

RESEARCH REPORTS IN THE ECONOMICS OF GIANT CLAM MARICULTURE

Working Paper No. 37

Interest of Japanese Restaurants in Brisbane in
using Giant Clam Meat in their Cuisine and
their Knowledge of it.

by

Clem Tisdell

and

Yoshihiro Kuronuma

November 1992



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Research for the project *Economics of Giant Clam Mariculture* (Project 8823) is sponsored by the Australian Centre for International Agricultural Research (ACIAR), G.P.O. Box 1571, Canberra, A.C.T. 2601, Australia. The following is a brief outline of the Project:

The technical feasibility of culturing giant clams for food and for restocking tropical reefs was established in an earlier ACIAR project. This project is studying the economics of giant clam mariculture, to determine the potential for an industry. Researchers will evaluate international trade statistics on giant clams, establish whether there is a substantial market for them and where the major overseas markets would be. They will determine the industry prospects for Australia, New Zealand and South Pacific countries, and which countries have property right factors that are most favourable for commercial-scale giant clam mariculture. Estimates will be made of production/cost functions intrinsic in both the nursery and growth phases of clam mariculture, with special attention to such factors as economies of scale and sensitivity of production levels to market prices.

Commissioned Organization: University of Queensland.

Collaborators: James Cook University, Townsville, Queensland; South Pacific Trade Commission, Australia; Ministry of Primary Industries, Fiji; Ministry of Natural Resources and Development, Kiribati; Silliman University, Philippines; Ministry of Agriculture, Fisheries and Forests, Tonga; Forum Fisheries Agency, South Pacific; ICLARM, Manila, Philippines.

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Interest of Japanese Restaurants in Brisbane in Using Giant Clam Meat in Their Cuisine and Their Knowledge of It.

ABSTRACT

This paper reports on the results of a survey of all Japanese restaurants in the Brisbane city area of Queensland, Australia. This survey was conducted in October 1992 in order to determine the knowledge which owners/managers/chefs of these restaurants have about giant clam meat and their interest in using it. The survey results show that most of chefs in these Japanese restaurants lack experience in cooking or using giant clam meat although many of them have knowledge about giant clams and know some potential methods of preparing it. The paper also examines the relationship between interest of restaurants in using giant clam meat and (1) the ethnic as well as regional background of the chef, (2) the geographical location of the restaurant (Brisbane versus the Gold Coast), (3) the extent of the restaurant's dependence for custom on locals and overseas tourists, (4) the racial nature of its customers (European or non-European), and (5) the income level of its customers. Although the same type of survey was undertaken for Asian restaurants in Queensland (Tisdell, 1992). The sample did not include any Japanese restaurants in the Brisbane area. Therefore, the survey summarised in this paper supplements the report on Asian restaurants in Queensland by Tisdell (1992).

Keywords: Japanese restaurants, giant clam farming, giant clam meat, Brisbane

JEL Classification: Q57, Q21, Q22

Interest of Japanese Restaurants in Brisbane in Using Giant Clam Meat in Their Cuisine and Their Knowledge of It.

1. Introduction

There is a widespread view in the South Pacific that Asian restaurateurs know giant clam meat and are eager to use it when it is available. For example, a venture to farm giant clams in the northwest of Western Australia specifically mentioned in its prospectus that sales to Asian restaurants in Australia would constitute an important market outlet for its product. A reviewer for *Journal of Pacific Studies* published from the University of the South Pacific in Fiji specifically mentioned in relation to an article on "The Potential Market for Giant Clam Meat in New Zealand" submitted by Tisdell and Wittenberg that demand by Asian restaurants could be an important market outlet (Vanessa Griffen, pers. comm., June, 1991). For this purpose, a sample survey of Asian restaurants in Queensland, Australia was conducted and summarised in the one of the reports in this series (Tisdell, 1992). This report pointed out that most Asian restaurants in Queensland were interested in using giant clam meat in their cuisine but no one knew recipes for using giant clam meat and most had little knowledge of how to prepare it. Although the survey reported in Tisdell (1992) included five Japanese restaurants on the Gold Coast, no Japanese restaurants from the Brisbane city area were included. The purpose of this paper is to take into account all Japanese restaurants in Brisbane. Twelve Japanese restaurants including one take-away shop located in Brisbane were surveyed in October, 1992 using the survey questionnaire reproduced as Appendix A. This covered all the Japanese restaurants in Brisbane. A complete list of the restaurants surveyed is included as Appendix B.

2. The Sample

In all, eleven Japanese restaurants and one take-away shop were surveyed in Brisbane. Many of the restaurants surveyed were located in the Brisbane city area or in suburbs close to the city centre. The restaurants were identified by means of the "Yellow Pages" of the Telephone Directory, contacted in advance by telephone and face-to-face interviews were conducted.

