recommendation

It would seem worthwhile to clarify why the three prawn licences have not been taken up, as a way to determining what to do with them.

It should be noted that the relative success of the Islander involvement in the fishery to date may well relate to the 'self-employed' and small-scale nature of this in-shore fishery where a fisher sees the cash return for his own effort. This can be contrasted with an Islander suspicion (possibly irrational) of the 'middle man', often the buyer or processor. Some of the suspicion of the middle-man may stem from earlier days when Islanders working in the shell fisheries and the military were paid less than others for their labour. The suspicion may apply today to potential partners and joint-venturers (cf. Menhim, Skehill and Young 2002).

A possible impediment to involvement in certain large scale, or joint ventures may include a suspicion of the partners and middle-men.

#### Infrastructure

#### **Freezers**

Though not tested in this survey, it has been suggested that freezer access, capacity and reliability affects Islander commercial take and participation in the fishery (Arthur 1990; Mapstone et al 2003:20; Harris et al 1994: 21; Begg and Murchie 2004: 20). Certainly the ability of island councils to operate freezers effectively is a long-standing issue (see Arthur 1990). This survey revealed that freezers could be classified into three types: those that are run by private individuals; those that are operated by community councils; and those that are joint ventures. It was suggested that the efficiency of these types differed.

<sup>&</sup>lt;sup>9</sup> The history of these changes, while relevant to a full understanding of structures and governance in Torres Strait, is outside the scope of this project (see Arthur forthcoming).

#### Recommendation

Mapstone et al (2003: 20) proposed that the impact of freezers on the Islander fishery needed further investigation. This idea is supported here. Such an investigation might explore the cost-benefit of different types of freezers and their optimum locations.

#### Accommodation

It was revealed during the survey that one island was constructing accommodation for Islander fishers from other islands. This suggests that an impediment to involvement might be the issue of accommodation.

#### Recommendation

The extent to which the lack of such accommodation is an impediment to involvement could be investigated. The ownership and therefore the funding of such accommodation would be part of the investigation.

#### **Fishing units**

Islanders fish from small boats (Harris et al 1994; Mapstone et al 2003; Arthur 1990). In 1994, of 553 vessels used by Islanders, some 95 per cent were less than 6m (Harris et al 1994). It has been suggested that fishing from small vessels limits range, tolerance to the weather and catch (Mapstone et al 2003: 2, 24). Efficiency may also be affected by the reliability of outboard motors (Mapstone et al (2003). The issue of vessel size is probably quite complex as vessels are used for a variety of purposes, and given earlier comments about access, it is not clear that larger vessels would automatically allow equal access to the waters around every island.

#### Recommendation

A cost-benefit analysis could be carried out regarding the optimum vessel size for Islander fishers.

#### Recommendation

With a view to establishing a training program, the degree to which vessel maintenance is affecting involvement in the fishery should be assessed.

#### The petrol rebate

It has been noted in the past that whereas diesel fuel is subject to a tax rebate, petrol is not (Arthur 1990). In a region where one of the primary production units is powered by petrol, it would seem reasonable to argue that a petrol rebate should apply.

#### Recommendation

This issue should be reviewed at a policy level.

<sup>&</sup>lt;sup>10</sup> This issue, as it applies to primary producers, is presently under consideration at the national level.

#### Market knowledge and responsiveness

Islanders have a history of responding to market change. They effectively reacted to the change in market demand from pearl shell to TRL. In some instances, and where stocks have allowed, they have moved their effort for short periods between species. It may be that this is an effective strategy.

An assessment of the ability or the desire of Islanders to move between species as markets change (especially in the short term) is beyond the scope of this exercise. The costs and benefits of making such moves (eg moving from TRL tails to live TRL) and of the market in formation needed to make such moves would require a separate investigation.

## How fisheries management and industry development and employment programs can be 'better aligned' for the benefit of Islander involvement in commercial/community fishing in the Torres Strait

While other sections of this project are aimed at an analysis of programs, this section is more policy-oriented.

The *Torres Strait Fisheries Act 1984* (the Act) and the PZJA annual report (2001-02) contain policy-type statements that have the intent of furthering the Treaty aims regarding the involvement of Torres Strait Islanders in the Strait's commercial fishery. These policies as they are reflected in the PZJA's most recent annual report are laid out in Appendix A.

