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TRINIDAD AND TOBAGO The Yachting Sector

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Yachting is tourism. In much of the Eastern Caribbean, Trinidad and Tobago included, the pleasure boat industry is the second most important tourism component after land-based tourism, an importance which exceeds that of cruise ship tourism. Despite this, the yachting subsector is generally unrecognised by national governments, regional and global institutions. For example, the Caribbean Community (CARICOM) Heads of Government meeting to discuss the impacts of "9/11" on the region's tourism did not have a single reference to yachting. Likewise the World Travel and Tourism Council/United Nations Environment Programme (WTTC/UNEP) report on tourism that was submitted to the World Summit on Sustainable Development (WSSD) in Johannesburg this year lacks any reference on yachting.

Aware of this lack of recognition and the importance of the subsector in diversifying the economies of the subregion, the Economic Commission for Latin America and the Caribbean (ECLAC), Subregional Headquarters for the Caribbean, initiated the project "Development of a Subregional Marine-based Tourism Strategy" which is co-funded by the Government of the Netherlands. This project is aimed at the development of sustainable yachting tourism in the Eastern Caribbean and focuses on the island arc from the British Virgin Islands in the north to Trinidad and Tobago in the south.

The project includes the conduct of national studies in the British Virgin Islands, St. Maarten, Antigua and Barbuda, Saint Lucia, Saint Vincent and the Grenadines, Grenada and Trinidad and Tobago. In all countries the studies were preceded by consultations with the private and public sector and following the completion of the national reports, the findings were similarly discussed via national, public and private sector consultations.

EXECUTIVE SUMMARY

The yachting industry in Trinidad and Tobago developed at an unprecedented rate of growth in the last decade of the previous century. Positive factors that stimulated this growth included initiative and investment. private sector supportive policies by Customs and Excise, Immigration and the Tourism and Industrial Development Company (TIDCO), an active organization, industry trade the Yachting Services Association of Trinidad and Tobago (YSATT), the presence of a skilled work force, competitive price levels, location outside the hurricane belt, low cost of living and hospitable people.



Since November 2000 there has been a reversal of this growth. The drop in yacht arrivals, yacht population and active boats of up to 40%, compared with 2000, has been very stark compared with other Caribbean destinations.

Despite the absence of reliable economic data it is estimated that yachting generates at least TT\$130-150 million or between US\$20-25 million (and quite possibly more) and makes a contribution to value added, or the economy, of over TT\$99 million (US\$17 million). The sector generates direct employment of at least 1100 people.

Some of the findings of this study include:

- Low awareness of the sector and its link with tourism
- Existence of efficient links between YSATT and government departments and institutions
- Limited availability of data and information
- Recognised need for skills training of staff at all levels and a need to attract high skilled entrepreneurs in selected occupations.
- Need for over-the-counter, bonded warehousing
- Need for visitor safety and crime prevention
- Perception that Trinidad is important only for yacht storage, maintenance and services
- Underdeveloped recreational vachting infrastructure, particularly in Tobago
- Increased competition for land in the Chaguaramas area

Specific recommendations of the study are:

□ Recommendations

1. Competitiveness

- TIDCO and YSATT should prepare market intelligence reports which analyse the position of Trinidad and Tobago in relation to developments in its main competitor countries (new legislation, prices, new infrastructure) and prepare recommendations to counteract a weakening of the Trinidad and Tobago product.
- Over-the-counter bonded warehouse facilities should become available in Chaguaramas.
- Work permit policies need to reflect the interest of the country and the industry by facilitating employment for highly skilled workers.

2. Recreational yachting development

- Develop a strategy for the exploration and expansion of the recreational aspects of yachting.
- Develop a mooring buoy policy and place mooring buoys in selected anchorages.
- Develop a crewed charter policy similar to that of Grenada whereby non-Trinidad based yachts can pick up passengers in Trinidad or Tobago.
- Promote the development of a medium sized marina in Tobago.

3. Space

• Maintain the open space and windows to the sea between the entrance of Chaguaramas and the Military museum.

4. Data

• A primary source for data is the "marine pleasure craft declaration" form, which could provide a wealth of information on the yachting industry. Data entry is computerized so that aggregation of such data would not interfere with confidentially issues. Recommended monthly or annually aggregations are:

No of yachts arrivals (and departures) by length of vessel (e.g. (in feet) less than 35; 35 - 45; 45 - 60; 60 - 90; >90)

No of yacht arrivals by number of crew (including master)

No of yacht arrivals by previous port or country

No of yacht departures by destination port or country

No of yacht arrivals by type of vessel (e.g. cabin cruiser, ketch, sloop, multi-hull, pirogue, power boat, other)

Purpose of stay (cruising, repair, storage, charter)

Length of stay

- A yachtsmen expenditure and motivation survey should be carried out with some urgency.
- CSO could consider simplifying the establishment survey form and in consultation with TIDCO and YSATT should establish an "establishments to be surveyed" list and review the classification of the establishments. For any business survey YSATT should stress that its members accurately complete the forms.
- Yacht as a place of stay should be recognised and reported as a distinct category rather than being merged with "other" as is currently the case.

5. Training

- The recommendations of the Riley report which reviews the need for skill advancement, training and certification, are supported.
- It is recommended that YSATT and TIDCO approach TRAINMAR to facilitate focused training in middle and higher staff management. In the same vein, it is recommended that these two organizations approach the Caribbean Fisheries Training and Development Institute for training in seamanship and small engine repair. Both YSATT and TIDCO also need to explore the concept of twinning with recognized training institutions abroad.
- A quantitative assessment of manpower/skill requirements and training needs should be conducted. Ideally such an assessment should be done on a regional or subregional basis.
- An apprentice scheme should be initiated that is recognised by the Ministry of Education and YSATT, which allows for mobility of apprentices within the yachting sector.
- The Small Business Development Company should initiate courses in small business management for the marine sector.

6. Environment

- The Institute of Marine Affairs (IMA) or the University of the West Indies (UWI) should conduct an assessment or evaluation of all past pollution/contamination studies and try to establish trends for the major parameters.
- A regular monitoring programme should be established for selected parameters.
- YSATT should take the initiative to establish best management practices with particular reference to storm water, dust control and fuel dock operations.

- CDA should undertake efforts to upgrade or refurbish the sewage system. With this, refurbishment connections to the sewage system should be obligatory and package treatment plants and sceptic tanks should be phased out.
- IMA should be requested to identify sensitive ecological areas (coral and sea grass beds, possibly spawning and traditional fishing grounds) where anchoring should not be allowed.

7. Property management

- A zoning plan for Chaguaramas Bay and Welcome Bay with particular reference to marine usage should be prepared with some urgency.
- The provisions of the revised Harbour Act should be implemented and a harbour master for the Chaguaramas area should be appointed.
- Governance for the marine area needs to be clarified and simplified. In this context government may wish to consider an evaluation of the role and functioning of the Chaguaramas Development Authority (CDA) and those agencies responsible for marine management. It may consider the possibility of establishing a new private/public sector management company along the line of Point Lisas for that area of Chaguaramas that is currently zoned for light industrial development (from about the former heliport to the military base) and the adjoining waters.

I. COUNTRY BACKGROUND

1.1 Economy

The economy of Trinidad and Tobago is energy based and has experienced strong economic growth since 1997/98 with growth rates in constant prices ranging from 7.8% in 1997/98 to 2.7% in 2001/02. Despite the slowdown of the United States, European and Japanese economies and the heavy losses in the stock market of these areas the country has weathered the current economic climate. Limited dependence on tourism, high energy prices and the continuation of energy related investment projects contributed to this. This performance was in contrast to much of that of the countries of the subregion where tourism and agriculture and, by consequence, their economic performance was under considerable strain.

In contrast to the steady general economic performance the tourism sector, as evidenced by growth rates in the hotels and guesthouses subsector, performed in a much more erratic manner. A negative growth rate of 50.5% in 1996/97 was followed by increases of 17.9% and 15.2% for the following two years, only to be followed by declines of 18.8%, 21.9% and 1.3% for 1999/2000, 2000/01 and 2001/02, respectively¹. However because hotel tourists make up only 15% of the total tourists, changes in GDP may very well give a distorted picture.

1.2 Social

According to the 2000-population census the country had a population of 1.2 million and a population growth rate of below 1%, with the age group of less than 15 years old actually experiencing negative growth. The Human Development Index (HDI) for Trinidad and Tobago stood at 0.805, which places the country among the high HDI countries. Poverty levels, at 21% of the population with even higher levels for some communities, are high for a resource-rich country. In 2000 the country had an adult literacy rate of 93.8%. However, in 2000, 21% of the labour force had little or no formal education, 33% had only primary education, 40% had secondary and only 6% had tertiary education. In 2001 the labour force stood at 567,450 people of whom 514,100 were employed and 62,400 were without employment. This implies an unemployment rate of 10.8%². At 14.4%, female unemployment stands much higher than male at 8.8%, even though females have higher educational achievements throughout the educational system. Another group with high unemployment levels is youth between 15–19. Here unemployment levels stood at 29.5%.

Life expectancy is at 71.9 and 76.5 years for males and females, respectively. Infant mortality is 16 per 1000. With a relative good health status, lifestyle and longevity diseases are becoming health issues.

The number of squatters remains high and there remains an unfulfilled demand for low and middle-income housing.

¹ In constant prices. Central Statistical Office data

² Central Statistical Office data

1.3 Environmental/Physical

Trinidad with 4828 square kilometres is the larger of the twin island State of Trinidad and Tobago and is located about 10 degrees north and between 61 and 62 degrees west. Mostly flat Trinidad's' north coast is characterised by the Northern Range, the highest peak of which, the Aripo, is 940 meters high. Northeast of Trinidad, at a distance of about 31 kilometres is Tobago with 300 square kilometres.

Situated near Venezuela and close to the mouth of the Orinoco River, the marine environment, and in particular the Gulf of Paria, of Trinidad and Tobago is influenced by that river³. Furthermore both Trinidad and Tobago are part of the continental shelf, and Trinidad is, at its closest, only about 11 km from the mainland. During the last ice age there were land bridges between Trinidad and Tobago as well as, even more recently, between Trinidad and Venezuela. The recent separation implies that much of the terrestrial flora and fauna is typical of that of the bordering mainland and little endemism has developed.

1.4 Chaguaramas

The Chaguaramas area was ceded to the United States by the United Kingdom under the Lend-Lease Agreement during the Second World War⁴ and then depopulated and developed as a naval base. During this period much of the infrastructure (roads, water, sewerage and power) was constructed. The base was closed in 1967 and the area was handed back to the Trinidad and Tobago Government.

Located on the northwest peninsula of Trinidad, Chaguaramas (latitude 10.40 N, longitude 61.4 W) is the hub of the yachting activity in Trinidad and Tobago. Chaguaramas includes the offshore islands of Chacachacare, Huevos, Monos,



Gaspar Grande, the Diego Islands and Five Islands. All but the Diego and the Five islands are under the management of the CDA, an area comprising of 14,572 acres. Of this the Chaguaramas peninsula accounts for 12,000 acres and the offshore islands for 2,572 acres. As the western tip of the Northern range much of the land is hilly with steep slopes. However, flat lands include 3,390 acres.

See also Kenny et. al. 1997. This paragraph relies on that publication.

Under this agreement Britain granted the USA a 99 year lease for military bases in Newfoundland, Bermuda and the Caribbean in exchange for 50 old destroyers. See letter from Cordell Hull to the British Ambassador, September 2nd, 1940.

Map of Chaguaramas



Source: Chaguaramas Development Agency

Excluding the 1,900 acre Tucker Valley, flat land with yachting and tourism or recreation potential comprises 1,400 acres distributed as follows:

Table 1.1
Land availability in Chaguaramas

Area Size (acres)		Current use		
Carenage Bay	580	yachting, recreation, other		
Chaguaramas Bay	520	yachting, industrial, recreation, other		
Teteron Bay	80	military, coast guard		
Scotland Bay	110	recreation		
Off shore islands	200	recreation, weekend housing, other		
Total	1390			

Source: CDA

The Northwest peninsula in Trinidad is characterised by near coastal semi-evergreen seasonal forest and by the driest type of forest found in Trinidad and Tobago, the deciduous seasonal forest. The first type of forest is found in areas with an annual rainfall of around 180 cm, while the latter is found in those areas where rainfall is not higher than 125 cm. The deciduous seasonal forest is found on the lower slopes of the Northwest peninsula and on the Gulf islands as well as on Pointe Gourde and Little Tobago. It is sensitive to fires and replacement of the vegetation by grass can occur, as happened on Monos. Typical vegetation types include saltfishwood, yellow savonette, incense, yellow poui, wild tamarind and wild guava. Ground vegetation includes cacti, agave and terrestrial bromeliads and aroids. (Kenny, et. al. 1997).

1.5 The Anchorages $\frac{5}{2}$

1.5.1 The Chaguaramas Area

The coastline is about 42 miles with a number of sheltered bays that are used by yachtsmen.

a) Welcome Bay

This bay is at the corner of Carenage Bay and Point Gourde and is used by the Trinidad and Tobago Sailing Association (TTSA) and yachts at anchor. It is usually calm but for a rare southeast wind. The narrow beach along the road is also used for recreational bathing.

b) Point Gourde

On Point Gourde there are two anchorages. These are Masson Bay just south of Welcome Bay and Escondida Cove on the Chaguaramas Bay side.

c) Chaguaramas Bay

This bay is the hub of the Trinidad yachting sector and most yachting services are located here. Although designated as a port it has not yet been declared a harbour but there is a fair amount of commercial traffic (see also Figure 2.1). Chaguaramas Bay is also the designated port of entry for visiting yachts to Trinidad.

d) Scotland Bay

Although Scotland Bay is not an approved anchorage, its use is tolerated and it is popular with foreign and local yachtsmen alike. As the cruising guide reports it is often used as a last stop on the way to Tobago or Grenada.

e) Gaspar Grande

This island has a small marina that is mostly used by foreign yachts on a long-term mooring. It is a recreational destination for Trinidad residents. There is a small anchorage, Winns Bay, on the southern side of the island. This island also has a small hotel and some (holiday) houses.

f) Monos Island

Like Gaspar Grande this island is popular for (holiday) homes. It has two anchorages, Morris Bay and Grand Fond Bay.