Although many different Asian restaurants can be found in this area, only Japanese restaurants are focused on in this report to supply supplementary information (see Report No.35 of this series for other Asian restaurants). The location of the restaurants surveyed were five in the Brisbane City, one in Fortitude Valley and six in the suburbs. A list of the individual restaurants surveyed including their addresses is given in Appendix B. Details of ethnic and regional background of the owners/chefs interviewed are given in the Table 1 and Table 2, respectively.

As it can be observed from Table 1, the ethnic background of owners and chefs of Japanese restaurants in Brisbane is quite varied. Only half of Japanese restaurants (six) in Brisbane are owned by Japanese. The others are owned by Chinese (three), Australians (two), and a Korean (one). The ethnic background of chefs follows almost the same distribution pattern as that for the owners. Table 2 shows the regional background of owners or chefs. It was thought that the interest of restaurants in using giant clam meat in their cuisine and their knowledge of it might vary with the regional background of owners or chefs. In particular, it was thought that if there were any Japanese owners or chefs from Okinawa that would have considerable knowledge of giant clams and interest in using them because this is the area in Japan where *tridacnid* clams are best known. However, there were no owners or chefs from Okinawa in the sample.

Table 1: The ethnic background of owners/chefs interviewed

	Japanese	Chinese	Australian	Korea	Malaysian	Total
Owners	6	3	2	1	0	12
Chefs	7	1	2	1	1	12

Table 2: Regional background of owners and chefs interviewed.

Japanese				
	Tokyo	Hokkaido	Gifu	Total
Owners	2	1	3	6
Chefs	2	2	3	7

Chinese				
	Beijing	Taiwan	Hong Kong	Total
Owners	1	1	1	3
Chefs	1	0	0	1

Others				
	Australian (Queensland)	Korean (Pusan)	Malaysian (Kuala Lumpur)	Total
Owners	2	1	0	3
Chefs	2	1	1	4

3. Use of Seafood by Japanese Restaurants, Knowledge of Giant Clam Meat as a Food Item, Interest in Using It

Seafood is an essential item in the menus of Japanese restaurants. All restaurants surveyed served seafood. All owners and chefs of these restaurants believed seafood to be a 'vital component of their Japanese food selection. This is because of the importance of sashimi and sushi items in the menu of Japanese restaurants. Almost all types of fresh seafood available in the Australian seafood market are used in these restaurants and some materials used for sushi (e.g. raw fish roe) are imported from Japan. The types of seafood most commonly used are varieties of tuna, reef fish for white meat (e.g. king snapper, coral trout), salmon, cuttlefish, prawns (shrimps), scallops, oysters, abalone, ark shell (*Scapharca broughtonii*), and crabs. All Japanese chefs (seven) said that there is a lack of fresh seafood in Australian markets suitable for Japanese food compared to its availability in Japan. They are always looking for new types of fresh seafood items. This indicates that there is a strong potential demand for new seafoods from the perspective of Japanese chefs.

None of the restaurants surveyed were using giant clam meat. Although all the respondents did know of giant clams, only twenty-five per cent (three out of twelve) of owners/chefs interviewed had eaten giant clam meat (e.g. as sashimi, or grilled after marinating in both soy sauce and sake). However, all of restaurant personnel surveyed have had no experience in cooking or using giant clam for food as part of their menu. Thus the general hypothesis that Japanese restaurants are very familiar with giant clam meat as a food item is not supported. This is in accordance with the results obtained by Tisdell (1992) for Asian restaurants generally in Queensland.

Most respondents did not know exactly how to cook or prepare giant clams for Japanese cuisine. This is basically because giant clams have not been available in the Australian seafood market until recently. However, because of their knowledge of Japanese cuisine, respondents were able to suggest potential recipes for using giant clam meat in their menus. The types of 'cooking' most favoured by Japanese chefs for potentially using giant clam meat are sushi and sashimi including sashimi combinations, seafood salads including Wafu-salad, and grills (e.g. with butter, with salt, and with both soy sauce and sake). Sunomono (i.e. vinegared dishes), Teppan-yaki, and Nabemono (e.g. mixed winter casserole (Yosenabe)) were also mentioned as possibilities.

Table 3 shows some differences of potential cooking suggested by chefs according to their ethnic background. As can be observed from Table 3, no Japanese chefs mentioned steaming, use in soup and frying with vegetables as potential cooking methods.