#### More specific policy aims

The statements in the Act and reflected in the PZJA with regard to goals for Islander involvement in the fishery (Appendix A) are rather general. They suggest for example that the aim is to 'maximise' Islander opportunities in (either all or some specific aspects) of the fishery. In addition, it is not clear from the objectives if they align with any time line. Such terms as 'maximise', 'increase' and 'encourage' can be hard to operationalise through programs. Also as they are somewhat open-ended, their progress is hard to monitor and to assess. As well as this, the goals as they are given are rather similar for all species and do not suggest any connection with the needs or status of each individual fishery. More specific goals would make it easier to devise relevant programs and to measure progress against.

#### Recommendation

The goals of the Act and the PZJA should be made more specific for each individual fishery. These goals should be aligned with a timeline. (For example, a goal for a fishery might be "The number of fishers employed in line fishing should be increased by # per cent over the next # years.")

#### **Islander aspirations**

To the best of my knowledge the policy statements in the Act and as given by the PZJA were not derived from a process of consultation. The extent or way that Islanders wish to maximise their involvement in the commercial fishery is not clear. Islanders may wish to minimise their effort, not maximise their involvement. For example, a survey between 1999 and 2003 of some 100 Islander youth (aged 15 to 24) showed that there was mixed interest in commercial fishing as a career (Arthur and David-Petero 2000a; Arthur et al 2004). In addition, we have already seen that the resource is limited. We must assume that if there were twice as many Islander fishers in the fishery they would only be making half the income they are now. This would surely be a factor affecting the Islander

approach to the fishery. Similarly, the number of fishers will probably increase through natural population increase and this may affect Islander perceptions of the fishery.

#### Recommendation

Some effort should be applied to determining what Islanders wish to achieve in the future vis a vis the commercial fishery. This would then relate to the policy goals as determined by the previous recommendation.

#### Policies, programs, coordination and responsibility

The Strait is a complex region. Factors that contribute to this complexity include: an international border with a country that is substantially different (politically and economically), a Treaty and a Protected Zone, a community of small islands, a high degree of remoteness, and an Indigenous regional authority (the TSRA). As a result of the above, the region has more agencies than do others in the country and has some additional issues to contend with. Considering how to better 'align' development and employment programs in such an environment is quite difficult. There appears to be two networks of agencies dealing with different and/or common objectives and these are discussed below.<sup>11</sup>

#### The PZJA network

The Treaty has the general ethos of benefiting traditional inhabitants of the region economically and the objectives of the Act flow from the Treaty. The PZJA has policies reflecting those of the Treaty and Act (see Appendix A). The PZJA articulates with program agencies and with industry through its working groups and committees. These agencies include the TSRA, the Department of Agriculture Fisheries and Forestry (DAFF) and AFMA. Other agencies might also deliver programs, such as TAFE (see below). All of these bodies interact to make things happen on the ground. On the ground, the primary bodies, or the 'hub' of the network appear to be the TSRA and AFMA. It should be noted that in its formative years the PZJA's working groups drew their Islander members from the ICC. The TSRA did not then exist. In addition, until recently the PZJA did not include the chair of the TSRA. Despite these apparently significant structural changes there has been no formal review of the operations of the PZJA or its associated network.

The PZJA is not a program agency, but a policy body, and it and its committees and working groups exist because of the Treaty. AFMA is a regulatory rather then a developmental body. This appears to leave development, at least from the Islander viewpoint, with the TSRA. At the moment the hub agencies appear to work well together and the partnership is much more positive than in the early 1990s. At that time the then AFMA and the ICC probably tended to view each other as protagonists rather than as partners in development (see Arthur 1990). However, the present working relationship between the hub agencies may well have as much to do with personalities as with clear lines of responsibility. In Indigenous affairs, particularly in remote Australia, high quality

<sup>&</sup>lt;sup>11</sup> Not all of the agencies operating in the region are discussed here.

agency staff can have a very positive impact on a region. However, remote-area staff are invariably on short-term contracts and unless their input is institutionalised in some way, it is lost when their contracts expire.