⁵ This sections draws heavily on the Cruising Guide to Trinidad and Tobago by Doyle, C. and Fisher, J. 2001. See that publication for a more detailed description of the anchorages and the facilities they offer.

g) Chacachacare

A former treatment centre for Hansen's Disease, the island was abandoned when a cure became available. The island offers numerous anchorages in Chacachacare Bay and in La Tinta Bay on the west side of the island.

1.5.2 The Gulf of Paria

Within the Gulf of Paria there are three locations that offer facilities to visiting yachts.

a) Bayshore

Between Chaguaramas and Port of Spain is the location of Trinidad and Tobago Yacht Club (TTYC) which offers a well protected marina.

b) Port of Spain

Port of Spain is mainly a commercial harbour and yachts have to clear in Chaguaramas before proceeding to the port. It is being used during the carnival period when the other convenient anchorages are crowded.

c) Pointe a Pierre

There is a small yacht club located on the Petrotrin Refinery.

1.5.3 The North Coast

Doyle⁶ indicates that there are "wonderfully scenic anchorages along this coast". Anchoring on the north coast requires prior permission from the Customs and Excise Department. The publication recognizes La Vache Bay, Maracas Bay, Las Cuevas and Grande Riviere as possible anchorages when there are no northern swells or northeast winds. During the turtle nesting season a yacht is likely to encounter leatherback turtles that nest on the beaches along the north coast and in particular in Grande Riviere.

1.5.4 *Tobago*

Doyle's⁷ webpage states that Tobago is offstream as it is too far to sail in a day and too often there is a struggle against current and wind. However, it also states that Tobago is rich in anchorages, particularly Charlotteville and Anse Bateau on the eastern side of the island. In contrast the northern anchorages are susceptible to swells and strong north easterly winds.

⁷ http://www.doyleguides.com/tobago.htm

⁶ Doyle and Fisher, 2001.

a) Scarborough

Like Chaguaramas, Scarborough is a port of entry for yachts. Behind the seawall and the customs building is a well-protected anchorage for yachts.

b) Store Bay

This bay, just north of the airport is a popular anchorage. It is also the venue for events such as the Angostura Tobago Sail Week and the Great Race.

c) Pigeon Point

Pigeon Point is on the northern part of the same bay and edges the Buccoo Reef Marine Park.

d) Bon Accord Lagoon

This is considered the most protected anchorage in Tobago but as part of the Buccoo Reef Marine Park its use is restricted and only available during a hurricane.

e) Buccoo Bay

This is a well protected anchorage on the western side of the Buccoo Reef National Park.

f) The North Coast

Doyle identifies several anchorages on the north coast. These include Mt. Irvine Bay, Grafton Beach, Great Courland Bay, Castara Bay, Englishman's Bay and Parlatuvier Bay.



g) Man of War Bay/ Charlotteville

Like Scarborough this is an official port of entry, and described by Doyle as a "spectacularly beautiful natural harbour"."

-

⁸ Doyle and Fisher, 2001.

h) East and south coast

Just east of Speyside is Anse Bateau, considered the best anchorage on the east coast and the only place in Tobago that sells yacht fuel. Kings Bay is just west of Speyside and offers the last anchorage before Scarborough.

2. DESCRIPTION OF THE YACHTING SECTOR

2.1 Definitions

Throughout the region and even in Trinidad and Tobago itself the yachting sector goes under a variety of names all of which essentially denote a similar product. Alternative names include the yachting industry and the pleasure - or leisure boat industry or sector. Recreational boating is another concept, which at times is used interchangeably with pleasure boating or yachting. In fact recreational boating and pleasure boating are wider concepts as these would also include sailing dinghies and other boats which are not normally considered yachts. In Trinidad and Tobago it would also include many of the pirogues that are used for recreation, semi-professional fishing or for transport between the mainland of Trinidad and holiday houses on the offshore islands.

The yachting sector, or pleasure boat industry, is defined as the array of activities that are required to sustain charter boating and cruising in the Eastern Caribbean. It includes the "yachting" establishments as well as "tourist" establishments that are the direct recipients of the yachting tourist expenditures, as well as those establishments that provide goods and services to the "yachting" and "tourist" establishments.

Following the World Tourism Organisation (WTO) definition of "tourist", we will define yachting tourists as those persons who stay for more than 24 hours but less than 12 months in a particular country outside his or her usual place of residence and whose place of stay is a vessel for most of the time. In Trinidad and Tobago, yachtsmen would include the yachting tourists as well as resident yachtsmen.

Yachting establishments are those enterprises that cater uniquely or mostly to yachtsmen, and include charter boat companies, marinas and ancillary marine services, such as, sail making, engine repair, marine electronics and out-haul facilities. The distinction between direct and indirect recipients can be blurred as many yachting establishments, such as marina and ancillary services, provide goods and services directly to yachtsmen, as well as to other yachting establishments, such as charter boat companies and, further confounding the problem, to non-yachting residents and tourists as well. For example, half the members of the TTYC are considered "social members", that is to say, members who do not own a boat but join for the recreational facilities and the atmosphere. Tourist establishments are those enterprises that provide goods and services mainly to tourists in general.

Because of its product mix Trinidad and Tobago also recognizes "active boats", which are vessels that are being worked on.

2.2 History

Prior to the 1990s the yachting sector in Trinidad and Tobago was dominated more by resident recreational boating than by a (foreign) yachting sector. A large part of this recreational boating

was made of locally built pirogues that were used for recreation and part-time fishing⁹. Apart from the many fishing depots and cooperatives there were six main yachting oriented facilities: the members-only TTYC and TTSA, Powerboats and the Island Property Owners Association on the North-western Peninsula. The last three facilities are located in Chaguaramas as is Bowen Marine, a boat builder, while TTYC is located near Port of Spain proper. In addition there were membership facilities in San Fernando and Point a Pierre (The San Fernando and Pointe-a-Pierre Yacht Clubs) further south.

The foreign yachting sector was limited to occasional visits, often during carnival, until the beginning of the 1990s. In 1991 the first yacht haul-out facility was established in Chaguaramas when Powerboats commissioned a 50-ton travel lift with a storage capacity for about 45 yachts on land. This was in part a response to the exodus of yachts from Venezuela following the imposition of a US\$50 boat fee, aided by other factors such as the increasing need for yachting hurricane shelters, the escalating cost of marine insurance for yachts north of the hurricane belt, good quality workmanship, availability of skilled and unemployed labour as Trinidad and Tobago was still in the middle of a prolonged and painful adjustment period following the oil boom of the 1970s. Another facility soon followed and from this first initiative the yachting sector took off. Virtually all of this increase was located in the Chaguaramas area, which early in the decade had under- or non- utilised seafront flat land available. By the end of the decade most of the space in Chaguaramas was fully occupied. Figure 2.1 gives an indication of the facilities now available in the eastern part of Chaguaramas Bay.

⁹ A large part of the officially registered artisan fishing fleet (pirogues) comprises part-time fishermen who register to take advantage of the various tax benefits. In 1993 there were an estimated 307 vessels and 2393 recreational fishermen, landing an estimated 1231 tons of fish operating in the north-west peninsula. Kishore, 1999.

CHAGUARAMAS ROYAL BANK **FACILITIES** BUDGET MARINE IMS POWER BOATS YACHT SERVICES CALYPSO MARINE N HUMMING BIRD MARINE Contractors Building ECHD Marine PEAKE Chandlery TARDIEU MARINE PEAKE CHT SERVICËS TROPICAL MARINE Bight Rest MARINERS A HAVEN CUSTOMS DOCK-Water Taxi Pier to Fantasy Island CREWSINN THE MARINA & BOATYARD **ANCHORAGE AREA** Hidin **CHAGUARAMAS BAY** REPUBLIC BANK ٠, COMMERCE DIV. Basin IMMIGRATION CREWSINN SHIPWRIGHTS
BUILDING O Boaters' Enterprise Limited

Figure 2.1 Facilities in Chaguaramas Bay

Source: Boaters' Enterprise

2.3 Visiting Yachts

Between 1990 and 2000 the number of recorded yacht arrivals saw a five-fold increase from a low of 637 yachts in 1990 to 3249 yachts in 2000. Over a period of slightly more than a decade Trinidad and Tobago developed from a yachting "backwater" to a recognised destination for yacht storage, repair and maintenance. Table 2.1 below shows the growth of the industry after the initial take-off. When we look at the data we can distinguish three periods.

Table 2.1 Growth in yachting arrivals

Year	Total Arrivals (yachts)
1990	637
1991	804
1992	1067
1993	1327
1994	1459
1995	2307
1996	2552
1997	2590
1998	2894
1999	2970
2000	3249
2001	2735
2001 (Jan – Sept)	2107
2002 (Jan – Sept)	1865

Source: YSATT based on Custom and Excise data

The first period from 1990 to 1995 saw a steady increase in arrivals. The following year, 1995, proved to be a watershed year as arrivals increased by 60%. This increase incidentally was not so much influenced by the devastating effects of Hurricane Luis in Simpson Bay in Sint Maarten as by the increases in capacity through investment in storage and haul-out equipment.

The growth in yacht arrivals and the subsequent increase in turnover facilitated the establishment and growth of specialised companies that service the wide-ranging needs of the market. Sometime later there was the spin-off in more general allied services, which were aimed not only at the yachting market but also on individuals and companies that had located or were doing business in the Chaguaramas area. This is a still ongoing process and will be discussed in more detail in the following chapter.

Of concern is the decline in yacht arrivals since November 2000, which is the beginning of the third period. The drop in arrivals, yacht population and active yachts has been significant. This has been particularly significant in the active yacht population which has declined by 32% for the period January to September in 2002, when compared with 2001. Compared with 2000 the decline has been 40%.

Compared with other destinations this decline is very stark as is shown in the following table:

Table 2.2 Comparative yacht arrivals 1999 - 2002

	Yacht arrivals				Yacht visitors 000s	
Year	Antigua	ntigua Grenada St. Lucia Trinidad		Martinique	St.Vincent	
1999	3352			2970	43	89.6
2000	3202			3249	44.8	75.8
2001	3063	5607	6643	2735	45.8	91.9
2002 year to	2113	2397	7883 (Oct)	1865 (Sept)	na	
	(Sept)	(Sept)				

Notes: Antigua and Barbuda, English and Falmouth Harbour only. St. Lucia netted for traffic between Rodney Bay and Marigot Bay. Martinique and St. Vincent and the Grenadines: Yacht passengers '000's

Source: ECLAC, based on national data

At this point in time it is uncertain whether this decline is only caused by weakening economies in the Organization for Economic Cooperation and Development (OECD) countries or the fall in the stock market in the same countries. It may very well be that the cruising and live aboard market niche is more sensitive than other components of the yachting market (such as the charter market or luxury yacht) to a loss of wealth or declining economic prospects. Another possible explanation is a loss of market share due to a loss in competitiveness. It is certainly an area of concern that warrants further investigation. It is therefore recommended that YSATT and TIDCO combine efforts and assess the competitive position of Trinidad and Tobago vis-à-vis the region with particular reference to Venezuela, Grenada and St. Maarten, and review recent incentive legislation introduced by, for example, St. Lucia.

2.4 Push and Pull factors

Until the early 1990s there was no yachting industry to speak of in Trinidad and Tobago. Within a decade the country developed a product that is now well known in the region. It is interesting to summarize the push and pull factors that made this phenomenal rise possible. Most of the points raised will be discussed in more detail further in the document.

Pull factors include:

- Private sector initiatives in plant and equipment and the consequent availability of a wide range (and concentration) of services.
- Efficient system for boats to import parts duty and VAT free.
- Supportive policies by the Customs and Excise and Immigration departments and by TIDCO.
- Relatively well skilled labour force derived from an industrial background and synergies with the oil sector.
- Competitive price levels for yachting services.

- Location below the restricted or costly hurricane insurance boundary of 12'40" North.
- Low cost of living compared with the other islands in the eastern Caribbean.
- Hospitable people.
- Events like carnival.

However these pull factors are somewhat counteracted by negative influences whether real or perceived, such as:

- Crime
- Difficulty in sailing to and from the Eastern Caribbean
- Increasing costs
- Limited range of yachting supplies
- Problems in meeting deadlines
- Shoddy workmanship

2.5 The yachting tourist

Small surveys of the yachting population have been carried out by James¹⁰ and TIDCO in 1996 and a mini survey by YSATT in 2002. The results of the various surveys correspond and are therefore amalgamated in the following profile.

While most yachtsmen come from the United States (about 33%), Europeans as a group form the largest contingent of arrivals (56%). Here French, German and British form the largest subgroups. Around 58% of the visitors are English speaking, with the remainder having a variety of languages as mother tongue. The dominant age group is the 41–59 age bracket. About half of the yachtsmen are retired with the others either being self employed (24%), employed (13%) or unemployed (12%). Most are male (64%). The surveys estimated that the average complement per boat was slightly over two people.

Data from the Customs and Excise Department indicate that the actual complement per yacht of yachts clearing in Chaguaramas stood at 2.8 people per boat in 2001 and 2.7 people per boat in 2002. The difference with the survey results may arise from the larger complement of yachts arriving during the carnival season (January and February) or may indicate a slow growing trend.

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¹⁰ James, 2001.