Table 3: Suggested methods of cooking of giant clam meat by ethnic background of chefs in Japanese restaurants

Ethnicity	Japanese	Chinese	Korean	Australian	Malaysian	Total
Number ^a	7	1	1	2	1	12
Sushi	7	1	1	1	1	11
Sashimi	7	1	1	1	1	11
Grill	4	-	1	1	1	7
Nabemono	3	-	-	-	-	3
Teppan-yaki	2	-	-	-	1	3
Steam	-	1	-	-	-	1
Soup	-	1	-	1	-	2
Fry ^b	-	1	1	-	-	2

(a) Number of restaurants

(b) Frying with different vegetables

Only three chefs were interested in using clam meat for Teppan-yaki. This was probably because they had facilities for preparing Teppan-yaki. Note that none of the chefs have had experience in cooking giant clams. Therefore, the suggestions of the chefs are based on their imagination and experience with Japanese cuisine. Their responses are conditioned not only by their knowledge of Japanese food but also by the type of restaurant in which they work at present.

Respondents were asked (Question 9) if they thought giant clam meat was well known to Japanese food caterers as a food item. All twelve surveyed restaurants believed that giant clam meat was not well known to Japanese food caterers in Australia. This is simply because it is not readily available in Australian fish markets. This further emphasises the general unfamiliarity of Japanese restaurants in Australia with giant clam meat. However, around ninety-two per cent of respondents (eleven out of twelve) thought that Japanese food caterers in Australia would have considerable or moderate interest in using giant clam if it were available. Only one respondent (eight per cent) thought that Japanese caterers would have little or no interest in this. These results are summarized in Table 4. This high potential interest in using giant clam meat is basically because only a few species of shellfish are

available for Japanese food in Australia. All respondents, except the take-away shop, stressed that their use of it would depend heavily upon its price, its taste, and the yield of giant clam meat for cooking (i.e. the useable proportion of meat). In the case of take-away shop, the respondent believed that giant clam meat would not be appropriate for this outlet. Furthermore, four out of the seven Japanese chefs mentioned that chefs of Japanese restaurants need experience in cooking giant clam meat before they can decide on its suitability.

Table 4: Interest of chefs of Japanese restaurant by ethnic background in using giant clam (Question 10)

	Japa- nese	Austra- lian	Chinese	Korean	Malay -sian	Total	Percent- age
Considerable	6	0	1	1	1	9	75
Moderate	1	1	0	0	0	2	17
Little/No	0	1	0	0	0	1	8

Nevertheless, many respondents expressed interest in using giant clam meat in the future if it should become available. Six restaurants (50 per cent) answered "yes" to the question (Question 7) asking whether they would like to use giant clam in future. Five restaurants (42 per cent) replied "yes/no" to this question. This was because these five respondents strongly felt that they needed to have some trial cooking to determine whether they would be able to adapt giant clam to their menus.

Table 5 summarises the binary answers to questions 5 - 9 by respondents, mostly chefs, according to their ethnic background. The questions were designed to determine the following:

- Q5. Whether giant clams are known by respondents.
- Q6. Whether they have been or are used by respondents for their meat.
- Q7.(a) Whether the respondent would be interested in the possibility of using giant clam meat in the future.

- (b) Whether the respondent would be interested in the possibility of using giant clam meat for sashimi.
- Q8. Whether the respondent knows of any recipes for preparing giant clams as food.
- Q9. Whether or not respondents believe that the meat of giant clams is well known to Japanese food caterers in Australia.

Table 5 Responses to Questions 5 to 9: Japanese restaurants in Brisbane by ethnic background of the chef and Japanese restaurants on the Gold Coast

Ethnic background (Brisbane)	Total Number of Responses	Q5				Q6				Q7 (a)				Q7 (b)				Q8				Q9			
		Yes		No		Yes		No		Yes		No		Yes		No		Yes		No		Yes		No	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Japanese	7	7	100			2	29	5	71	7	100	0		6	86	1	14	2	29	5	71	0	0	7	100
Australian	2	2	100			0		2	100	1	50	1	50	1	50	1	50	0		2	100	0	0	2	100
Chinese	1	1	100			0		1	100	1	100	0		1	100	0		0		1	100	0	0	1	100
Korean	1	1	100			1	100	0		0		0		1	100	0		1	100	0		0	0	1	100
Malaysian	1	1	100			0		1	100	1	100	0		0		1	100	0		1	100	0	0	1	100
Total	12	12	100			3	25	9	75	11	92	1	8	9	75	3	25	3	25	9	75	0	0	12	100
Gold Coast*	5	5	100			1	20	4	80	3	60	2	40	-	-	-	-	0		5	100	2	40	3	60

(a) Source: Tisdell (1992), p.10.