An aim of the Treaty is the economic betterment of the traditional inhabitants. However, it is probably true to say that the activities of the PZJA's network, including research, have been aimed mostly at an analysis of the fish, not the fishers. This is not surprising as the network's major representative on the ground is AFMA which one could argue is predominantly about management and regulation not development. Research directed at assessing the constraints to increasing the involvement of Islanders in the fishery and to developing strategies to make this happen were proposed in the most recent PZJA annual report (PZJA 2003: 51). This type of research would seem to be allied to the Treaty aims but it was not commissioned.

Some of the issues noted in this current project with respect to fisheries were also recorded in 1990 in a report carried out for the ICC (see Arthur 1990). The first recommendation of that report was that the ICC be given the resources to implement the report's findings. This did not happen and the other recommendations were not implemented. The TSRA is probably better resourced than was the ICC. However, it is necessary to ensure that the bodies in the PZJA network have the capacity to implement any development policies.

In summary, at the present time, the responsibility for issues of development seems a little hazy and the extent to which the 'hub' agencies have the capacity or mandate to design and deliver programs that would implement the PZJA policies given in Appendix A, is unclear.

#### Recommendation

The PZJA and its network should be reviewed. This would include an assessment of their strategies for devising and their resources for implementing, programs that would relate to their policies.

#### The non-PZJA network

Another set of agencies operates in Torres Strait somewhat separately to the PZJA and its network. In the past the Queensland DATSIP assisted communities to prepare their community plans, and it provided grants for their community operations. The survey revealed that DATSIP has largely withdrawn from the planning role and now sees itself as a provider of (community) statistics. The Queensland Department of Local Government (DLG) now assists communities prepare their plans. Communities submit their plans and make submissions to the TSRA for grants and for training (this can be through the Community Training Program [CTP] for which the TSRA is responsible). The TSRA organises the provision of this training. The Queensland Department of Employment and Training (DET) has visited communities and prepared a regional employment and training strategy. A brief glance at this shows it has no data, and so would be hard to action. The extent to which these bodies: TSRA, the communities,

DLG, and DET mesh is not clear, though it was suggested by the TSRA that an overall or coordinated picture of training is hard to obtain. What also seems to be the case is that the TSRA's priority for training (from the community plans) is not fishing but trades and vocational training (apprenticeships). This is understandable to a degree as the provision of community infrastructure is a sizeable industry in the Strait.

The Torres Strait Regional Employment Committee (TSREC) is primarily an agency of advice and referral for people interested in small business. The TSREC estimates that around 70 per cent of its inquiries are fishing related, though many of these are simply queries about ABNs. Only around 30 per cent of those making inquiries about fishing have a business plan, though it was unclear to what extent this was a problem as clients seeking loans etc. would be referred mostly to the TSRA and the TSRA seems to assist people with such matters. Of interest is the fact that most of the TSREC's clients are from Thursday Island. The TSREC only makes contact with Outer Islands on twice yearly visits there. It is unclear the extent to which this is a problem for people on Outer Islands, and it is unclear exactly how a resident on an Outer Island accesses advice on fishing or for any other matter. Other research has indicated that, not surprisingly, people on Outer Islands have less access to various services than do those on Thursday Island (Arthur and David-Petero 2000b). Taking all of the above. It is likely that the links between individuals on Outer Islands and programs and advice to do with fishing are quite weak.

It appears that the closest DEWR office is in Cairns. The Jobnetwork Office (ITEC) on Thursday Island does not carry the complete suite of employment and training programs. For instance, the New Enterprise Incentive Scheme (NEIS) is handled by an agency in Cairns. The Department of State Development, is also located in Cairns. There is the perception by some on Thursday Island that departments both on Thursday Island and from Cairns may not always coordinate their activities. The extent to which these factors hinder Islander involvement in commercial fishing, if at all, is not clear.

An investigation of the Island Coordinating Council (ICC) Annual Report 2003–04 revealed that the ICC has no programs associated with enabling Islanders to enter the commercial fishery. The ICC appears to have carriage of a Torres Strait Marine Conservation Strategy and the Torres Strait Marine Strategy (1998). This strategy mentions the commercial resource but it does not appear to include programs associated with getting Islanders into fishing.