Recent information provided by the Customs and Excise Department confirm the nationality patterns as is shown in the table below:

Table: 2.3

Nationality of Masters Arriving at Chaguaramas for the period April 2001 to October 2002

Country	2001 (Apr - Dec)	2002 (Jan – Oct)
United States	338	372
United Kingdom	187	225
France	188	185
Germany	61	119
South Africa	32	31
Trinidad and Tobago	99	128
Italy	25	28
Netherlands	34	50
Canada	77	80
Sweden	24	37
TOTAL	1065	1255

Source: Customs & Excise Department

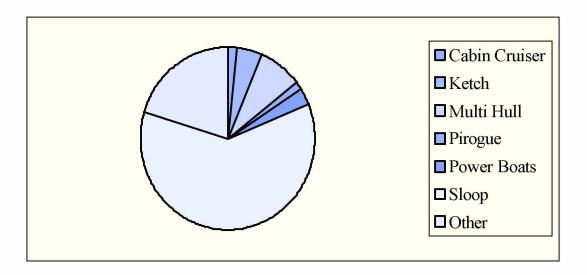
By and large, it is more difficult to obtain data and information on the yachting tourist than on the yachts. In part this stems from definitional problems because the complement of yachts are considered as crew and therefore not recorded by the Immigration Department as visitors. This is an easy shortcoming to address and will be discussed in more detail in the data deficiencies section.

2.6 Yacht characteristics

Dominant boat characteristics were a sailing yacht (95%) that was used for cruising and live aboard (96%) and was personally owned (99%). The main purpose of visiting was repairs with 33% coming for repairs only, 26% mostly for repairs, 18% for a mix of tourism and repairs, 14% mostly for tourism and only 8% for tourism only.

The following chart shows the distribution per type of vessels for yachts clearing in Chaguaramas.

Figure 2.2
Type of Vessel clearing in at Chaguaramas 2001



Source: ECLAC based on data from Customs and Excise Department.

With the focus on cruising and live aboard, it is not surprising that the typical size yacht is less than 45 feet as shown in figure 2.3 below. This size group comprised 85% of the yacht arrivals in 2001 and 76% in 2002. We note with interest the drop in arrivals of yachts below 35 feet and the increase in the number of larger yacht arrivals, particularly of those over 65 feet. The Customs and Excise database from which the above information is drawn only became operational in April 2001. This time period is too short to draw firm conclusions about a possible shift in usage patterns but the data certainly could signal such a shift and continued analysis of this parameter is recommended.

70 60 Percentage 40 30 20 10 0 45-54 55-64 65-74 >75 <35 35-44 1 1 65 20 10 4 ■ 2001 □ 2002 50 26 15 5 3 2

Figure 2.3
Percentage Yacht arrivals by size of vessel (in ft.)

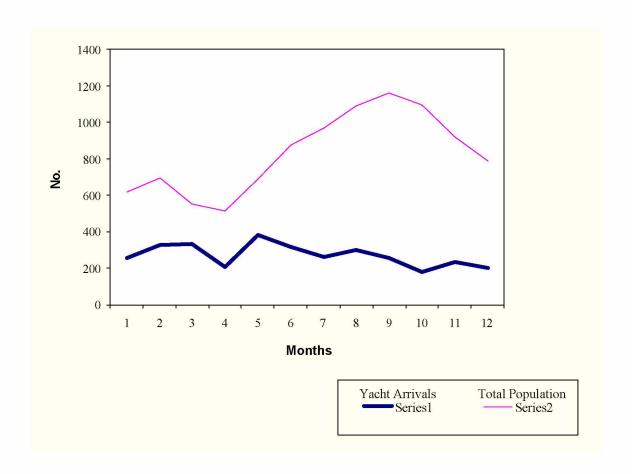
Note: 2001 April 18 to December 31; 2002. January – October

Source: ECLAC based on Customs and Excise data

2.7 Yacht population

Because of the relatively long time of stay by many yachts in the country, the yacht arrival data do not necessarily reflect immediately on the yacht population, which is the total number of yachts present in the country. For example, the yacht population peaks between August and October of any particular year. At the same time, arrival figures peak around June or July. This difference is illustrated in the graph below. The delay confirms the relatively long stay by yachts as compared with other destinations and the impact of long-term yacht storage.

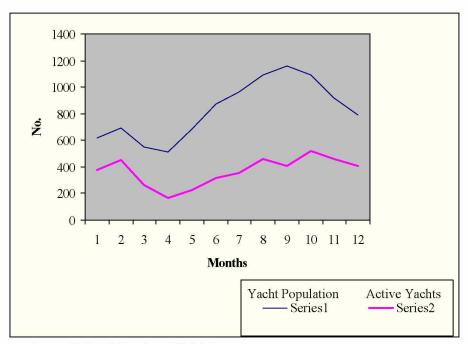
Figure 2.4 Yacht arrivals and yacht population 2000



2.8 Active yachts

Another characteristic of the Trinidad and Tobago yachting industry is the difference between the active yacht population, that is, the number of boats actually being worked on, and the total yacht population as shown in the chart below. Note, however, that both graphs follow a similar pattern with a peak in September and October and a smaller peak during the carnival season.

Figure 2.5
Active versus total yacht population 2000



Source: ECLAC based on official data

Because active yachts are those which are under active maintenance or repair, the population of active yachts is good indicator of the business climate of the sector, especially if the seasonality is removed by using a 12 month moving average.

2.9 Arrival and Departure Patterns

Most yachts clearing in Chaguaramas arrived from or departed for Grenada or Saint Vincent and the Grenadines as is shown in the table below. This is not surprising as Grenada is the nearest port of call in the Caribbean. Together these two countries account for half the arrivals or departures¹¹.

 11 Their share may be higher if Tobago arrival and departure data would be available.

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Table 2.4
Yacht Clearances in Chaguaramas by Country of Arrival and Departure

Country	Country Arrivals		Departures	
	2001	2002	2001	2002
Grenada	869	650	809	452
St. Vincent	212	201	209	152
St. Lucia/Martinique/Dominica	129	128	192	152
Leeward Isl., Netherlands Antilles and	95	62	179	116
Guadeloupe				
Barbados	31	25	17	15
Other Caribbean	6	6	27	9
Subtotal Caribbean				
South America	472	244	684	494
- of which Venezuela	385	180	641	470
Europe	28	21	21	20
Africa	20	26	3	1
Other	3	2	1	0
Unspecified	87	147		
Total	1957	1485	2047	1421

Note; 2002 January to October

Source: ECLAC, based on Customs and Excise data.

Apart from a service centre Trinidad is also a gateway to and from Latin America with Venezuela the most popular previous or next port of call, followed by Brazil and French Guiana. We note the sharp decline in movements to and from Venezuela and to a lesser extent Brazil, which may be due to poor economies, reports of crime and piracy in both countries and the political instability in Venezuela. Of course it may also be caused by an increased supply in yachting services in Venezuela.

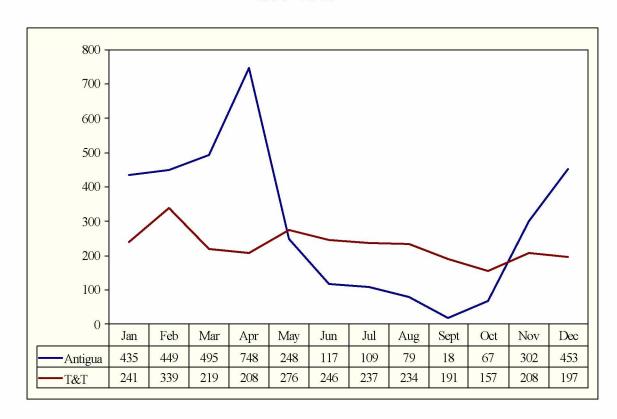
Tobago also is a popular port of call with arrivals from Tobago (326 and 301 for 2001 and 2002 - January to October) running about 50% higher than departures to the island (207 and 140, respectively). For arrivals the months of January and February, just before carnival, were the busiest with around 30% of the total arrivals in 2001. February and March, immediately after carnival, were the busiest for departures.

2.10 Seasonality

Seasonality does not appear to be as pronounced in Trinidad and Tobago as in many of the other yachting destinations of the Caribbean. Indeed, because of its supply of services and its safe-

haven function during the hurricane season¹² (June to November) its arrival patterns tend to be anti-cyclical to the rest of the region. For example, in Trinidad and Tobago the peak month of September contrasts with the lowest yacht arrivals in Antigua and Barbuda, the country with arguably the most pronounced seasonality in the region, in the same month. The contrasting seasonality patterns between Trinidad and Tobago and Antigua and Barbuda is illustrated in the graph below. While the example is taken from Antigua and Barbuda similar patterns can be discerned in the other Eastern Caribbean Islands. This difference would be even more pronounced when Antigua yacht arrivals are compared with the Trinidad yacht population.

Figure 2.6 **Comparative Yacht Arrivals** Antigua and Trinidad and Tobago 1996 - 2001



Note: Average over 1996 to 2001 Source: ECLAC based on official data

2.11 **Events**

2.11.1. Carnival

The main event which has a discernible impact on yacht arrivals and the yacht population is the carnival which is held six weeks before Easter. The attraction of carnival is such that this period

¹² Insurance rates are significantly lower below 12' 40" North

is considered an additional peak period with boats staying at anchorage or at a marina. The impact of the event was earlier referred to in the data from the Customs and Excise Department that indicate that crew size in the carnival season tends to be larger than during the remainder of the year.

2.11.2 Angostura Tobago Sail Week

Held in Tobago in May the Angostura regatta follows the Antiguan Sailing Week in May. In addition to racing and cruising categories the regatta also has specific events for cruisers and charter boats. In 2002 the event drew 76 participating yachts (14 racing, 13 cruising non-spinnaker, 30 charter class and 8 in the comfort cruising class) and around 40 to 50 spectator boats.

Table 2.5
Class and number of boats participating

Class	2000	2001	2002
Racing	18	13	14
Cruising	17	24	24
Charter	17	28	30
Comfort cruising	6	8	8
Total	58	73	76

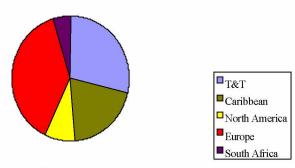
Source: Regatta Promoters Ltd

The charter class is drawn from bareboat yachts from other locations such as Saint Lucia, Saint Vincent and the Grenadines, Grenada or even as far as Martinique¹³. In fact charter boat companies such as the Moorings do advertise special packages to participate in the regatta. With a mainly European oriented marketing strategy the impact can be seen in the distribution of skippers by nationality.



¹³ For example the Moorings was offering one week Tobago/Tobago charters starting at 860 per person (6 people per boat) or two week charters from Grenada or Martinique at 912 and 1171 per person respectively. These charges did include flights, entry fees and support, but not race insurance, racing fees.

Figure 2.7 Nationality of skippers, 2001



Source: Regatta Promoters Ltd.

A 2001 expenditure survey by TIDCO and Regatta Promoters estimated expenditures at US\$893 per boat per day. With an estimated stay of five days this implies expenditure per boat of US\$4464 for the event. With 73 boats participating that year the estimated expenditures amount to US\$326,000 or slightly over TT\$2 million. It is interesting to note the distribution of this expenditure which is shown in the table below.

Table 2.6
Daily expenditures per boat, 2001
US \$

Expenditure item	Expenditure
Accommodation	300
Food	375
Entertainment	150
Transport	45
Fees and taxes	16
Yacht services	7
Total	893

Note: 8 crew per boat Source: Regatta Promoters Ltd

The above estimate points to an average expenditure per person per day of about US\$110, which does not seem to be outrageous. As can been seen from the table most expenditures are not yachting related and therefore contribute directly to the Tobago economy.

2.11.3 Great Race

The Great Race is a powerboat race held between Trinidad and Tobago since 1969. Apart from participating boats the event attracts a large, mostly Trinidadian spectators and a party crowd whose spending contributes to the Tobago economy and should be considered as a pleasure boating induced impact on the economy.

2.11.4 Other events

Tobago Heritage Week, sports fishing tournament and bumboat race are also important events, however, additional information on their impact is not available.

2.12 Chartering

While Trinidad and Tobago is not known for its chartering there are a few chartering options available, other than charters that are offered in association with the Angostura Tobago Sail Week and Devine Yacht Charters¹⁴ that offers crewed charter options from amongst others, in Trinidad and Tobago during the hurricane and low season from July to October. This boat operates in the Virgin Islands during the high season.

2.13 Day Charters

Both Tobago and Trinidad offer day charters which in Trinidad can range from the rental of a pirogue to go down the islands, to party boats. By and large most of these vessels cater for the local market. In Tobago the product includes the tour guides visiting Buccoo Reef, other snorkelling boats, dive boats, day sailors and sport fishing boats. Here the product is mostly oriented to land-based tourists.

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¹⁴ http://www.vachtcharterstt.com/index.html

3. YACHTING WITHIN THE NATIONAL SUSTAINABLE DEVELOPMENT FRAMEWORK

3.1 Structure of the industry

The expansion of the yachting sector, as evidenced by the increase in yacht arrivals during the 1990s, was and is driven by the boat yards and the services they offer to the yachting sector. This is a pyramidal structure in that the yards (or the hard) provide the space for yacht storage and repair and maintenance. The yards also control access by sub-contractors. A range of yachting specific (e.g. chandlers, yacht brokerage or - insurance) or non-yachting specific services (e.g. transport, banking, retail, bars and restaurants) cater to yachts, yards and sub-contractors. Figure 3.1 shows the relationships between the various elements that make up the yachting sector in Trinidad and Tobago.

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YACHTS OTHER SERVICES YARDS AND MARINAS YACHTING SERVICES (E.G. RESTAURANTS, (E.G CHANDLERS) BANKS) SUB-CONTRACTORS SUB-SUB CONTRACTORS AND INDIVIDUALS

Figure 3.1
Simplified Structure of the Yachting Sector

3.2 The Yards

There are 17 yards and marinas in Trinidad providing a total of 458 slips and space for some 1200 pleasure boats on the hard. If we deduct the facilities and space that are largely for pirogues and small powerboats there are about 340 slips and land space for about 975 visiting yachts available. In fact there is more space to accommodate visiting vachts because in the Welcome and in Chaguaramas Bays yachts at anchor can register with a yard or marina and then use their facilities.