Some interesting observations can be made from Table 5. Firstly, all Japanese restaurants surveyed in Brisbane did know of giant clams. This result contrasts with Tisdell's report (1992) for Asian restaurants in Queensland generally. However, Tisdell (1992) found that surveyed Japanese restaurant on the Gold Coast mostly knew of giant clams. Twenty five per cent of Japanese restaurant chefs (two Japanese chefs and one Korean chef) surveyed in the Brisbane area had used giant clam meat and interest was expressed by half of the chefs (six) in using giant clam meat if it should become available. Overall, about ninety-two per cent of Japanese restaurants in Brisbane indicated that they have a potential interest in using giant clam meat. This includes forty-two per cent who said that their use of giant clam would depend upon its price and taste, etc.(Question 7 (a)). Seventy five per cent of surveyed restaurants would be interested in using it for sashimi (Question 7(b)). Three chefs (25%) indicated that they would not use giant clam meat for sashimi even if it was readily available. This is because in the case of two their specialisation in Japanese food did not include sashimi. One for example specialised in Teppan-yaki. Another Japanese restaurant did not indicate interest in using giant clam for sashimi at the time of this survey because its personnel wondered whether handling and transportation of giant clams could result in food poisoning.

Question 8 was designed to provide additional information about the knowledge of Japanese food caterers of giant clam meat as a food item. Only twenty-five per cent of all respondents (two Japanese and one Korean chef) indicated that they knew a recipe or recipes for the preparation of giant clams as a food item. In general, knowledge about how to prepare giant clam meat as a food item is very limited amongst Japanese food caterers. However, chefs from Okinawa would probably have more knowledge about this. This is because some varieties of giant clams are used for sashimi in Okinawa.

Further confirmation of the paucity of knowledge of Japanese food caterers in Australia about giant clam meat was obtained from Question 9. All of twelve respondents (100%) indicated that on their view it was not well known amongst such caterers. By contrast, however, Tisdell (1992) reported that around forty per cent of Japanese restaurants in the Gold Coast indicated that the meat of giant clam was well known to Japanese food caterers in Australia.

The view that Japanese food caterers in Australia provide a ready market for the sale of giant clam meat must be discounted. While most caterers would be prepared to try such meat if it became readily available, virtually all lack experience with it and knowledge about its

preparation. Thus in Australia, it would seem necessary for sellers of giant clam meat to make it available for trial and to provide more information (recipes) for its preparation in Japanese-style cuisine.

4. Location of Restaurants and Socio-Economic Characteristics of Their Customers Related to the Interest of Restaurants in Using Giant Clam Meat

As mentioned earlier, of the 12 restaurants surveyed, all of them were located in Brisbane area. A higher proportion (92%) of Brisbane restaurants were interested in using or trying giant clam meat (Table 6) compared to the Gold Coast where 60% of them expressed such an interest. Note that a sample of only five Japanese restaurants (as part of a larger Asian sample) was surveyed on the Gold Coast by Tisdell (1992) although there seems to be more than thirty Japanese restaurants in that region.

Table 6: Comparison of the distribution of those surveyed Japanese restaurants interested (and not interested) in using giant clam meat in Brisbane and on the Gold Coast

All	Total	Interest ^a		No Interest ^b	
		Number	%	Number	%
Total	17	14	82%	3	18%
Brisbane	12	11 ^c	92%	1	8%
Gold Coast ^d	5	3	60%	2	40%

(a) Answered 'Yes' to Question 7.

(b) Answered 'No' to Question 7.

(c) Note that five of restaurant in Brisbane responded as "Yes/No" are included in this figure.

(d) This results was adopted from Tisdell (1992), p.10.

Almost all restaurants surveyed obtain most of their business from Australian customers, mainly locals. One hundred per cent of restaurants surveyed in Brisbane indicated that eighty-five per cent or more of their customers were Australian residents, including interstate customers. Furthermore, around seventy-five per cent of all the Brisbane restaurants stated that ninety-five per cent of their customers or more were Australian residents. Japanese restaurants on the Gold Coast are much more dependent on foreign tourists than those in Brisbane. The distribution of the dependence of Japanese restaurants on Australian customers

and on overseas tourists is indicated in Table 7.

It may be worthwhile considering whether there is any relationship between the interest of the Japanese restaurant owners/chefs in using giant clam meat in the future (answers to Question 7) and the dependence of the restaurants on local Australian customers for business (answers to Question 11 and 12). From Table 8, it can clearly be seen that Japanese restaurants in Brisbane heavily depend upon local Australian customers and most of these restaurants show an interest in using giant clam meat.