The extent to which these two networks interact is not clear but it seems minimal. However, the agency that appears common to both networks is the TSRA, suggesting its potential role as a node in the region.

#### Recommendation

The viability of integrating parts of the two networks with regard to developments in the fishery, should be explored.

\_

<sup>&</sup>lt;sup>12</sup> NEIS is open to all citizens who qualify.

#### Data

As noted elsewhere, the data on the involvement of Islanders in the fishery is poor. No matter what policies are adopted, good data will be required to put them and their programs in place. The most recent PZJA Annual Report states that a research aim is to quantify the level of Islander involvement in the commercial fishery (2003: 51). It is not clear that this research has been completed. AFMA has initiated a new docket book system for Islanders which may go some way to addressing this issue.

The Treaty establishes the Torres Strait Protected Zone. The Zone encompasses the Outer but not Inner Islands (see Table 1). Because of the relationship between the Treaty and the Torres Strait Protected Zone, there has been a tendency for some studies and data collection exercises to focus on the Zone (the Outer Islands) to the exclusion of the Inner Islands. Any data collection system should include all of the Torres Strait.

#### Recommendation

Consideration should be given to devising and supporting a data and monitoring system that is applicable to the fishery. It would include provision for measuring the commercial involvement of Islanders and non-Islanders and for the traditional involvement of Islanders. It would cover all of Torres Strait.

#### **Unequal or equal development?**

As noted above, the commercial species are not distributed uniformly across the region, nor are they of equal value. Hence some islands are resource-rich while others are resource-poor. As noted, Islanders subscribe to a form of traditional ownership which will tend to exclude fishers from each other's territory and it is highly unlikely that this can be changed by government programs. Taken together, these factors mean that the islands that have access to the present commercial fisheries may be able to generate more income from fishing than those that do not. Following from the above, a policy issue is whether the aim of 'development' is to achieve approximate equality across the region or not. Two interventions are possible. One is that development programs would focus on the 'poorer islands'. A second is that resource-rich islands would agree to allow others access to their resources. The second intervention seems a little problematic, because of the traditional ownership issue.

Programs that aimed to develop resource-poor islands would be likely to focus on exploiting new marketable species and/or developing new techniques. New techniques may be limited to programs associated with aquaculture (see below).

#### Recommendation

Consideration should be given as to whether policies and programs should aim to equalise the development opportunities across the region.

#### Aquaculture and new species

If the present fishery is fully exploited Islander involvement could be increased by introducing new species, for example through farming. Research into aquaculture is already underway via the Torres Strait Cooperative Research Centre (TSCRC). The TSRA provides research funds to consultants and research bodies, is a partner in the TSCRC and has supported research into sponge aquaculture as part of the TSCRC. As noted below the TSRA has also assisted the Thursday Island State School with its TRL aquaculture project. These would all seem like valuable activities regarding Islanders and commercial fishing. It can be argued that the relative success of Islander fishing in the last 30 to 40 years relates to the fact that the unit of ownership is quite small. In such a fishery the fisher is the owner and his returns are readily identified with his own effort (as noted above). In addition, the returns are fairly immediate and the management or handling of the product is fairly straightforward. These factors may not always apply to aquaculture.

#### Recommendation

Research into the viability of aquaculture projects should be continued. Such projects should include an assessment of the potential for such projects to generate employment and income. Programs intending to encourage aquaculture projects should pay attention to issues of ownership, the necessary management skills and the possible returns to the worker/owner. Before establishing aquaculture projects it may be advisable to allow Islanders to visit similar installations in other parts of the country.

#### **Increasing efficiencies**

Earlier sections of this report suggest that the present fishery has little room for expansion. In such circumstances, it may be advisable to consider ways of generating more income from the present (existing) fishery. Income from the present fishery may be increased by (a) increasing the efficiency of individual fishers (b) by increasing the efficiency at the level of processing and (c) by value adding in Torres Strait.

#### Recommendation

An assessment should be made of the benefits that could be derived from (a) increasing the efficiency of individual fishers (b) increasing the efficiency at the level of processing and (c) by value adding in Torres Strait.