While initially the yards may have carried out work themselves there seems to be a gradual movement of some yards to move out of the maintenance and repair business and focus more on the provision of space and hauling of boats. A few facilities tend to oversee yacht maintenance themselves.

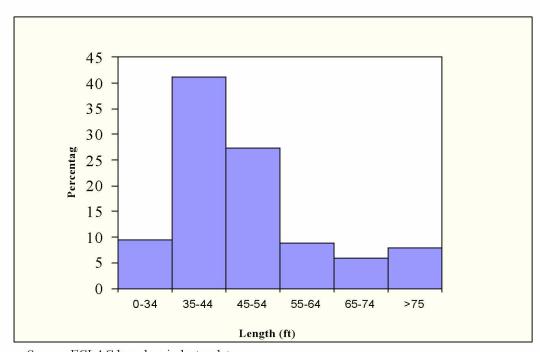
With the exception of the earlier referred to yacht clubs in Point a Pierre, San Fernando and TTYC all facilities are located in the Chaguaramas area. There are no facilities in Tobago. Equipment ranges from a simple tractor with trailer for the smaller power boats to travel lifts ranging from 15 to 200 tons, to a dry-dock that can accommodate vessels up to 270 feet. While the yards focus on mostly foreign yachts they will also provide space for commercial vessels such as the Taiwanese long line fishing vessels, work boats used in the oil industry and others. Many yards now concentrate on hauling and yacht storage and leave jobs to specialized subcontractors who may visit all yards in the course of their business. It is the yacht storage and the range of specialized services that have become the trademark of the Trinidad yachting industry While initially the yard had extensive water frontage a more recent development has been the provision of storage and repair facilities away from the immediate seashore. Companies like IMS or Aikane have no real waterfront, apart from the travel lift or outhaul facilities. If this trend continues then there remains scope for expansion in the Granwood valley, which is already zoned for semi/light industrial purposes.

The typical size of the active yacht is between 35 and 55 feet, which seems to be somewhat smaller than the average size of yachts in Antigua or St. Maarten¹⁵, even though at least three companies specialise on larger yachts. This difference stems from a different product as the length of the cruiser/live-aboard in these two countries corresponds with that in Trinidad. It is the larger cruiser, charter and mega yacht segment of the market that is largely missing from the Trinidad product. Industry sources indicate that smaller vachts either tend to anchor in the Welcome or Chaguaramas bays or, when on the hard, the yachtsmen themselves tend to do most of the work. This situation is somewhat similar to crewed yachts that visit the island even though these boats tend to be bigger. This is the cause of the difference between figure 3.2 below and figure 2.3, which shows the arrivals in Chaguaramas by size of vessel. The graph below shows

¹⁵ See the respective country reports Source: ECLAC, based on industry data

the average size distribution of yachts on a typical yard over the period 1994 to 2001. Unlike other destinations like St. Maarten or Antigua no trend towards an increase in the size of yachts could be discerned.

Figure 3.2 Size Distribution of Boats Selected Yards Ave. of 1994-2001



Source: ECLAC based on industry data

Table 3.1 Yards and Marinas

Name	No. of slips	Travel lift (tons)	Land area (acres)	Yard capacity (boats) ¹⁶	Maximum beam (ft)	Maximu m length (ft)	Website
Aikane	0		2.7				
Bayview Beach resorts and Marina	22 (+ 5-6 for pirogues)	-	-	-		85	
Crews Inn	68	200	18.2 ha	Na Pipes and fabrication	33.5		www.credsinnltd.
Coral Cove	40	60		75		90 mono	http://www.coralcovemarina.com/
Humming Bird	20	-		2-8			
IMS	0	70	1.5 ha	180			www.imsyacht.co m.
Island Property Owners Ass'n	0	-		150 (pirogues)			
Mariners Haven	0	Dry dock	5	Na (pipe storage)	56	270	www.marinershav
Peake's	22	150	6.0 ha	350	31		www.peakeyachts
PaP Yacht Club							
Powerboats	32		5.7 ha	255 yachts only			http://www.power
San Fernando Yacht Club	18	slipway	2.5 acres	40 –50 (pirogues)			
Southern Caribbean Yachtworks	(-)						http://www.crews innltd.com/
Soufriere Marine				Partly pipe storage			
Tardieu	6		0.2 ha				
TTSA	115	15	0.7 ha	32			http://www.ttsailing.org/.
TTYC	94		1.0	84			http://www.trinid adandtobagoyach club.com/
Tropical Marine	21	no		-			http://www.boatersenterprise.com/tropical.htm.
Total							

Source: ECLAC based on industry data, Boaters Directory and TIDCO

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¹⁶ Average size of boat will vary with the focus of the storage, e.g. private member clubs versus commercial yards.

3.2.1 Recreational/industrial facilities

There is a difference between the facilities offered and work allowed at member organizations (TTYC and TTSA) and the strictly commercial yards and marinas. While both groups accommodate visiting yachts, the membership establishments place limitations on the extent of work that can be carried out. Recreational facilities offered by the commercial yards and marina differ from the very stark to a more comprehensive package. However none of the marinas comes close to the recreational concepts as practised, for example, in St. Maarten.

Indeed, in some circles, it has been observed that the yachting facilities offered by Trinidad are "semi-industrial" in nature. While the development has been rapid it has been at the cost of developing "recreational facilities and packages", not only in the Chaguaramas area (for example Scotland Bay and the islands), but also on the North Coast and the anchorages of Tobago.

3.3 The Subcontractors

All the yards seem to have different policies towards contractors. Some yards provide easy access to their facilities while others are more restrictive. In some yards, the sub-contractors pay a percentage of the contract fee, others charge an annual fee based on the amount of work carried out by subcontractors in the previous year while others charge a daily fee per worker. Some yards also give preferential treatment to YSATT members, while others do not.

The term subcontractor covers a range of establishments and individual workers and applies to those companies and individuals that carry out work on boats in the yards and the marinas.

The following table illustrates the specialized services that are available in Trinidad. A detailed listing of the services can be found in the Boaters' Directory or at its website at http://www.boatersenterprise.com/.

Table 3.2
Examples of the range of available services
Number of establishments in brackets

Boat maintenance, services and cleaning (10)	Outboard engines (5)
Boat repair (5)	Painting and refurbishing (5)
Chandlers (7)	Propeller repairs and service (5)
Electrical equipment (11)	Refrigeration and AC (7)
Electronic equipment (7)	Rigging (7)
Engines, diesels (5)	Sailmaking (5)
Fibreglass (11)	Welding (5)
Machine shops and metal fabrication (4)	Wood & woodworking (6)
Marine mechanics (3)	Yacht brokerage (2)
Osmosis repair (1)	

Source: Boatersenterprise

Nevertheless the subcontractors draw occasionally on highly technical expertise from abroad that is not as yet available in Trinidad and Tobago. While this practice may not be entirely legal in the sense that it may conflict with immigration laws, it does strengthen the reputation of Trinidad and Tobago as a quality service provider. Arguably when the demand for such high quality services increases efforts will be made to provide these within the country.

Notwithstanding the above it has been argued that restrictions in work permits limit growth and investment of the skill level of sub-contractors thereby imposing limits on the further development of the yachting industry in Trinidad and Tobago. For example, the St. Maarten report¹⁷ indicates that St. Maarten remains attractive for those jobs that require specialized expertise and know-how. It should come as no surprise that these jobs tend to be among the more lucrative.

3.4 Distribution

The third component of the yachting services is the distribution sector. This would include the chandlers and others who supply goods to the yachtsmen, the yards or the sub-contractors. The availability of a wide range of yachting supplies would strengthen the competitive position of Trinidad and Tobago vis-à-vis other competing destinations. The supply situation in Trinidad and Tobago can perhaps best be characterized as middle of the range. It is better than the bare minimum but it lacks depth and the more expensive items may not be available.

3.5 Yacht building

Even before the advent of Trinidad and Tobago as a sailing centre there was and continues to be a tradition of small boat building often at an artisan level or semi-industrial versions of the traditional pirogue, catering mostly for the domestic market. More industrialized companies included Bowen Marine, Spra Glass and Glastron. However since 1990 the country has also made advances in the building of sailing yachts, mostly if not all for export. Companies include Soca Sailboats, based in Laventille, Port of Spain, or Samson Boats located in San Fernando. Aikane, a builder of luxury catamarans, has decided to specialise in catamaran yacht maintenance and repair. The building of catamarans continues, however, by a small operation in Skinners Yard

3.6 Ancillary services

The growth of the sector has also spun off ancillary services that are not specifically directed towards the yachtsmen but also provide services to establishments located in the area and their employees as well as to the public at large. Examples include banks, supermarkets, internet cafes, hair salons, travel and tour operators, food stalls and restaurants, etc. Interestingly hotels that were initially constructed to satisfy an anticipated demand by yachtsmen now draw their clientele from outside the marine sector also.

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¹⁷ ECLAC. 2002.

3.7 Gaps

While the growth of the services in Trinidad and Tobago has been impressive there remain gaps in the width and depth of the product. One limitation concerns highly skilled expertise that is not available in the country, an issue that could be addressed through more flexible work permit and foreign investment policies that cater for the typical high skill but small establishment, common in the industry. Another limitation concerns the range (and price) of parts available, which is influenced by import duty and VAT policies.

3.8 Import duty relief

Under the current legislation transient boats can directly import parts free of duty and VAT through either the airport or via fast delivery services. The facility is efficient but can result in logistic delays, as it is the boat and not the (sub) contractor who has access to the facility. Arguably the facility may even have an in-built bias against local firms as these establishments cannot stock goods for subsequent duty and VAT free sale to transient yachts. Over the counter in-bond facilities, like the sale of duty free alcohol and the duty free shops at the airport, which are already permitted, would address this issue. In principle such a measure would be government revenue neutral, as it would only affect transient yachts which already have facilities for direct imports. Bonded over the counter facilities would then compete with such direct imports. The advantages would be a wider range of products, increased stocks, easier logistics, possibly, increased employment and improved competitiveness.

3.9 Communities dependent on yachting

It was indicated earlier that Chaguaramas was depopulated with the establishment of the United States naval base. This did not change following the return of the base to the sovereignty of the Government of Trinidad and Tobago. Carenage is situated just before the entrance of Chaguaramas but the extent of the interactions of the villagers and the business community with the yachting sector is unknown.

Another factor is perhaps the lack of dependency of those communities with an un- or underdeveloped potential for yachting. Quite a



few of these are located in Tobago where facilities are lacking. Here a mix of policy initiatives and suitable incentives for the development of small scale yachting tourism facilities may be called for.

3.10 Stakeholders and possible user conflicts

3.10.1 Stakeholders

The yachting industry as it developed in Trinidad and Tobago has a wide range of stakeholders. There are those who have a financial interest through investment or employment (e.g. the private sector and their employees), those whose livelihood may be affected because of competition for the same resource (e.g. fishermen and recreational bathers), those who express concerns about unwarranted impacts (e.g. environmental groups), and those who are to manage the sector as a public good (e.g. the public sector).

3.10.2 User conflicts

User conflicts arise because of competition for the same resources of land, shoreline and water. Possibly the two major ones concern the pattern of development in Chaguaramas and conflicts with fishermen in Chaguaramas and in Tobago.

3.10.2.1 Chaguaramas, choice between different development patterns

□ Competition for land

While in the early 1990s there was ample land available in the Chaguaramas area, this situation had radically changed by the end of the decade. Most of the sea front area from the La Soufriere Marine to the military camp is now being utilized and there is little scope for immediate expansion. Already developments are under way on the land side of the Western Main Road (WMR) and at least one company has begun to carry out yacht maintenance on that side of the road.

There is a strong and increasing competition for space with the hydrocarbon sector. With the development of the North Coast hydrocarbon reserves there is need for the storage of pipes and the oil industry is aggressively bidding for space. With financial resources several magnitudes higher than the yachting sector it remains uncertain whether the yards will continue to cater for yachts or whether they will, perhaps gradually and one by one, submit to the financial rewards, however temporary these may be. Already several yards have been partly or completely been turned over to the storage of pipes and landward of the WMR in the Granwood valley, areas zoned for light industrial development are being used for pipe storage.

The danger of such a substitution is that it would limit the space available for yacht maintenance and could render sub-contractors out of business or causing reduced turnover and profitability. While some sub-contractors may be able to transfer some of their business to the oil sector, others, such as sail makers, riggers and chandleries may not be so fortunate.

This competition resembles, although in a geographically limited space, developments of the oil-boom in the 1970s when high oil prices rendered much of the non-oil economy uncompetitive. It took Trinidad and Tobago more than a decade of harsh structural adjustment to recover from the collapse of the oil prices in the 1980s.

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Apart from the oil sector, Chaguaramas Bay is also used for other industrial activities such as CARIDOC (shipyard), paint mixing (IMS), salt grinding and others. In fact Chaguaramas is recognised as an official port. However, because the Harbour Act does not include Chaguaramas the area suffers from a lack of regulation and yachts can be affected by commercial traffic.

Another area of possible conflict is with the fishermen based at the Allmooring Fishing Cooperative. James has reported¹⁸ that the fishermen are concerned about the perceived increase in pollution thought to be associated with the increase in yachting activities, indiscriminate anchoring by yachts, disappearing stocks of bait fish, and increased theft of engines and equipment. A complaint by the yachting industry is the general unkempt looks of the Allmoorings area and the tolerance of squatting close to the Cruise Inn complex.