Table 7: Distribution of restaurants surveyed in terms of their percentage dependence on Australian and overseas customers.

	Brisbane						Gold Coast			
Percentage of Australian Customers	100%	99%	98%	95%	90%	85%	70%	50%	15%	10%
Percentage of Overseas Customers	0%	1%	2%	5%	10%	15%	30%	50%	85%	90%
Number of restaurants	4	3	1	1	1	2	1	2	1	1
Percentage of total restaurants	33%	25%	8%	8%	8%	16%	20%	40%	20%	20%

The Gold Coast result are also summarised in the same table (Table 8) for comparative purposes. Most of those restaurants on the Gold Coast also showed an interest in using giant clam for their cooking. It seems that interest in using giant clam meat does not depend upon whether customers are from Australia or overseas.

Table 8: Relationship between the dependence of restaurants on Australian customers and their interest in using giant clam meat.

Brisbane						Gold Coast					
Australian Customers	Total (/12)	Interest ^a		No Interest ^b		Australian Customers	Total (/5)	Interest		No Interest	
		Number of Restaurants	%	Number of Restaurants	%			Number of Restaurants	%	Number of Restaurants	%
100%	5	4	100	0	0	90%	1	1	100	0	0
99%	3	3	100	0	0	85%	1	0	0	1	100
98%	1	0	0	1	100	50%	2	2	100	0	0
90%	1	1	100	0	0	30%	1	1	100	0	0
85%	2	1	50	1	50	-	-	-	-	-	-

(a) Answered 'Yes' and 'Yes/No' to Question 7. (b) Answered 'No' to Question 7

Restaurants were asked to indicate what proportion of their customers were European and non-European. Europeans were predominant in most of the Japanese restaurants in Brisbane. However, the results of the Gold Coast indicate that Europeans were predominant in two restaurants, non-Europeans were predominant in two restaurants, and of about equal racial background in one restaurant. As Table 9 indicates, racial background of customers is not a major determinant of interest of restaurants in using giant clam meat.

Table 9 Relationship between the Racial Background of the Majority of their Customers and the Interest of Restaurants in Using Giant Clam Meat in Brisbane and on the Gold Coast

Racial type of most customers	Brisbane					Gold Coast				
	Total Number of Restaurants	Interest ^a		No Interest ^b		Total Number of Restaurants	Interest		No Interest	
		Number	%	Number	%		Number	%	Number	%
All races	12	11	92	1	20	5	4	80	1	20
European	10	9	90	1	0	2	2	100	0	0
Non-European	1	1	100	0	0	2	1	50	1	50
European + Non-European ^c	1	1	100	0	0	1	1	100	0	0

- (a) Answered 'Yes' and 'Yes/No' to Question 7
(b) Answered 'No' to Question 7
(c) Answered half Europeans and half non-Europeans

Japanese restaurateurs were asked the income group to which most of their customers belong (Question 14). They were asked whether they belong mostly to the high income, middle income or low income group. The intention was also to see if there was any connection between the levels of income of customers served by Japanese restaurants (both in Brisbane and on the Gold Coast) and their interest in using giant clam meat. The responses and the relationship are indicated in Table 10. Most Japanese restaurants said that they were catering for middle and middle-to-high income groups. Only one restaurant catered for high income groups exclusively.

Table 10: Relationship between the income levels of the majority of their customers and the interest of restaurants in using giant clam meat

Dominant Income Group of Customers (Brisbane)	Total	Interest ^a		No Interest ^b	
		Number of Restaurants	%	Number of Restaurants	%
All groups	12	11	92%	1	8%
High income	1	1	100%	0	0
Middle income	7	6	86%	1	14%
H + M ^c	4	4	100%	0	0
(Gold Coast)					
All groups	5	4	80%	1	20%
High income	0	0	0	0	0
Middle income	4	3	75%	1	25%
H + M ^c	1	1	100%	0	0

(a) Answered 'Yes' to Question 7.

(b) Answered 'No' to Question 7

(c) Middle and high income customers the majority

From Table 10, it can be seen that the group in which the highest percentage of restaurants expressed interest in using giant clam meat cater for high income and middle to high income customers (100% in Brisbane). The next greatest level of interest, in the case of Brisbane, was amongst those restaurants catering for middle income customers. It should be noted, however, that this includes one take-away shop, the owner of which did not show any interest in using giant clam meat. This was because he said it would be inappropriate for his outlet. Therefore, all Japanese restaurants catering for middle income customers could also classified as having an interest in using giant clam. No Japanese restaurants catered for lower income groups.