#### The PNG traditional inhabitants of Torres Strait

Some policy statements in Appendix A include reference to the PNG traditional inhabitants of Torres Strait as though furthering their involvement in the fishery is an objective of Australian policy. There are no data on PNG's involvement in the commercial fishery and this project has not identified any programs that would further such an objective. This objective appears a little ambiguous.

#### Recommendation

The Act's objectives with respect to PNG should be clarified. If the objectives relating to PNG remain in place, a system should be devise, in cooperation with PNG, to collect data on the PNG fishery and then to design appropriate development programs.

#### **Strategic planning for the fishery**

Many of the recommendations noted above could probably be incorporated into a five-year strategic plan for the fishery. The Torres Strait Scientific Advisory Committee (TS SAC) is presently formulating a strategic plan for research which may capture some of the above recommendations when it is finalised.

#### Recommendation

The TS SAC strategic research plan, when finalised, should be assessed for its potential to incorporate recommendations in this report.

## The gaps and overlap in the industry development and employment programs in the Torres Strait in the promotion and support of Islander involvement in commercial/community fishing

#### **Training issues**

#### Tax and administration

As noted above, Islander commercial fishing is termed community fishing. This fishery has to date been relatively unregulated. Since 1999 some fishers have been asked to complete docket books, apply for TIB licences, and comply with tax rules (obtain ABN numbers etc)<sup>13</sup> and there is some suggestion that they may soon have to comply with the necessary Workplace Health and Safety regulations. In these ways the community fishery is moving to increased regulation. Discussions with agencies suggest that the change is not complete and that Islanders may not know how to carry out the necessary formalities, bookwork etc. The survey revealed that some Islanders may not fish commercially because of this.

#### Recommendation

An appropriate training/advisory program should be devised re tax issues and business.

#### Recommendation

The Thursday Island Business and Community Directory 2003-04 lists two tax agents. The extent to which these can or do assist local fishers with their accounting matters should be assessed.

#### **Boat handling**

At the present time TAFE on Thursday Island provide a coxswain's course and courses on marine safety and boat handling. The Australian Customs Service provide a 12 month contract position for Indigenous people designed by their National Marie Unit in Canberra. This includes boat-handling skills. The Queensland Department of Workplace Health and Safety on Thursday Island is attempting to upskill Islanders with respect to the necessary diving regulations.

#### Fishing and fish handling

Earlier work has suggested that Islanders are good natural seamen but not necessarily good commercial fishers and that training in aspects of the fishery would be beneficial (Arthur 1990; Mapstone 2003: 140). It is beyond the scope of this report to say what skills (if any) are presently lacking in the region.

#### Recommendation

An authority with the requisite expertise should carry out a skills audit across the fishery.

<sup>&</sup>lt;sup>13</sup> The TSREC notes that many of its clients only want information about ABNs.

#### **Resource management skills**

Islanders wish more involvement in managing the resource on a regional basis (Menhim, Skehill and Young 2002). As noted above, governments are considering reserving parts of the commercial fishery for Islanders. If this eventuates it would have implications for regional resource management. At the present time Islanders are represented on several of the PZJA's working groups and management committees. However, it would be safe to say that in the past Islanders have not been subject to the type of skills that are relevant to regional resource management and in particular those that might approach management issues from a scientific view point. Similarly, there has been little work done on the possibility or viability of combining scientific and traditional knowledge in resource management. Possible impediments to Islander involvement as fishers and as managers may be their lack of knowledge of, or their exposure to, scientific management systems. A further impediment might be the perception that there are contradictions between Islander (traditional) and non-Islander approaches to resource management.

#### Recommendation

Presently, AFMA and the TSRA coordinate a short resource management course that includes Islanders and that is funded by the TSRA. This should be assessed and, if successful, continued and/or expanded. Through the Department of Employment and Workplace Relations (DEWR) AFMA have mounted a National Indigenous Cadetship program. AFMA has hosted two of these cadetships on Thursday Island. In the interests of expanding Islander involvement in formal resource management and in increasing ties between AFMA and communities, this program should be encouraged.