Unlike associations such as TTSA and TTYC the Allmoorings Fishing Co-operative has not taken advantage of the yachting development in Chaguaramas Bay although its location would certainly have justified its entry into the yachting industry. Members of TTYC and TTSA benefit from the expansion of the scope of these organizations as profits on servicing foreign yachts help to keep membership dues down. In the medium term members of the Allmoorings Fishing Co-operative could consider expanding its range of services.

Parts of Chaguaramas (Carenage Bay, Welcome Bay and the Cove) are also popular bathing beaches for the population of Port of Spain and beyond. It is close and access by public transport and maxi taxis is easy. While data are not available a cursory assessment of license plate numbers of cars seems to indicate that bathers are less affluent than bathers on the north coast beaches such as Maracas or Las Cuevas or even Macqueripe, on the northern shore of Chaguaramas. This recreational function is important and should be maintained.

Another aspect of the recreational function of the area is the growth of entertainment such as provided by Pier 1, the Base, Mobs 2 and others. The holding of simultaneous events as is prevalent during the carnival season can result in traffic congestion.

Finally, and perhaps one of the more confusing aspects of the area is its designation as a national park. Clearly the area does not comply with the standard definition of a national park boundaries are unclear as the CDA only stipulates that land over 300 meters above sea level remains virgin²⁰.

¹⁸ IMA, 2001.

¹⁹ The IUCN defines a national parks as: "Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible. (Source: IUCN, undated)

²⁰ www.chagdev.com

3.10.2.2 Use of the water

User conflicts can also occur because of the lack of regulations and or zoning of the waters of, in particular, Chaguaramas Bay. While declared a port, Chaguaramas has not been designated as a harbour and therefore regulations pertaining to use and traffic remain lacking.

3.10.3 <u>Tobago</u>

Fishermen in Tobago can also be affected when anchoring yachts interfere with traditional fishing practices such as seining.

4. HUMAN RESOURCES

4.1 Overview

The yachting industry is young and depends for its long-term future on a mix of high and very high skilled labour with a few lower skilled staff. This is particularly true for the core function of vessel maintenance and repair. At the same time it is the application of the skills that give Trinidad the edge which enables the country to compete with countries such as Grenada and Venezuela that offer apart from services, a "holiday" environment. Therefore continuing investment in human resources is essential for the long term success of the industry.

It is reported that initially the industry drew workers from the artisanal boat builders and other sectors of the economy where there was excess supply. However after the take off and the move towards more specialized skills, labour problems came to the fore. More recently anecdotal evidence points to the oil sector now poaching trained labour from the yachting industry.

A member survey conducted by YSATT estimated the employment level of its members at 1076 people, of whom 976 were fulltime and 100 part-time. The distribution over the sectors is shown in the table below.

Table 4.1 Employment in the Yachting Sector YSATT members, January 2000

Sector	Full time	Part time
Banks	18	
Boat building	50	
Boatyards	384	51
Electronics	18	5
Marinas	50	
Mechanics	10	
Painters	98	42
Refrigeration	10	
Rigging	8	2
Sail repair	24	
Suppliers	120	
Upholstering	20	
Welding	20	
Wood working	54	
Other	100	
Total	976	100

Source: YSATT

To this total those government workers have to be added whose jobs are yachting related, such as the staff of the immigration and customs offices at Crews Inn and part of the staff of CDA. Also not all yachting establishments are members of YSATT and those are not included in the estimate above.

A characteristic of all establishments is that they are small with none having more than 100 employees, one or two with between 50 and 100 employees, but most with less, and often with less than 10 employees.

4.2 Quality of work and raising standards

Services are provided by the marinas, sub-contractors and the informal sector. By virtue of its specialisation, customers in Trinidad have high expectations of the quality of work in the marine trades, an expectation which is not always met. Negative feedback indicates gaps in training which need to be addressed. This is not a new issue as the need for skill advancement, training and certification was recognized as early as 1998²¹ in the Riley report (Commonwealth, 1998). The box below summarizes the recommendations of that report.

Box 4.1

Expatriate counterparts who are skilled in yard management, should be employed on a one to one basis immediately to lift the level of middle management and to train present incumbents;

Extension courses in small business management and quality control should be provided to increase the level of skills of middle management, subcontractors and foremen;

A system of part time training should be introduced immediately to lift the skills of the trades people working in the industry and those coming into the industry over the next few years;

A four year apprentice scheme should be introduced within the next two years to attract school leavers into the industry and to train them in the various trades;

The short term courses should be given on a part time basis using a combination of day release and evening study;

The courses should be arranged to provide vertical articulation from trade to foreman to middle manager;

Certification should be provided for the successful completion of individual models of study and for blocks of courses completed;

Subcontractors should be certified to practice only in those areas and to the attainable level that their expertise permits;

A time limit should be placed on the completion of the prescribed courses for the present incumbents at all levels in the sector to ensure the elevation of trade skills and management practices is sector wide; and

Workshops should be provided for the artisanal sector to expose it to current practices in small boat construction.

Source: Commonwealth Secretariat

²¹ Commonwealth Secretariat, 1998.

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4.3 Training

Concerns about training, quality of work and raising standards are, however, not limited to Trinidad and Tobago. For example, a recent report in the United States notes that "many marina and boatyard technicians are trained on the job, and in many cases, their training has been limited to a small number of technical areas or basic skills. The marine trades need a stable work force of geographically distributed, skilled service technicians to support boaters' needs. Such a labor pool would raise the quality of services offered while enhancing career possibilities for those working in the trades²²". On the other hand, because of its industrial nature, the local yachting sector needs a greater inflow of technical skills than most if not all other islands.

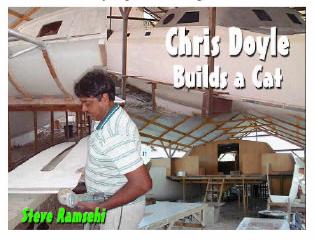
In those islands with severe seasonality it has been observed that it is difficult to choose yachting as a career path because of the long periods of enforced idleness. This does not apply to Trinidad to the same extent as seasonality may not such be a problem as it is in islands such as Antigua and Barbuda, Saint Lucia or St. Maarten.

Observations made by yards and subcontractors indicate that much training has to be carried inhouse as training facilities are simply not available for the specialized skills required in the yachting sector. Furthermore it has been observed that basic skills such as technical drawing, or mathematics are either lacking in depth or missing altogether. Also a number of sub-contractors and individual tradesmen seem to be in need of basic management skills such as job scheduling or costing. The box below illustrates some of the complaints raised and published by yachtsmen.

Box 4.2

"We had some work done (a cover for the dingy) and a luff tape and sail cover put on our blade (110% jibb). The canvas work was done at US prices but was not US quality and the biggest problem was just getting the job done." From: Trip report of the Dahlfin II. (http://dahlfin.com/dahlfin/bequia.com.)."

This points to three different human resource development needs, a finding confirmed also by the other country reports although at a smaller scale:



- 1. Need for basic skill training
 - Need for advanced skill training.
 - 3. Need for basic, middle and higher management training

Much of the Eastern Caribbean faces similar problems as Trinidad and Tobago, but the various islands have solved it differently. In St. Maarten, for example, high skilled labour is facilitated by liberal work permit policies. Interestingly, in Antigua and Barbuda there is migration of workers during the high and off

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²² Sea Grant Louisiana and Maine Maritime, 2002.

season, with foreign workers coming into Antigua and Barbuda during the high season and skilled Antiguan workers going to the United States and the Mediterranean during the low season²³

It must be recognized however that in any particular country demands for any particular skill are limited and that it may not be cost effective to conduct specialized marine trade training to satisfy such demands. Therefore alternative actions are called upon.

4.3.1 Establishing links with existing education centres

While the yachting industry has specific demands for expertise many of the required skills could conceivably be obtained with some adjustment. It has been observed that the marine environment is more demanding than terrestrial environments, but that in many cases the basic skill requirements correspond to those already taught at existing institutions such as John Donaldson Technical Institution or private institutions. Automotive repair, diesel mechanics, fabrication, welding, fibre glassing, air-conditioning, woodwork and electronics are just some examples. Curricula adjustments coupled with on-the-job training may facilitate this.

4.3.2 Specific maritime training organizations

There are two institutions in Trinidad and Tobago that provide maritime training. Neither is focused on the yachting industry, but these institutions have expressed a willingness to expand course schedules to include selected aspects of marina management, yachting technologies or seamanship.

TRAINMAR provides training in supervisory and management development, maritime and port development, transportation, logistics and safety courses, targeting line staff, supervisory and management capacity building. While most of the training is focused on commercial shipping and ports specific marina courses could be arraigned. More information can be found at http://www.trainmar-caribbean.org/

The other training facility is the Caribbean Fisheries Training and Development Institute²⁴, which is located in Chaguaramas. It provides merchant marine training (ratings only) and fisheries training. Its courses include seamanship, navigation, marine engine maintenance, and outboard engine repair and maintenance. Its curriculum could be expanded to include courses of relevance to the yachting industry.

The H. Lavity Stoutt Community College in the British Virgin Islands has also established a subregional (Organisation of Eastern Caribbean States - OECS) training facility for the marine trades and seamanship but it is not known to what extent this facility is relevant to Trinidad.

²³ See UNECLAC, 2002.

²⁴ This institute although national has a regional mandate.

4.3.3 Extraregional

As was seen previously, Trinidad and Tobago and the region are not unique in the recognition that additional training is necessary. Training opportunities are available in the OECD countries, as is shown, for example, in the recent Training for the Marine Trades: A Directory, which provides information on training facilities in the United States. Similar training opportunities are likely to exist in other countries. For example, The College of Falmouth²⁵ offers a wide range of courses, including leisure marine management, marine crafts and others at various levels. A possible advantage of British based courses may be that certificates, diplomas and degrees may already be recognized by Trinidad and Tobago.

4.3.4 Apprenticeships

The Riley report proposed that an apprentice scheme be initiated, a recommendation that seems to have support within the industry. An apprentice scheme is also consistent with the objectives which the government has elaborated in the section on skills development in its Social and Economic Policy Framework²⁶.

Because most of the establishments are small it is advocated that such an apprenticeship scheme be industry wide and offer possibilities (if not a requirement) for horizontal movement between different establishments.

4.4 Work Permits

It has already been observed that the observance of too strict a work permit policy hampers future development of the yachting industry. Future foreign investment in the sector will be largely skill driven and may not necessarily imply a large outlay of investment funds. Instead the objective and spin-offs of such an investment, from an industry point of view, would be to complement and strengthen the Trinidad and Tobago yachting product.

4.5 Future challenges

The use of environmentally sound techniques or the application of best management practices may necessitate the application of higher levels of training and expertise. However training is not limited to the adoption of environmentally sound technologies. It also implies preparing the work force for future directions the industry may wish or is able to take. Development of the recreational aspects of yachting is one, a focus on the luxury yacht market is quite another. As the St. Maarten Yachting report states²⁷: "The technical requirements and specific skills required for servicing bigger yachts are a lot more difficult to obtain than in the case of the smaller yachts. Equipment is more often highly specialized, and is custom made. The nature of the equipment is

²⁵ www.college-falmouth.ac.uk

²⁶ Ministry of Finance, 2002.

²⁷ UN-ECLAC, 2002.

very often highly advanced with complex wiring and automated systems that require highly skilled personnel and with which the owners do not want to take any risks with lesser qualified personnel"

5. SOCIO-ECONOMIC IMPACTS

5.1 Methodology

Yachtsmen contribute to the economy through the purchase of goods and services. Generally the tourism literature recognizes three impacts:

- Direct
- Indirect, and
- Induced

Direct impacts relate to those impacts with respect to establishments that are direct recipients of the yachtsmen expenditures such as marinas, sail makers, bars and restaurants and the like.

Indirect impacts relate to the purchase of goods and services by those establishments that are direct recipients of the yachtsmen's expenditures.

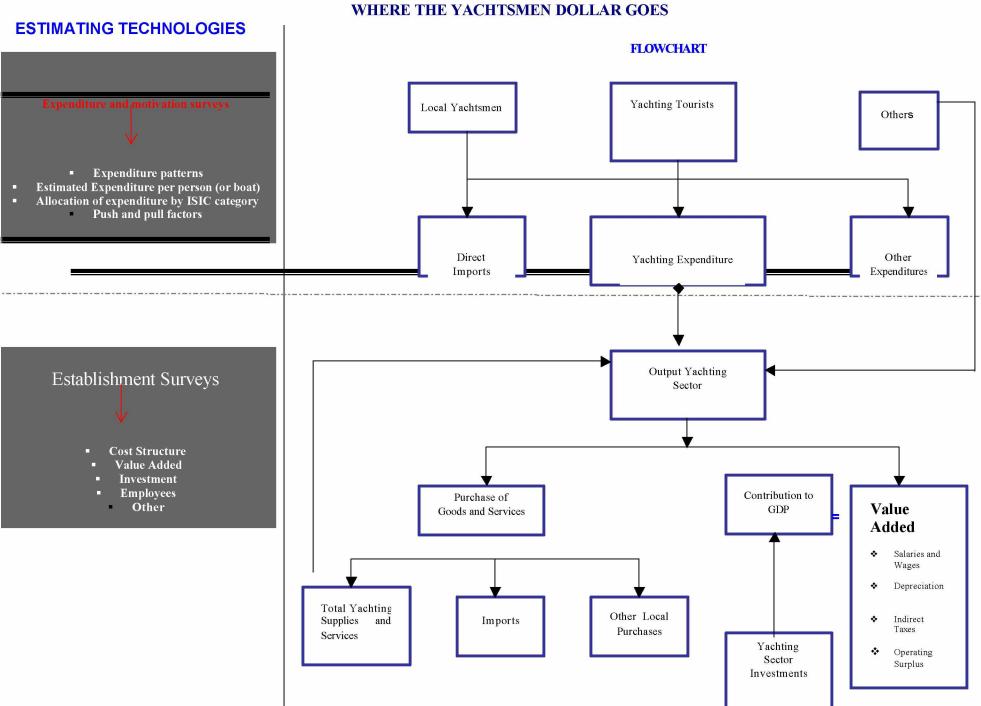
Induced impacts relate to the purchase of goods and services bought by those who have received income stemming from the yachtsmen's expenditures.

