

A Guide to the Fishers of Queensland

Part B: TRC-Analysis and Social Profiles of Queensland's Harvest Industry

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Executive Summary

This report describes the social and financial characteristics of the harvest fishing industry in Queensland. It also identifies the social and financial relationships that exist between the fisheries resource and coastal communities using a research framework known as Town Resource Cluster (TRC) Analysis.

This report provides a comprehensive profile of the harvest industry in Queensland that can assist in assessing potential social and financial impacts of changes in fisheries policy and management. This information is not a social impact assessment.

In this report, only those fishers that were identified as 'harvesters' were included. Harvesters are defined as those commercial fishers who collect marine products such as trochus, sea-cucumber, aquarium fish, coral, coral sands, shells, beachworms and bloodworms.

Social and financial information was collected from harvesters using structured telephone interviews. The interview included questions on the charter fishing business and the use of the marine resource. It included questions on the location of homeports, years of business operation, number of boats, size of boats, type of fishing activity and seasonal variations in fishing. There were also questions about the number of employees, the value and location of sales and the town locations for business expenditure, as well as the location of resource use and the use of coastal ports when accessing different areas of resource use.

To develop social profiles of fishers within the industry, business owners gave information about their family and employees (including age, gender, marital status, housing tenure, educational levels, place of residence, hours worked in the industry) and the towns from which they purchased household goods and services.

Ninety-six percent of harvest fishers that could be contacted participated in the research (101 questionnaires), representing 68% of the industry. Of the 194 licence holders that exist in Queensland at this time, 44 (22.5%) were considered latent, or had not been actively engaged in harvest fishing within the last year.

The profiles were analysed using a recently developed framework for social assessment in natural resource management known as Town Resource Cluster Analysis (TRC-Analysis). This framework describes and examines the relationship between resource systems and human social systems. Specifically, the analysis identifies clusters of mutually inter-

dependent towns and communities (TRCs) that have relationships to specific areas of marine resource use.

Twenty-two TRCs were identified along the Queensland coast from Karumba in the north to Southport in the south of Queensland. A detailed description of the social and financial profiles within each TRC is provided for those TRCs in which there were at least five harvesters.

A summary of the socio-financial profiles of harvesters is presented in Tables A (business characteristics) and B (business owner characteristics). Comparisons of profiles across TRCs show distinctive business characteristics among TRCs. The majority of harvesting businesses were found in the Cairns, Mackay and Brisbane TRCs (Table A). Only those harvesters that live in the north harvested trochus and sea-cucumber, while only those in the south harvested sandworms and bloodworms. Aquarium fish and coral sands were harvested throughout Queensland. Harvesting businesses had been owned by the current harvester for between one and 38 years, with some of the oldest harvesting businesses being found in the Innisfail, Yeppoon, Maryborough and Southport TRCs. Businesses with the most boats were from the Mackay and Gladstone TRCs, and those with the largest boats were from the Port Douglas, Cairns and Townsville TRCs. Businesses with the largest median gross value of production (GVP) were from the Port Douglas, Cairns and Gladstone TRCs. The TRC with the greatest total GVP was the Cairns TRC, which had a total GVP from harvest fishing of \$5.1 million.

A comparison of the social profiles for each of the seven major TRCs (Table B) also shows unique characteristics for each TRC. For instance, the youngest harvesters were found in the Hervey Bay TRC, and the oldest harvesters were found in the Mooloolaba TRC. Fishers that had resided in their home town for the longest period of time were from the Brisbane, Townsville and Southport TRCs. Most fishers were employed in another industry in addition to the harvest fishing industry, although those from the Mooloolaba TRC were most reliant on income from the harvesting industry.

While the social and financial profiles of harvest fishing businesses may be of interest in their own right, they are most useful when developed further in terms of indicators of sensitivity to change. For instance, characteristics such as age, income, and years in the industry can be used to describe the sensitivity of businesses and harvesters to changes in fisheries policy or changes that affect the quality of the resource. The development of 'indicators of sensitivity to change' will be developed in future reports in this research series.

Table A. Summary of Harvesting Business Characteristics for each TRC.

TRC	Number of Businesses	Number of Employees	Predominant Activities	Mean Years Owned Business	Mean Number of Boats	Mean Boat Length	Median GVP (\$'000)	Total GVP (\$'000)
Cairns	21	218	T, S, A	10.4	1.8	10.6	76	5,121
Innisfail	5	20	T, S, A	22.3	1.0	8.6	25	137
Townsville	8	20	T, S, A	12.3	1.0	11.4	31	170
Mackay	14	53	T, S, A	10.0	1.3	7.7	50	699
Yeppoon	5	8	A, S	20.0	1.7	6.0	15	38
Gladstone	6	15	A, B	6.4	2.0	4.1	80	975
Hervey Bay	8	17	A, B	7.2	1.6	8.9	5	56
Tin Can Bay	6	6	B	11.1	0.3	5.8	27	180
Mooloolaba	12	24	A, S	14.8	1.4	6.5	44	310
Brisbane	49	81	A, S, B	11.5	1.2	5.4	20	1,433
Southport	14	21	S, B	15.1	1.6	5.8	8	201

Note: T=trachus; S=Seacucumber; A=Aquarium fish, coral, coral sand; S=Sandworms; B=Bloodworms

Table B. Owner-Operator Summary Profiles for each TRC.

TRC	Mean Age	Years in Industry	Years in Town	% Employed Elsewhere	%Own Home	%Completed Year 12	% Use Bus. Plan	% Married	Family Size	Total Family Members	Average Income
Cairns	44.6	13.7	11.4	30.8	38.5	61.5	46.2	38.5	2.1	41	42
Townsville	49.8	13.0	25.3	40.0	60.0	60.0	40.0	80.0	3.0	15	27
Mackay	47.1	12.1	19.0	44.4	66.7	22.2	44.4	66.7	1.4	13	25
Hervey Bay	39.0	10.2	7.8	40.0	0.0	0.0	60.0	60.0	1.4	7	14
Mooloolaba	51.5	22.2	12.3	16.7	50.0	50.4	0.0	66.7	2.6	18	30
Brisbane	44.7	17.2	26.5	31.3	31.3	21.9	12.5	65.6	1.9	62	37
Southport	44.3	19.6	24.2	44.4	62.5	37.5	55.6	66.7	2.6	23	35

Note: Years in Industry, Years in town, Family Size are all Mean values