#### Thursday Island State High School and TAFE

The TSRA made a grant to the State secondary school for infrastructure associated with a TRL aquaculture project inside the school. The school also has several boats for marine tuition and runs classes in marine studies. The school's principal initiated the program for TRL aquaculture, liaising with the TSCRC and the TSRA.

The school has also negotiated with the State Government to join with the TAFE with which it shares a campus, and the TAFE and the school run complementary marine related courses. All of these relationships would seem beneficial to Islanders. However, some might argue that that grants for infrastructure which are part of the school should be made by the State Government, not the TSRA which is funded by the Australian Government, and that the TSRA is 'overlapping' with the State's funding responsibilities. A counter argument would be that the TSRA is filling a program 'gap' in funding the school. It should be noted that the school has been proactive in seeking 'development' funding from other sources such as the Priority Country Area Program.

The school and the TAFE aspire to further their activities in marine education, training and development through becoming a 'centre for marine excellence' similar to a marine college.

#### Recommendation

The school's initiatives seem allied to the PZJA policy goals. It may be useful to clarify the funding options available to the school in such forms of industry development.

#### Recommendation

The school and TAFE should be provided with some assistance to explore the potential for establishing a centre of marine excellence.

#### **Loans and grants**

The TSRA provides loans to individuals and assists them with their legal, business and insurance matters and costs. In 2003-04 the TSRA's Business Funding Scheme (BFS) released 18 fisheries related loans at an average value of \$21,625. Fishing loans were 80 per cent of all of loans given. Borrowers apply to the TSRA directly, and they can also be referred to the TSRA by other organisations such as the Torres Strait Employment Committee (TSREC). Fishing loans are typically for a boat, motor, trailer or hooka, or any combination of these. Applicants must demonstrate their ability to manage the loan, prove their business is viable, have equity for the enterprise and provide sufficient security. The TSRA has a working relationship with the Queensland Department of State Development, which has located an officer within the TSRA to assist with development loans and grants, business start up and with mentoring new businesses.

The bank on Thursday Island is also available to give loans to individual fishers, though other research has suggested that in recent years the TSRA has taken over from the bank as the principal lender (Arthur 1990; McDonnell 1999). Other research has suggested that borrowers could repay bank loans (Arthur 1990) and this survey revealed that the TSRA can also service its loans. The TSRA also appeared to be able meet the demand for such loans. The TSRA's lending program could be seen as 'overlapping' with that of the bank. On the other hand, the TSRA's rates are intentionally lower than the banks, to provide greater access to lenders with limited resources.

Communities (but not individuals) can obtain grants from the TSRA through its Community Economic Initiatives Scheme (CEIS). Grants therefore tend to be for 'public' business ventures. In 2003-04 of 12 grants, 2 were related to fishing matters (for infrastructure items). Their total value was \$42,178 which was just 2.6 per cent of the value of all of the grants made by the TSRA. Communities and organisations make applications to the TSRA for grants through their community plans, and through their general contacts with the TSRA. Grants appear less significant to the fishing industry than do individual loans.

Whether access to these forms of finance was satisfactory would require interviews with the applicants and this was outside the scope of this study.

Indigenous Business Australia (IBA) provide loans to Indigenous people to start up businesses. However, the IBA's policy is to deal with medium to large businesses, their minimum loan being \$500,000. This is well above the average (fishing) loan in Torres

Strait. No prospective Torres Strait fishing business appears to have attracted funds from the IBA. If more capital intensive projects were planned, say for example in aquaculture, then the IBA may become a funding source.

#### **Conclusions**

The various sections of this report carry their own recommendations, only the major conclusions are stated here.

The Treaty and Act are predominantly statements of policy and are mirrored by the PZJA in its annual report. None of the PZJA's statements have specific targets or time lines and this makes them hard to devise programs for. None of the policies or programs that were mentioned during this project are aligned to a target or time line. The Menham, Skehill and Young (2002) report is of little help here as it also operates at the level of generalities. This current project is about programs, but clear programs flow from clear policies. It would seem therefore that either the policies require greater definition by being made more precise with respect to targets or, programs should be devised by the relevant agencies that carry with them specific targets. These targets should match the reality of the situation, for example that the fishery has limited room for expansion. The targets should also be aligned with Islander aspirations for the fishery, which are yet to be determined.