The total expenditures by yachting tourists + expenditures on yachting related activities by non-yachting tourists (e.g. day charter) + yachting expenditures by local residents should be matched by the direct revenues of the yachting sector. However yachting establishments also buy goods and services from each other (for example, a sub-contractor may buy goods from a chandler, the banks in Chaguaramas will do much of their business with individuals working or companies located in Chaguaramas).

The above can be simplified in:

Receipts yachting sector = Purchases by yachtsmen (direct effects) + purchases by other yachting sector establishments (indirect effects) + purchases by employees (induced effects)

This is a first step because insight in the structure of the yachting industry is required to estimate its contribution to GDP. In a large number of studies yachting or tourism expenditures are directly attributed to GDP as a direct impact on GDP. This is not a correct procedure as "Intermediate consumption" has to be deducted. The flow of the yachtsmen's dollar is indicated in the following graph.



Yachting, however, is not recognized as a sector in the sense of national income accounting or in the industrial classification of activities. Even more so than land-based tourism, expenditures on yachting are spread over a range of sectors. Therefore the determination of the actual contribution of yachting is complicated and cost structures for each of the different subsectors will have to be estimated.

Of necessity the whole estimating procedure requires a number of surveys. Expenditure surveys are necessary to get insight in the spending patterns of the yachtsmen while establishment surveys are necessary to obtain an understanding of the cost structure of the various subsectors that make up the yachting industry.

Non response is a problem in either survey but is more harmful in establishment surveys than in expenditure surveys because the number of interviewees is more limited. Also while sampling techniques can be used for yachtsmen expenditure surveys, the establishment surveys are additive as the sum total of each subsector and establishment results in an estimate of the gross output and value added of the yachting sector.

In most Caribbean islands the contribution of the yachting sector to the national economy is based on direct or implicit expenditure surveys. Only the British Virgin Islands has attempted to estimate the economic contribution of yachting to the economy by combining tourism expenditure surveys with the production side of the national income accounts²⁸.

5.2 Estimating Procedure

The Trinidad and Tobago system of national accounts uses the following classification which is of relevance to yachting.

Table 5.1 Classification of yachting establishments by sector

Sector	Description	Examples of Yachting Establishments
06	Printing, publishing and paper converters	Publishing
07	Wood and related products	Woodwork
08	Chemical and non-metallic minerals	Paint manufacture and blending
09	Assembly type and related industries	Boat building and boat repair
12	Construction	Fabrication, painting
13	Distribution	Chandlers, Provisioning, shops
14	Hotels and guest houses	Hotels
15	Transportation, communication and storage	Yards
16	Real estate and business services	Real estate
19	Personal services	Other

Source: Central Statistical Office

²⁸ Tourism and Transport Consult, 2000.

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The procedure outlined below illustrates some of the problems associated with the estimating process. The Central Statistical Office in 1991 sampled 91 establishments associated with yachting. Of these, 53 firms responded, but most did not respond to the yachting question. This resulted in an estimated as shown in Table 5.2 below.

Table 5.2
Initial, uncorrected estimate of the contribution of yachting to GDP 1999 (TT\$ 000's)

	Total	Yachting
Total output by yachting sector establishments	277,742	57,129
Purchase of goods and services	137,714	13,063
Value added	140,028	44,065
No. of firms in sample	53	28

Source: CSO

When this estimate is corrected for the non-response to the yachting question by applying prior knowledge about the non-responding establishments²⁹ in each of the sectors, the revised estimate,³⁰ as shown in the table below, shows a more realistic picture.

Table 5.3 Revised estimate yachting contribution 1999 (TT 000's)

	Total	Yachting
Total output by yachting sector	283,435	99,956
establishments		
Purchase of goods and services	139,283	22,597
Value added	144,152	77,389
No. of firms in sample	58	58

Source: ECLAC

The above is still a low estimate because:

No adjustment has been made for those 31 establishments that did not respond to the survey. "Other Trinidad" yachtsmen expenditures have not been included. Yachting expenditures in Tobago have not been included.

²⁹ A similar methodology was applied by Blommestein and O'Neal (1983) in the British Virgin Islands

³⁰ Five more establishments did respond to the survey during the revision process and these have been included

□ Adjustment for non-response

The estimate in the table above is influenced by one sector, paint manufacture, that accounts for 25% of the total gross receipts and for almost half of the purchase of goods and services, but whose receipts from the yachting sector is small. Since the non-respondents are not in that sector, inclusion of this typical sector in the adjustment process would cause too much distortion; hence the above table is adjusted by excluding the sector. The revised "working" table is shown below.

Table 5.4
Yachting excluding paint manufacture
1999 (TT\$ 000's)

	Total	Yachting
Gross output	204,662	96,018
Purchase of goods and services	74,138	19,340
Value added	130,524	76,678
No of firms	56	56

Source: ECLAC based on CSO and YSATT data

If we assume constant factor proportions the estimated adjustment for non-response would amount to (yachting industry only):

Table 5.5 Adjustments for non-response in the yachting sector 1999 (TT\$ 000's)

Add gross output	53,152
Add purchases of goods and	10,706
services	
Add Value added	42,446
No. of firms	31

The assumption of constant factor proportions may or may not be realistic. More detailed information than is currently available of the non-responding firms would be required to make such a judgement. To remain conservative, we will use as the estimate for non-response, half the above figures.

□ Other yachting expenditures

This category would include purchases by yachtsmen in establishments that are not included in the above survey. It would include expenditures during carnival and purchases at supermarkets such as PriceSmart and TruValu, Long Circular Mall, both of which have made special arrangements to attract vachtsmen. While anecdotal evidence suggests that this may be substantial no estimates are available. Therefore this category is not included.

Tobago

In section 2.11 we noted the estimate of expenditures during the Angostura Tobago Sailing Week. Undoubtedly events such as the Great Race, the Fishing Tournament and possibly the Tobago Heritage Week will also impact. However as no estimates of the impact of these events are available they are not included in the analysis.

The other category is expenditure by yachtsmen while they are cruising Tobago. In 1999 Tobago arrivals amounted to 728 yachts. Assuming an average stay of five nights, an average complement of 2.7 people per boat and an estimated daily expenditure per person of US\$10³¹ the estimated expenditure is about TT\$ 600,000.

5.3 The Results

The above information is summarised in the table below. This table also indicates the gaps in knowledge:

Table 5.6 **Contribution of Yachting** 1999 (TT 000's)

	Establishment Receipts			Value Added
Yachtsmen Expenditures =	Direct	Indirect	Total	
Expenditures in Trinidad				
Surveyed, response	X	X	99,956	77,389
Surveyed, adjusted for non-response	X	X	26,500 – 53,150	21,200 – 42,000
Not surveyed	X	X	X	X
Expenditures in Tobago				
Angostura Regatta	2,000	X	2,000+	X
Other events	X	X	X	X
Tobago cruising	600	X	600+	X
Total	X	X	129,056+	98,589+

Note: x is positive but unknown

Lower estimate used Source: ECLAC

In summary, the yachting industry has a turnover of somewhere between TT\$129 and TT\$150 million (US\$21-\$25 million) and makes a direct and indirect contribution to GDP of between TT\$99 and \$120 million (US\$17-\$20 million). Most of these monies are generated in Trinidad because of the product there and of the lack of spending opportunities in Tobago.

³¹ The US\$ 10 per person is based on region wide guestimates.

5.4 Value Added Components

The components of value added are compensation of employees, depreciation, indirect taxes less subsidies and operating surplus. The table below shows the components, based on the estimated value added excluding paint manufacture (see table 5.4)

Table 5.7 Components of Value Added Revised Yachting 1999 (TT\$ 000's)

Item	Yachting	Index yachting
Gross output	96,018	100
Purchase of goods and services	19,340	20.1
Value added (GDP)	76,677	79.9
Compensation of employees	17,330	18.0
Depreciation	3,708	3.9
Indirect taxes	251	0.2
Operating surplus	56,538	58.9

Source: ECLAC

We note the proportion of value added in gross output of yachting and in particular the high proportion of the operating surplus. This is particularly pronounced in the sectors 9 (boat building and boat repair), 13 (distribution) and 14 (hotels). At almost 60% of gross output the share of the operating surplus is out of proportion for not only the economy of Trinidad and Tobago, but also for tourism in the Caribbean and, based on the very limited available evidence, also for the Caribbean yachting sector. What could cause such a structure?

The obvious response is that the above described adjustment and estimation process was incorrect. However when we go back to the original data the same structure is evident, so the estimation procedure cannot be the sole factor.

A second explanation is that the questionnaire forms were completed incorrectly. Perhaps, but it seems a bit unlikely that all respondents made the same error.

Another explanation might be that (imputed) labour costs for owner/operators have not been allocated to compensation of employees but rather to operating surplus. Possibly, but at best, it would be only a partial explanation. Another, more worrisome explanation is that in the period before 1999, prices have increased faster than cost increases for labour and purchases of goods and services would justify. The actual reason for this is likely to be a combination of the factors mentioned above, but without any further investigation it is difficult to draw any firm conclusions. For future surveys the Central Statistical Office (CSO) may consider simplifying the questionnaire forms and YSATT could promote the accurate completion of the survey forms.

6. ENVIRONMENTAL IMPLICATIONS

6.1 Introduction

Because of the focus of the product on the provision of goods and services for yacht maintenance and repair, concerns about environmental impacts tend to concentrate on pollutants and waste management and less on the protection of sensitive ecosystems such as seagrass beds and corals.

The environmental implications impacting on yachting or caused by yachting have been studied and reviewed in a number of recent studies commissioned by TIDCO, as well as by the IMA. A 1996 report³² commissioned by TIDCO made suggestions on upgrading techniques in boatyards and marinas. Also Trinidad and Tobago is one of the few countries in the region where efforts have been made to implement the International Maritime Organization (IMO) Code of Conduct for the Prevention of Pollution from Small Ships in Marinas and Anchorages in the Caribbean Region³³.

In Trinidad and Tobago most slips are in waters that are part of the larger immediate waters. This promotes the flushing of the water as there are no or few barriers that limit the exchange of water between the slips and the adjacent water body.

There are also pollution/environmental impacts from other users (non-yachting) and conflicting industrial and commercial users in Chaguaramas as well as impacts from land-based sources of pollution.

6.2 Pollutants of concern

Preliminary results from an ongoing investigation onto heavy metal contamination in sediments in the Chaguaramas area indicate that there is pollution of copper, lead, zinc and mercury. The results also indicate that contamination in the Chaguaramas and Almooring Bay was significantly higher than in Scotland, Welcome and Carenage Bays³⁴.

The same investigation also states that butyl-tin (TBT) compounds were also detected. This pollution shows a similar distribution pattern as those for the other heavy metals. The study states that "sediments with the highest TBT concentrations were associated with boat building and ship repair activities".

TBTs are of global concern and the application of organotin-based systems is banned under the IMO regulations as of 1 January 2003 and a complete ban on their use is scheduled for 2008³⁵.

³² See Gulf & Caribbean Pollution Management Group, 1996.

³³ See IMO, 1997.

³⁴ Abstract of "Heavy metal contamination in sediments of the Chaguaramas Peninsula" by Aphtaab Mohammed et. al. IMA Proceedings etc.

³⁵. Under the terms of the Convention, Parties to the Convention are required to prohibit and/or restrict the use of harmful anti-fouling systems on ships flying their flag, as well as ships not entitled to fly their flag but which operate under their authority and all ships that enter a port, shipyard or offshore terminal of a Party. See also www.imo.org

Also an International Convention on the Control of Harmful Anti-fouling Systems on Ships has been agreed on but is not yet in force. The use of organotin compounds remains popular with yachtsmen, however. Caribbean countries are not exactly known for their collective speedy implementation and enforcement of global environmental treaties. In the case of TBTs the decision to ban their importation and use needs to be taken and implemented simultaneously by all countries of the region when the global ban becomes in force in 2008. Furthermore under the terms of the convention Trinidad and Tobago may request technical cooperation from the IMO for:

- (a) the assessment of the implications of ratifying, accepting, approving, or acceding to and complying with the Convention;
- (b) the development of national legislation to give effect to the Convention; and (c) the introduction of other measures, including the training of personnel, for the effective implementation and enforcement of the Convention. It is recommended that the government do so.

The above survey results are in line with earlier studies such as those by Bullock (1997) or Sudama and Kumarshingh (1997) on Bacteriological Surveys in Welcome Bay and Chaguaramas Bay and Water and Sediment Quality in Welcome Bay and Chaguaramas Bay, respectively. The first study concluded that water quality varied among the locations sampled and that these did not always comply with internationally acceptable water quality standards. The second study observed that levels of pollution (sewage, petroleum hydrocarbon and trace metals – copper, lead and mercury) were generally higher at Welcome Bay. This is of concern because the roadside is also used for recreational bathing.

Another study was conducted by REAL in 1996³⁶. This study identified pollution problems at CARIDOC and Power Boats of copper (related to anti-fouling paints) and polyaromatic hydrocarbons (PAHs) associated with fuel operations and oil and diesel spills.

More water quality studies in the shore waters of the Chaguaramas peninsula have been conducted than in any other Eastern Caribbean country. All of these studies point to contamination. Less clear are trends, e.g. whether the water quality is deteriorating, improving or remaining stable. Nevertheless consistent time series are of importance to evaluate the success or failure of management interventions whether these be legal, zoning, new infrastructure or the adaptation of best management practices by the industry. The IMA or UWI may want to consider conducting an evaluation or meta analysis of past studies to assess consistency, comparability and trend movements. It is also recommended that a regular monitoring programme be established for agreed crucial parameters.