5. Concluding Comments

The total number of Japanese restaurants surveyed in Brisbane was twelve. That is, all Japanese restaurants in Brisbane. The following are the main findings:

- Japanese restaurants in Brisbane have relatively little practical knowledge of clam

meat, including exact methods of preparing it for food. However, their suggested methods of cooking it for Japanese menus differ according to the ethnic background of the chefs.

- The majority of chefs in such restaurants, would be interested in trying giant clam meat if it became readily available.
- Their interest would depend on its market price, its taste, and its yield for cooking. Australian (local and interstate) customers would play a crucial role in the continuing acceptability of giant clam meat by Japanese restaurant in Brisbane.
- Interest in trying giant clam meat is not to any great extent a function of the racial composition of the customers of such restaurants. It does not depend to any great extent on whether customers are European or non-European.
- All restaurants in Brisbane catering for middle-to-high income groups and for high income groups expressed a strong interest in trying clam meat.

The results from the sample indicate that a potential market is likely to exist amongst Japanese restaurants in Brisbane for giant clam meat but it needs to be developed. In particular if giant clam meat should become readily available¹, Japanese restaurants would benefit from advice on its preparation, though many would be willing to experiment with its preparation on their own. Suitable preparation and presentation of the product would be extremely important in gaining acceptability for the product and building up a suitable "image" for it, especially since in the beginning it would be regarded as an "exotic" speciality. Price and stable supply of giant clam would also influence long-term use but price may not be the most important consideration in the period of early introduction of the product, particularly if it is regarded as a specialty item. For example, crocodile meat for an appetiser at a Japanese restaurant in Brisbane sells for A\$ 34 per small plate. Presumably because it is a speciality item, its high price is not a deterrent.

¹ Supplies of giant clams are available commercially in Australia from Reefarm Pty. Ltd. and grown at Fitzroy Island. Its office address is 1st. Floor, Tropical Arcade, Abbott Street, Cairns 4870, Australia. Telephone (070) 51 6139

6. Acknowledgments

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7. Reference

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To Whom it May Concern

Survey of Japanese Food Restaurants in Brisbane about their Knowledge of
Giant Clam Meat and Interest in Using it

It is now possible to farm giant clams in the sea. One of their possible uses is for food, and we want to find out whether Japanese food restaurants know of this possibility. It is for this reason that we hope that you can help us with our research. We would therefore like you to answer some questions for us. Your answers will remain confidential. They are being used for research purposes only and not commercially. We hope to prepare a report based on all the completed surveys.

I have asked Mr. Yoshihiro Kuronuma to assist me in undertaking this survey. He is a research assistant at The University of Queensland and is a reliable individual. I would appreciate any assistance which you are able to give to him. If you have any difficulties or queries, you can telephone me using the telephone numbers listed above.

Thanking you in advance for your assistance.

Yours sincerely

Clem Tisdell
Professor of Economics

APPENDIX A

CONFIDENTIAL

Survey of Japanese Food Restaurants in Brisbane About their Knowledge of Giant Clam
Meat and Interest in Using It.

Name of Respondent and Position

Name of Restaurant

Address

Telephone

1. Ethnic and regional background of owners or of effective operators of the business, e.g. Japanese, Tokyo.

.....

2. What type of ethnic food do you sell? List in descending order of importance (e.g. (1) special types of Japanese food, (2) Australian food).

.....

.....

3. Is seafood included in your menu? Yes/No

If yes, is it an important part of your menu? Yes/No

What types of seafood do you mostly use?

.....

4. Do you use shellfish (scallops, prawns, oysters, clams and so on) on your menu? Yes/No

Is shellfish an important item in your menu? Yes/No

Which types of shellfish do you mostly use?

.....

5. Do you know of giant clams? [This is the shell of one. Please see photographs]. Yes/No

6. The shells of the giant clam cover the meat inside. The meat of young clams can be eaten whole after discarding the kidneys, but the meat of older clams is usually divided into two parts - the muscle (which is firm and whitish in colour) and the mantle. Both parts may be eaten but are usually prepared differently by those that eat it. Sometimes only the muscle is eaten, e.g. this is usually the case in Taiwan. In Okinawa, some varieties of giant clams are used for sashimi. All the meat except the kidney is eaten. Have you used giant clam meat for eating or for any of your recipes? Yes/No

Please explain

If yes, indicate the recipes or ways in which you used it.

.....
.....
.....

7. (a). Do you think that you might use giant clam meat in your cooking or food preparation in the future if it were available? Yes/No

Please explain

If you might use it, would you please indicate how you might like to use it?

7 (b) Would you be interested to use giant clam for sashimi? Yes/No

If 'yes', please indicate how you could use it in sashimi? e.g. in Wafu-salad?