Torres Strait is a complex and unique region, not least because it straddles an international border between two very different countries. One element of the associated border Treaty is to create economic development for the traditional inhabitants within the fishing industry. However, it is not clear where responsibility for this lies. It can be argued that fishery agencies tend to be regulatory rather than developmental and it is not clear that in Torres Strait such agencies have been given the mandate or the resources to take on this (additional) developmental role.

## Appendix A: Extracts from the PZJA Annual Report 2001-02 on policy and programs relating to the participation of traditional inhabitants in the Torres Strait commercial fishery

References to the subjects of the PZJA's policies vary and include: 'Islanders', 'Torres Strait Islanders', 'traditional inhabitants', traditional inhabitants of Australia', traditional inhabitants of Australia and PNG', 'traditional inhabitants of Torres Strait', 'traditional inhabitants (as defined by the Treaty)'. Where the annual report refers to just 'traditional inhabitants', this is taken to refer to those of Australia only.

Numbers refer to pages in the PZJA Annual Report of 2001-02 (see PZJA 2003). AFMA Canberra has confirmed that this is the most recent annual report and that these policy objectives were correct at the time of writing.

#### The Fisheries

The PZJA has a policy of maximising the opportunities for Islander participation in all sectors of industry (p 8)

Growth in Torres Strait fisheries, where there is scope for expansion, has been reserved for Torres Strait Islanders (p 8)

#### **Prawn fishery**

Management objectives: ... to encourage traditional inhabitants of Torres Strait to participate in the Prawn Fishery (p 11)

Management arrangements: ... To encourage participation by Torres Strait Islanders, three additional vessel licences up to 20 metres have been reserved for Australian traditional inhabitants of Torres Strait and would be issued by the ICC (p 12)

#### **Tropical Rock Lobster**

Management objectives: ... to maximise the opportunities for traditional inhabitants of both Australia and PNG to participate by implementing policies that include managing the fishery for tropical rock lobster as a dive fishery (p 16)

Management arrangements: Expansion in participation in Torres Strait Tropical Rock Lobster Fishery, is limited to traditional inhabitants so as to maximise their opportunities (p 16)

#### **Spanish Mackerel**

Management objectives: ... To maximise the opportunities for traditional inhabitants of both Australia and Papua New Guinea to participate in the commercial fishery (p 19) Management arrangements: Expansion of participation in the Torres Strait Spanish Mackerel Fishery is limited to traditional inhabitants, so as to maximise their opportunities (p 20)

#### **Pearl Shell**

Management objectives: ... to maximise the opportunities for traditional inhabitants of Australia and PNG to participate in the Pearl Shell Fishery (p 22)

Management arrangements: In the Torres Strait Pearl Shell Fishery, expansion in participation is limited to traditional inhabitants, so as to maximise their opportunities (p 22)

#### **Traditional Fisheries**

Due to the low level of exploitation of stocks no management restrictions are currently placed on traditional fishing activities other than dugongs and turtles and a bag limit on tropical rock lobster (p 26)

#### Barramundi

Management objectives: ... to reserve barramundi stocks for the exclusive use of Islanders (p 28)

Management arrangements: ... stocks will be retained entirely for the benefit of traditional inhabitants undertaking community fishing (p 28)

#### Finfish (excluding mackerel)

Management objectives: ... to maximise the opportunities for traditional inhabitants of Australia and PNG to participate in the commercial fishery (p 31) Management arrangements: ... expansion in participation is limited to traditional

inhabitants so as to maximise their opportunities (p 31)

#### Crab

Management objectives: ...to maximise opportunities for traditional inhabitants of Australia and PNG to participate in the commercial fishery (p 32)

Management arrangements: ...participation is limited to traditional inhabitants so as to maximise their opportunities (p 32).