6.2 Sewage

While there is no regular monitoring programme there have been many ad-hoc studies (see also the previous section). The main conclusion is that sewage pollution in the main stems from a

³⁶ Potential Pollution Problem, Chaguaramas Nearshore Waters – A Preliminary Survey of Pollutants Residues in Coastal Marine Settlements of the Chaguaramas National Park, REAL Preliminary Research Report, March 1996. Quoted in TIDCO, undated.

poor operating Water and Sewerage Authority (WASA) sewage plant and improperly designed or located sceptic tanks³⁷. Much of the sewerage infrastructure is old and dates from the United States occupation of the area. On the other hand, the study by Sudama and Kumarshingh states that the observed higher levels of nutrient enrichment (phosphate) in the dry season than in the wet season suggest that high levels of total phosphate are not significantly influenced by land based sources³⁸.

Is sewage by yachts a real issue or is it a perception by non-yachtsmen? A few years ago there was a great furore about sewage pollution in selected bays in Tobago that was largely based on the few yachts anchored in the bays. Whether this outcry was justified or not is really the issue.

A survey that was carried out by the IMA a few years ago indicated that about 42% of the interviewed visiting yachts had holding tanks¹⁹. Of the yachts that had holding tanks most were from the United States, which is not surprising in view of United States legislation.

6.2.1 Holding tanks

The United States recognized three types of marine sanitary devices (MSD). The California Department of Boating and Waterways defined the three types of MSDs as follows.

"A Type I MSD must macerate the sewage to no visible solids, and then reduce the bacteria count to less than 1,000 per 100 milliliters.

A Type II MSD macerates the sewage even finer so that the discharge contains no suspended particles and the bacteria count must be below 200 per 100 milliliters.

Type III MSDs are holding tanks. This is the most common type of MSD found on boats. These systems are designed to retain or treat the waste until it can be disposed of at the proper shoreside facilities."

³⁷ IMA

³⁸ That levels of contamination were comparable between inshore and offshore stations supports this observation.

³⁹ IMA, 2001.

⁴⁰ See http://www.dbw.ca.gov/



Source: California Department of Boating and Waterways

During the interviews comments were made by several respondents that Trinidad and Tobago should make type III MSDs (i.e. holding tanks) obligatory for all yachts. This report does not quite agree with that position for a number of reasons.

The first reason pertains to the financing, operation and maintenance of pump out stations. In the United States the construction, renovation, operation and maintenance of pump out stations and waste reception facilities was helped through a federal grant programme under the Clean Vessel Act.

Box 6.1

Initially approved for 1992 – 1997, this programme was extended for another 5 years in 1998. The grant covers 75% of the installed cost of pump out and dump stations. This includes the cost of new equipment, renovation of existing equipment, as well as necessary pumps, piping, lift stations, on-site holding tanks, pier or dock modifications, signs, permits and other misc. equipment needed for a complete and efficient station. The 25% counterpart contribution can be cash, fair market price for labour and materials provided or a combination thereof. Source: California Department of Boating, and Waterways. Clean Vessel Act of 1882 Pump out Grant Program. (est. max grant 25K). Operators may charge a fee not exceeding US\$5. Recipients of the grant can be private or public sector entities that operate boating facilities that are open to the public. Grant recipients must allow all recreational vessels access to the pump out or dump facilities. http://www.dbw.ca.gov/.

Such grants are not available in Trinidad and Tobago. Adopting legislation without a similar subsidy would only serve to increase the competitiveness of those destinations where subsidies are available.

A second reason in the Chaguaramas area is that a large percentage of the yachts are on the hard and presumably do not use their on board facilities during that period.

A third reason, perhaps even more compelling, is that most yachts are not based in Trinidad and Tobago on a permanent basis, not all yachts are American, and that the holding tank requirement is a United States legislative measure that does not necessarily apply to other countries. Therefore adopting legislation which is seen as more restrictive than that where the yacht is permanently based is likely to be counterproductive and result in a drop of arrivals, without a corresponding increase in water quality as most causes of pollution will remain the land-based sources.

The fourth reason is that legislative measures tend to inhibit technological progress. Recent advances of onboard sewage treatment plants, particularly for the larger yachts, suggest that high quality treatment and effluent is possible.

Finally, addressing the land-based sources of pollution whether in Chaguaramas, Buccoo Bay, Bon Accord Lagoon or in other anchorages, should be the primary focus, rather than the holding tanks, of any management intervention which hopes to have an impact on water quality.

The above does not mean that pump-out stations should not be established. Quite the contrary as half the visiting yachts do have holding tanks, and facilities to promote their use should be available. In this context discussions between YSATT and SWMCOL (the Trinidad and Tobago solid waste authority) on establishing a pump out facility in the Chaguaramas area is to be applauded.

Neither do the comments imply that particular sensitive ecological areas (e.g. Buccoo Reef) or anchorages in areas with a low flushing rate should not or could not be declared no discharge areas.

6.3 Best Management Practices

Traditionally much environmental management has relied on legislation, enforcement and education. However there remains scope for the adoption of volunteer guidelines and best management practices. In a regional tourism sphere this has been promoted by the Caribbean Action for Sustainable Tourism (CAST), which is part of the Caribbean Hotel Association (CHO). In Trinidad and Tobago YSATT guidelines for solid waste disposal are another example. Because best management practices tend to be less costly to implement, more technology sensitive and tailor-made for a particular sector or industry their use is often a viable and more effective alternative to legislation and enforcement. The sections below outline some possible best management practices for dust and storm water control, solid waste management and fuel dock operations.

6.3.1 Dust and storm water

Dust is a problem from the day-to-day operations on the yards due to other non-yachting activities in the coastal area (sandblasting, other industrial activities, e.g. salt grinding) and in the dry season, stemming from a lack of vegetation. Eventually much of it, if not all, will be deposited into the near shore area.

Rainwater can transport "on the hard" debris e.g. sanding dust, paint and metal chips, oil, grease, solvents, spilled fuel etc. to the marina basin, where these can form a film or sink to the bottom. Particularly the runoff from hull and engine maintenance can be of concern because this contains more toxic pollutants as compared with the rest of the marina.

The marinas can adopt two approaches to reduce such run-off pollution: The first would be source control and the second storm water management. Source control can include sandblasting either inside or under spray booth or tarp wrap; the use of vacuum sanders (these sanders capture over 90% of the dust. The use of such sanders also reduces occupational health problems. At the same time the rental of vacuum sanders to boat owners and contractors could become a profit centre). Practices within the area vary, with at least one company having made the use of dustless sanders mandatory.

Other practices of source control could include a variety of measures such as sweeping and vacuuming of the work areas (instead of hosing – a practice that almost guarantees the deposit of pollutants in the water), vertical hung tarps, and paint removal techniques such as plastic media blasting or the use of non-chlorinated biodegradable paint strippers, etc.

The other approach is storm water control and could include vegetated filter strips that is a strip of vegetation between the work area and the water edge meant to catch the larger particles (low cost and effective for paint), infiltration trenches and dry wells, vegetated swales, deep sump catch basins or retention basins⁴¹.

A wide range of best management practices is available and it is recommended that YSATT takes the initiative in identifying and elaborating these.

6.3.2 Solid Waste Management

Littering is a perennial problem in Trinidad and Tobago and with such habits and the direction of the currents as they are it should come as no surprise that litter is present not only in Chaguaramas but also in areas such as Scotland Bay.

YSATT has adopted a recommended policy for solid waste management at the yards and the marinas and some companies have gone beyond this as is shown in the waste handling policy below.

⁴¹ Tanski, Jay, 2000. Stormwater Runoff Best Management Practices for Marinas: A Guide for Operators.

Table 6.1: Waste handling policy

Waste Type	Waste Container Type	Method of removal	Comment/ Disposal method	
Recyclables				
Glass	Carib glass eco bin	Remove/replace bin	Recycled at Carib Glassworks	
Paper	Poly bag – shredded	Remove bag	Recycled at various paper recyclers	
Steel/Iron			Company may sell externally	
Solid waste				
Wood	General container	General bin		
Organic waste	-do-	-do-		
Box	-do-	-do		
Liquid hazardous was	ste			
Waste oils	Tank/drum	Suction	High temp incineration	
Others	Drum	Drum removal	High temp incineration, drum disposal	
Solid hazardous wast	e			
Filters	Fixed drum with poly bag and cover	Poly bag removal	High temp incineration	
Batteries	Na	Na	Recycle into new batteries	
Plastics/paint cans	General container	General bin	No systems in Trinidad for plastics/paint cans	
Oily rags	Fixed drum/ poly bag and cover	Poly bag removal	High temp incineration	
Fluorescent light bulbs	Unbroken in box or wrapped in card board	Box removal	Cement encapsulation prior to bury in specific landfill	

Source: IMS

6.3.3 Hydrocarbons

□ Two stroke engines

Two stroke outboard engines are a source of oil pollution because up to 25 - 30% of their fuel is transmitted to the water or the atmosphere. Also fuelling operations may cause additional small spills. Obviously this pollution is not confined to the yachting sector but also includes other outboard driven vessels that use outboard engines (e.g. pirogues). While modern 2 stroke outboard engines are not as polluting, there is a global move towards 4 stroke outboard engines. The authorities should monitor developments to avoid that the country becomes a dumping ground of inefficient engines when foreign legislation limits their use.

□ Fuel dock

Fuel docks are subjected to persistent low levels of contamination caused by drips and overfilling during filling operations and sheens of petroleum products can often be observed on the water

surface. Much can be done to reduce the occurrence of such mishaps. Best management practices would include

Box 6.2

Use of automatic shutoffs on fuel lines and hose nozzles

Removal of fuel nozzle triggers

Avoidance of overfilling

Regularly checking for fuel leaks and using drip pan under engines

Proper engine maintenance

Availability of small absorption pads

Inspection, maintenance and replacement of fuel hoses, pipes and tanks

Training of fuel dock staff in spill prevention, containment and spill procedures

6.3.4 Mooring buoys

The placement of mooring buoys can simultaneously serve several objectives. In sensitive ecological areas such as coral reefs and sea grass beds the obligatory tying to a mooring reduces anchor damage. It also is an instrument to control visitor pressure and may reduce user conflicts and finally it is a source of revenue. Particularly the communities of Tobago could benefit from the placement of buoys in selected anchorages.

In less sensitive areas, such as Chaguaramas Bay, the placement of mooring buoys can serve to increase capacity since in any given area a yacht tied to a mooring buoy needs less space than at anchor. As in the previous paragraph the revenue function and reduction of user conflicts remain.

6.4 Other hydro carbon

6.4.1. Cleaning of bilges

The cleaning of bilges by commercial ships has been reported and affects the yachting community negatively.

6.4.2 Impacts of non-yachting oil spills

An example is the oil spill of about 10 cubic meters at CARIDOC in 1999, which affected Chaguaramas Bay to Scotland Bay and caused fouling to yachts and shoreline pollution. Due to the prevailing currents in the Gulf of Paria the Chaguaramas area is also subject to spills occurring elsewhere in the Gulf as was shown with an oil spill that happened in Sea Lots (September 2000) and which caused damage to yachts in the Chaguaramas area.

6.4.3 Oils spill plan/response capacity

The coastguard, the oil companies and the Environmental Management Authority (EMA) have responsibilities for oil spill contingency plans, but there seems to be somewhat of a vacuum in equipment and responsibilities in dealing with spills in the Chaguaramas area. Following a partial settlement of the damages caused by the Sea Lots incident, YSATT established an environmental fund with, as objectives, the creation of an oil spill response strategy, the establishment of a pump-out facility and the placement of waste disposal containers in key coastal areas in Chaguaramas such as Scotland Bay⁴².

6.5 Land-seascape changes

One of the consequences of the developments in the Chaguaramas area has been the gradual enclosure of the land sea interface and the subsequent loss of windows to the sea. This development is not unique to the area (Blanchisseusse to mention but one example) but is of concern because it is a trend, which is simultaneously taking place in much of the coastal area between Port of Spain and Chaguaramas. Because of the activities in the Chaguaramas Bay area the enclosure is probably unavoidable, but the government and CDA should take measures to ensure that sufficient areas are set aside to ensure that lower income strata continue to enjoy the sea vistas and access to recreational facilities in the Chaguaramas area.

⁴² Press release YSATT dated June 6th, 2002.

7. GOVERNMENT AND PRIVATE SECTOR POLICIES

$7.1 \quad YSATT^{43}$

The YSATT was established initially by the yards and marinas in 1994. Later, in 1996, the organization expanded its membership to include subcontractors and others related to the yachting industry. In September of 2002 the YSATT membership stood at over 90 members. It has a fulltime staff of two and an office at the Crews Inn Marina complex. Services provided by YSATT include relations with government, promotion, data distribution and, quite unique in the eastern Caribbean, conflict resolution/arbitration between customers and suppliers.

YSATT does provide support in the operation of the immigration and customs and excise offices in Chaguaramas.

7.2 TIDCO

TIDCO, which was established in 1993 as a successor to three different agencies⁴⁴ focuses on the promotion and growth of investment, trade and tourism. In many instances TIDCO is the primary channel for the yachting sector in their relations with government. Interestingly, unlike most other countries, the industrial promotion division and not the tourism division of TIDCO has primary responsibility for yachting. This distinction illustrates the semi-industrial character that the yachting industry has taken. Notwithstanding, the tourism division also provides support to yachting such as the Boaters' Directory of Trinidad and Tobago. In its role to promote investment TIDCO is also the primary channel for investment incentives.

7.3 CDA

In Chaguaramas, the CDA has responsibility for the land but not for the water. The CDA complains that at the water edge development is not properly managed because there are conflicts in the interpretation of responsibilities.