8. Do you know of any recipes or ways (not mentioned earlier) in which giant clam meat can be used? Yes/No

If yes, would you kindly provide some information about these

.....
.....
.....

9. Do you think that giant clam meat is well known to Japanese food caterers in Australia? Yes/No
Please explain.

.....

10. Do you think that Japanese food caterers in Australia would have considerable moderate little, or no

interest in the availability of giant clam meat? Please explain.

.....

.....

.....

11. What percentage of your customers would be people resident in Brisbane?%

12. What percentage of your customers would be overseas tourists?%

From what country or countries do they mostly come?

.....

.....

13. Of your Australian Customers, are they mostly European or non-European?

European

Non-European

What is the main ethnic background of your non-European Australian customers?

.....

14. What socio-economic groups do most of your customers belong to?

High income

Middle income

Lower income

15. What short statement best describes the nature (characteristics) of your customers or custom?

.....
.....
.....

16. Any other comments?

.....
.....
.....
.....

Thank you for your co-operation and time. Your answers will remain confidential.

Clem Tisdell
Department of Economics
University of Queensland.
St Lucia, 4072 QLD

Telephone: (07) 3365 6306

1st of October, 1992

Would you like a free copy of our report when it is available?

Yes/No

APPENDIX B

List and Addresses of Japanese Restaurants Surveyed in Brisbane and on the Gold Coast

Japanese Restaurants in Brisbane:

1. Azabu Japanese Restaurant
18/165 Moggill Rd., Taringa
Telephone: 07-371-7605.
2. Genji Japanese Kitchen
9 Gladstone Rd., Highgate Hill
Telephone: 07-844-9935
3. Hanaichi Japanese Restaurant
624 Ann St., Fortitude Valley
Telephone: 07-252-3275
4. Kabuki
Cnr. of Edward and Margaret Sts., Brisbane
Telephone: 07-221-1999
5. Little Tokyo
Bowen St., Spring Hill
Telephone: 07-831-7751
6. Oshin Japanese Restaurant
Cnr. of Adelaide and Creek Sts., Brisbane
Telephone: 07-229-0410
7. Oyama Japanese Restaurant
Market Square Shopping Centre,
Cnr. of Mains Rd. and McCullough St., Sunnybank
Telephone: 07-344-3088
8. Sennari
85 Elizabeth St., Brisbane
Telephone: 07-229-1551
9. Sumo Japanese Take-Away Restaurant
Broadway on the Mall, Queen St. Mall, Brisbane
Telephone: 07-229-2577
10. Yakiniku Oriental Restaurant
283 Given Tee., Paddington
Telephone: 07-369-7999

11. Yamagen
Cnr. of Charlotte and Albert Sts., Brisbane
Telephone: 07-221-3033

12. Yumiko-Restaurant
32-34 Park Rd., Milton
Telephone: 07-369-3588

Japanese Restaurants on the Gold Coast (Surveyed for Tisdell (1992)):

1. Ichiban Japanese Restaurant
Address: No 3 Monte Carlo Palace, Gold Coast Queensland.
Name of the Respondent: the manager.
Telephone: 075-924169.
2. Mon Japanese Restaurant
Address: 1st Floor, Paradise Centre, Gold Coast Highway,
Gold Coast, Queensland 4217.
Name of the Respondent: Mr. M. Komiya, the general manager.
Telephone: 075-902928.
3. Musashi Japanese Restaurant
Address: Surfers Paradise, Gold Coast, Queensland 4217.
Name of the Respondent: Milos Jecny, the manager.
Telephone: 075-503309.
4. Ataka Steak.Seafood.Japanese Restaurant
Address: 3090 Gold Coast Highway, Gold Coast, QLD 4217.
Name of the Respondent: Mai Perry, assistant manager
Telephone: 075-388431
- 5 Yama Sakura Japanese Restaurant
Address: Shop 60, Centre Arcade, 3131 Gold Coast Highway,
Gold Coast Queensland 4217
Name of the Respondent: Yoshimi Yamagishi, Managing Director
Telephone:075-922799