#### **Trochus**

Management objectives: ...to maximise opportunities for traditional inhabitants of Australia; and

To encourage traditional inhabitants of the Torres Strait to participate in the Trochus Fishery (p 34)

#### Beche de mer

Management objectives: ... develop beche de mere stocks for the benefit of Australian traditional inhabitants (as defined by the Torres Strait Treaty) 9p 37)

Management arrangements: ...participation is limited to traditional inhabitants with the exception of one long-term non-islander operator who was active in the fishery prior to the introduction of licence limitation...(p 38)

Management regulations: ... limiting the activities of the one non-islander licensed operator to primarily involve the participation if Islanders in those activities (p 38)

#### **Surveillance programs**

... To provide an education and extension service for both traditional and commercial fisher persons to enhance the development and management of the fisheries within the Protected Zone (p 41)

#### **Research Programs**

All fisheries

Quantify the current level of Torres Strait Islander involvement in Torres Strait commercial fisheries (p 51)

Assess the constraints to increased involvement of Torres Strait Islanders in commercial fisheries and where appropriate develop and evaluate strategies to increase their involvement (p 51)

National competition policy legislative review of the Torres Strait Act 1984 (sic) ... alternative forms of fisheries management that need to be considered ... an assessment of the net benefit of individual transferable quotas and incentive based schemes (p 56)

#### References

- Altman, JC (2001). 'Sustainable development options on Aboriginal land: the hybrid economy in the twenty-first century', *CAEPR Discussion Paper No. 226*. Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Arthur, WS (assisted by Victor McGrath) (1990). *Torres Strait Development Study 1989*. Australian Institute of Aboriginal Studies, Canberra.
- Arthur, W & David-Petero, J (2000a). 'Career aspirations and orientation to work: young Torres Strait Islanders 1999', *CAEPR Discussion Paper No. 206*. Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Arthur, WS & David-Petero, J (2000b). 'Job searching by young people in Torres Strait 1999', *CAEPR Discussion Paper No. 205*. Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Arthur, WS, Hughes, JP, McGrath, V & Wasaga, E (2004). 'Careers and aspirations: Young Torres Strait Islanders, 1999-2003', *CAEPR Discussion Paper No. 259*. Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Arthur, WS (1991). 'The implications of the CDEP scheme for the economic development and employment of Islanders in the Torres Strait', *Australian Aboriginal Studies* 1: 25-38.
- Arthur, WS (forthcoming). *Torres Strait Islanders and autonomy: a borderline case*. PhD thesis, Australian National University, Canberra.
- Australian Bureau of Statistics (2001). *Australian Census 2001*. Australian Bureau of Statistics, Canberra.
- Begg, GA & Murchie, CD (2004). *Collation and Review of Islander Commercial Catch History in the Eastern Torres Strait Reef Line Fishery*. Cooperative Research Centre for the Great Barrier Reef World Heritage Area & the Australian Fisheries Management Authority, Townsville.
- Harris, A, Dews, G, Poiner, I & Kerr, J (1994). *The traditional and island based catch of the Torres Strait Protected Zone*. Final report on CSIRO research, 1990-1993, CSIRO Division of Fisheries, Australia.
- ICC (Island Coordinating Council) (2004). *Annual Report 2003-04*. Island Coordinating Council, Thursday Island.

- Johannes, RE & MacFarlane JW (1991). *Traditional Fishing in the Torres Strait Islands*. CSIRO Division of Fisheries, Hobart.
- McDonnell, S (1999). 'Women's business: access to credit for Indigenous women entrepreneurs within Torres Strait', *CAEPR Discussion Paper No. 188*. Centre for Aboriginal Policy Research, the Australian National University, Canberra.
- Mapstone, BD, Tobin, A, Jones, A & Begg, GA (2003). A review of reef line fishing in the eastern Torres Strait. Cooperative Research Centre for the Great Barrier Reef World Heritage Area & the Australian Fisheries Management Authority, Townsville.
- Menham, G, Skehill, S & Young, P (2002). *A fair share of the catch*. An unpublished report to the Torres Strait Protected Zone Joint Authority by the Torres Strait Fisheries Independent Advisory Panel, Canberra.
- Ostrom, E (1990). *Governing the Commons: the Evolution of Institutions and Collective Action*. Cambridge University Press, Cambridge.
- PZJA (Protected Zone Joint Authority) (2003). *Annual Report 2001-02*. Australian Fisheries Management Authority, Canberra.
- TSRA (Torres Strait Regional Authority) (2004). *Annual Report* 2003-04. Commonwealth of Australia, Canberra.