Research Reports and Papers in: Economics of Giant Clam Mariculture

Previous Working Papers

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2. "Seafarming as a Part of Indonesia's Economic Development Strategy - Seaweed and Giant Clam Mariculture as Cases." Carunia Firdausy and Clem Tisdell, November, 1989.
3. "Market for Giant Clams as Aquarium Specimens: Report on a Survey of Retailers of Supplies for Saltwater Aquariums, Southeast Queensland, Australia." Clem Tisdell with the assistance of Rene Wittenberg, November, 1989.
4. "Aquaculture as a Use of the Coastal Zone: Environmental and Economic Aspects, Giant Clam Farming as a Development." Clem Tisdell, December, 1989.
5. "Pacific Giant Clams and their Products: An Overview of Demand and Supply Factors." Clem Tisdell, December, 1989.
6. "Marine Property Rights in Relation to Giant Clam Mariculture in the Kingdom of Tonga." Dr T'eo I.J. Fairbairn, February, 1990.
7. "Exploring the Demand for Farmed Giant Clams and Their Components: Approaches and Problems." Clem Tisdell, February, 1990.
8. "Report on possible Demand for Giant Clam Meat by Tongan Descendants in Australia: Inferences from interviews conducted in the Brisbane Area". Clem Tisdell and Rene Wittenberg, February, 1990.
9. "Evaluation of International Trade Statistics on Giant Clams and Related Products and the Market for Giant Clam Meat." Dr John Stanton, March, 1990.
10. "Assessing Species for Mariculture in Developing Countries: A Review of Economic Considerations." Carunia Firdausy and Clem Tisdell, April, 1990.
11. "An Analysis of the Cost of Producing Giant Clam (*Tridacna gigas*) Seed in Australia." Tisdell, C.A., Lucas, J.S. and Thomas, W.R., May, 1990.
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15. "The Potential Market for Giant Clam Meat in New Zealand: Results of Interviews with Pacific Island Immigrants." Clem Tisdell and Rene Wittenberg, October, 1990.
16. "The Potential Demand for Giant Clams in Indonesia and Their Status: A Report on a Survey of Four Coastal Villages in Bali and Java." Carunia Firdausy and Clem Tisdell, November, 1990.
17. "Traditional Reef and Lagoon Tenure in Western Samoa and Its Implications for Giant Clam Mariculture." Dr T'eo I.J. Fairbairn, February, 1991.
18. "Ocean Culture of Giant Clams (*Tridacna gigas*): An Economic Analysis." C.A. Tisdell, J.R. Barker, J.S. Lucas, L. Tacconi and W.R. Thomas, February, 1991.
19. "Aid for Village-Based Rural Projects in LDCs: Experiences, Project Appraisal and Selection, ACIAR and Giant Clam Culture as a Case". Luca Tacconi and Clem Tisdell, March, 1991.
20. "Customary Marine Tenure in the South Pacific Region and Implications for Giant Clam Mariculture". Dr T'eo I.J. Fairbairn, April, 1991.
21. "ACIAR-Supported Research on the Culture of Giant Clams (*Tridacnidae*): A Multi-Faceted Economic Assessment of Research Benefits (Draft Appraisal)". Professor Clem Tisdell, April, 1991.
22. "Economics of Ocean Culture of Giant Clams: Internal Rate of Return Analysis for *Tridacna gigas*". Tisdell, C.A., Tacconi, L., Barker, J.R. and Lucas, J.S., April, 1991.
23. "Socio-Economic Aspects of Giant Clams in The Lau Group, Fiji, and Farming Prospects: Results of Field Research". Veikila Vuki, Clem Tisdell and Luca Tacconi, June, 1991.

24. "Subsistence Economic Activities and Prospects for Clam Farming in Ono-i-Lau, Fiji: Socio-Economic Factors". Veikila Vuki, Clem Tisdell and Luca Tacconi, June, 1991.
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27. "Economic Returns from Farming Different Types of Seaweed (Eucheuma) and for Farms of sizes in Nusa Penida, Bali, Indonesia." Carunia Mulya Firdausy and Clem Tisdell, December 1991.
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29. "Domestic Markets and Demand for Giant Clam Meat in the South Pacific islands - Fiji, Tonga and Western Samoa". Luca Tacconi and Clem Tisdell, January 1992.
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31. "Exports and Export Markets for Giant Clam Products in the South Pacific: Fiji, Tonga and Western Samoa". Luca Tacconi and Clem Tisdell, March 1992.
32. "Institutional Factors and Giant Clam Culture and Conservation in the South Pacific: Observations from Fiji, Tonga and Western Samoa". Luca Tacconi and Clem Tisdell, March 1992.
33. "Giant Clams in Wallis: Prospects for Development". Nancy J. Pollock, May 1992.
34. "Current and Potential Markets for Giant Clam Meat in Fiji - A Case Study of the Market in Suva". Vina Ram, August, 1992.
35. "Interest of Asian Restaurants in Queensland in Using Giant Clam Meat in their Cuisine and Their Knowledge of It." Clem Tisdell, September, 1992.
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39. "Giant Clams in Japanese Cuisine - Brisbane Trials and Use in the Ryukyus". Clem Tisdell and Yoshihiro Kuronuma, December, 1992.
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