The CDA has a staff of about 130 people, including a complement of 62 daily paid people. In 1998 its revenue was about TT\$10.4 million (US\$2 million), of which \$7.9 million (US\$1 million) was derived from rents. Current expenditures for that year amounted to \$11.9 million (US\$2 million) of which \$7.7 million (US\$1 million) for salaries and wages. As a statutory body the CDA has considerable less flexibility than, for example, PLIPDECO which manages the Point Lisas Industrial Estate. This is particularly noted in the planning and execution of major infrastructure works such as the refurbishment of the sewage system.

⁴³ See also http://www.ysatt.org/

⁴⁴ Industrial Development Corporation, Export Development Corporation and the Tourism Development Authority

7.4 Customs and Immigration

The customs and immigration departments in any country have a dual role to fulfil in any country. On the one hand they are charged with the enforcement of the relevant legislation, on the other hand these two agencies are also the entry point in a country and customs and immigration procedures leave a strong impression on the visitor. A positive experience in Scarborough is described in the box below.

Box 7.1

"The official who checked us in asked Peter how long we wanted to stay in Tobago. Peter said five or six days would probably be okay. The official responded "Oh, no!" Okay what did we do to insult him? He continued, "This is Trinidad and Tobago Heritage Week and we have so many activities planned, with the Great Race next Saturday.... You can't possibly see everything in so little time. You've to give it at least a couple of weeks!" After three weeks of exploring Tobago...

Source: sv Watermelon cruising around Trinidad and Tobago. http://www.cruiser.co.za/hostmelon.asp.

The Customs and Immigration offices in Chaguaramas are located in the Crews Inn compound. The Customs is open 24 hours per day, seven days a week and is also the official point of entry for yachts in Trinidad. In Tobago, the customs offices are located in Scarborough or in Charlotteville. The opening hours of the latter office are restricted at times.

Customs and immigration have instituted internal policies, which are supportive to the yachting industry. Clearance forms have been modified to accommodate yachting needs (and therefore contain a wealth of information). The importation of goods for transient yachts is relatively free from hassle, as it allows the master of a vessel to import boat parts via the airport, or commercial services and TT Post and take the parts to the Chaguaramas Customs Office for examination and clearing. Immigration usually provides an initial approved length of stay for three to six months, which can be extended.

Possibly unique in the region is the requirement that yachts clear in and out for travel between Trinidad and Tobago⁴⁵, although this regulation is not always adhered to. Also special permission is required to anchor in any of the bays on the North coast.

7.5 Incentives

The yachting or marine sector benefits from a number of incentive programmes that are managed by TIDCO under its investment promotion programme. Examples of beneficiaries include Aikane, Bowen Marine, which are both boat builders. Marinas include Crews Inn, IMS, Peake Marine and Tardieu and hotels include Crews Inn, The Cove and Peake Yachting Services.

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⁴⁵ Apparently Barbados has even more restrictive regulations.

Also the Small Business Development Corporation has identified the Chaguaramas area as one of the focal areas for support to micro enterprises and small business development.

The marine industry has been identified as one of the areas to benefit from the Commonwealth Secretariat Commonwealth Fund for Technical Cooperation (CFTC) Export Sector Investment Promotion Programme

Under the Tourism Development Act, 2000 the leisure marine sector is explicitly recognized. Schedule 2, Areas of Activity to be undertaken by Tourism Ancillary facilities includes amongst others marinas, boatyards, dive operations, water sports, charter boats, cruise activities and tour operations by sea. There a fair amount of discretion because the act also states (Schedule 4) that: "Owing to the dynamic nature of the tourism industry, it is not possible to complete a comprehensive list of "tourism projects". The national tourism development agency will determine the validity of proposals for tourism projects that are not defined by Schedules 1 and 2."

8. PROBLEMS AND STRUCTURAL WEAKNESSES IN THE INDUSTRY

8.1 Maintaining the competitive advantage of Trinidad and Tobago

During 2001 and 2002 arrivals dropped as compared with previous years. Undoubtedly this drop was influenced by a region-wide lack of tourism performance following the economic slowdown and the fall in the stock market in Europe and the United States (a slowdown which was reinforced by the events of "9/11" in 2001). At the same time concerns have been raised that Trinidad has become less competitive vis-à-vis other destinations as prices have increased, quality concerns have been expressed and new entrants like Grenada and Venezuela have begun to (re) enter the market. At the same time insurance rates in the islands north of Saint Vincent have begun to soften and these become more attractive. Furthermore experiences such as those described in Box 4.2 do not help the position of Trinidad and Tobago.

Trinidad does not have the natural resource base on which cruising thrives. Therefore if Trinidad wants to remain competitive it must compete on other factors such as price, range of services, quality of work and time scheduling. Basically it means that Trinidad has to remain cheaper because, all factors being equal, destinations such as Grenada are attractive because they also offer access to blue water and sandy beaches. Perceptions that Trinidad is no longer price competitive may very well result in the long-term loss of market share.

Market intelligence can help by keeping Trinidad companies aware of price and facility developments in the main competing destinations. TIDCO and YSATT could assist the yachting community by preparing market intelligence reports on a regular basis.

8.2 Lack of development of recreational yachting

While the development of the yachting industry has been rapid it has been at the cost of lack of development of recreational aspects of yachting. Some of the facilities in Chaguaramas are stark with limited or no recreational facilities, other than a bar/restaurant. A few have gone beyond this but no facilities have reached the recreational aspects of, say, a Simpson Bay Yacht Club in St. Maarten, a Jolly Harbor in Antigua or even the much older Rodney Bay Marina in Saint Lucia.

However the recreational aspects of yachting development are not limited to marinas. They also include the nearby anchorages like Scotland Bay and the off-shore islands, the few possible anchorages on the North Coast and, above all, the development of recreational yachting facilities in Tobago. If further explored, such a development could result in a more complete product with industrial marinas located in the Chaguaramas area complemented by more recreational facilities in other bays and anchorages.

Because the pattern of development in Trinidad and Tobago contrasts with that of the other islands the promotion of recreational yachting may need a concerted effort by the many stakeholders involved in such an endeavour. It may also need a strong impetus to counter the

perception that Trinidad and Tobago is not a cruising ground. Such may include the placement of mooring buoys in selected anchorages, support to ancillary facilities such as watering holes and restaurants, beach clean-up and systems of garbage disposal, etc., and, where necessary for ecological or socio-economic reasons, zoning. Incidentally such an approach would also prevent many of the pitfalls that have befallen some of the other cruising destinations.

8.3 The lack of data

A wide range of information is needed by the private and public sector to inform on investment planning, marketing, product development, resource management, need for policy changes and possible incentives, etc. Some data are available and accessible, others are available but not that easy to access or not in a format that allows for easy interpretation, while other data do not exist and may need to be developed.

The data that are available and easily accessible include arrival data for Chaguaramas and Tobago (by month) and is based on Customs and Excise data and distributed by YSATT. This organization also collects monthly data on active yachts from industry sources and estimates the yachting population⁴⁶. Facility data are available but may need some pursuing to obtain.

The situation changes with respect to the number of yachting tourists. The modes of arrival or departure are either by air through the airports, or by sea through Chaguaramas in Trinidad, or Scarborough and Charlotteville in Tobago. For sea arrivals yachtsmen are considered as crew (normal parlance for live aboard and cruising yachts) and in accordance with normal practice they are not recorded in the immigration statistics. For air arrivals or departures it is not known whether yachtsmen are being considered as crew or as other, even though the arrival card has yacht as a place of stay. A simple consequence of this practice is that yachtsmen are not recorded in tourism statistics.

This omission is simple to address by using the complement information as provided by the marine pleasure craft declaration form (which is the yacht dearance form) for sea arrivals and by including yachts as a separate category for place of stay for air arrivals. Apart from an insight in the number of yachtsmen arriving or departing the country such data will also provide information on movements while yachts may be in storage.

The yacht clearance form contains a wealth of (computerized) information that, if aggregated, is valuable for a wide range of purposes. Potential data include complement; length of stay of a vessel, inter island movements, vessel data (e.g. type, length, width, gross tonnage, construction material, previous port or country, next port or country). Some of the above data was generated specifically for this report but consideration could be given to make such information available on a regular basis.

The CSO carries out tourism and cruise ship expenditure surveys every two months, but has not as yet targeted yachtsmen. An extended yachting visitor motivation and expenditure survey (YVEMS) needs to be carried out with some urgency to obtain information on spending patterns,

⁴⁶ The yachting population is estimated by assessing changes (e.g. arrivals and departures). This may cause errors because of non-clearance of arrivals or departures to and from abroad and to and from Tobago.

motivations and assessments on strengths and weaknesses of the product, in particular, and Trinidad and Tobago, in general. These YVEMS surveys could be supplemented by simplified special event surveys (like the one for the Angostura Tobago Sail Week).

This year CSO has carried out an establishment survey. Access to this survey gave the basis for a first estimate, however crude, of the impact of yachting on the economy. The response rate, however, was somewhat low and the value added results were peculiar.

Consideration could be given to carry out a full economic study in 2003. This would entail the carrying out of YVEMS at varying times of the year to be followed by an establishment survey in 2004 or 2005 (to get the 2003 establishment data).

8.4 Safety and Security

8.4.1 Search and Rescue

One of the functions of the Trinidad and Tobago Coastguard is the conduct of search and rescue missions (SAR). Data for 2001 indicate that a total of 115 SAR missions were carried out.

Table Coastguard SAR Missions in 2001

Type of vessel	Number
Pirogues	58
Yachts	21
Pleasure crafts	15
Motor vessels	11
Trawlers	10
Suspended	7
Hoax	1
Total	115

Source: Trinidad and Tobago Coastguard

8.4.2 Drugs

With the Eastern Caribbean functioning as one of the transhipment areas of hard (mostly cocaine and its derivatives) and soft (mostly marihuana) drugs to Europe and North America it is not surprising that the perception exists that yachts are a major factor in the movement of such illegal substances through the region. However discussions with customs officers, not only in Trinidad but throughout the region, indicate that yachts are not a major factor in the interregional transhipment of drugs.

8.4.3 Guns

Weapons are illegal in Trinidad and Tobago and yachtsmen are expected to declare and store such at Customs. While the procedure is straightforward it is not always complied with and arrests and court cases for illegal passion of firearms are not uncommon.

8.4.4. Crime

Crime is a highly emotive issue in that crimes committed against the yachting community receive widespread attention not only in Trinidad and Tobago but throughout the region. The moment a crime is committed the incident is spread around the yachting community through VHF channels, through the Internet or through yachting publications.

While there is the perception that all crimes committed are committed against the yachting community by residents. Anecdotal evidence indicates that yachtsmen themselves are not 100% blameless for (mostly) the property crimes.

Nevertheless, and whoever the perpetuator, crime is a problem which needs to be dealt with. For a period YSATT ran a free shuttle between the marinas and yards but cost considerations prevented its continuance.

9. **RECOMMENDATIONS**

9.1 Competitiveness

TIDCO and YSATT should prepare market intelligence reports which analyse the position of Trinidad and Tobago in relation to developments in its main competitor countries (new legislation, prices, new infrastructure) and prepare recommendations to counteract a weakening of the Trinidad and Tobago product.

Over the counter bonded warehouse facilities should become available in Chaguaramas.

Work permit policies need to reflect the interest of the country and the industry by facilitating employment for highly skilled workers.

9.2 Recreational yachting development

Develop a strategy for the exploration and expansion of the recreational aspects of yachting.

Develop a mooring buoy policy and place mooring buoys in selected anchorages.

Develop a crewed charter policy similar to that of Grenada whereby non-Trinidad based yachts can pick up passengers in Trinidad or Tobago.

Promote the development of a medium-sized marina in Tobago.

9.3 Space

Maintain the open space and windows to the sea between the entrance of Chaguaramas and the Military museum.

9.4 Data

A primary source for data is the "marine pleasure craft declaration" form, which could provide a wealth of information on and relevant for the yachting industry. Data entry is computerized so that aggregation of such data would not interfere with confidentially issues. Recommended monthly or annually aggregations are:

No of yachts arrivals (and departures) by length of vessel (e.g. (in feet) less than 35; 35 - 45; 45 - 60; 60 - 90; >90)

No of yacht arrivals by number of crew (including master)

No of yacht arrivals by previous port or country

No of yacht departures by destination port or country

No of yacht arrivals by type of vessel (e.g. cabin cruiser, ketch, sloop, multi-hull, pirogue, power boat, other)

Length of stay

A yachtsmen expenditure and motivation survey should be carried out with some urgency.

The CSO could consider simplifying the establishment survey form and, in consultation with TIDCO and YSATT, should establish an "establishment to be surveyed list" and review the classification of the establishments. For any business survey, YSATT should instil upon its members the accurate completion of the forms.

Yachts as a place of stay should be recognised and reported as a distinct category rather than being merged with "other" as is currently the case.

9.5 Training

The recommendations of the Riley report are supported.

It is recommended that YSATT and TIDCO approach TRAINMAR to facilitate focused training in middle and higher staff management. In the same vein it is recommended that these two organizations approach the Caribbean Fisheries Training and Development Institute for training in seamanship and small engine repair.

Both YSATT and TIDCO also need to explore the concept of twinning with recognized training institutions abroad.

Conduct a quantitative assessment of manpower/skill requirements and training needs. Ideally such an assessment should be done on a regional or subregional basis.

An apprentice scheme should be initiated that is recognised by the Ministry of Education and YSATT, and which allows for mobility of apprentices within the yachting sector.

The Small Business Development Company should initiate courses in small business management for the marine sector.

9.6 Environment

It is recommended that IMA or UWI conduct an assessment or evaluation of all past pollution/contamination studies and try to establish trends for the major parameters.

It is recommended that a regular monitoring programme be established for selected parameters.

YSATT should take the initiative to establish best management practices with particular reference to storm water, dust control and fuel dock operations.

CDA should undertake efforts to upgrade or refurbish the sewage system. With this refurbishment connections to the sewage system should be obligatory and package treatment plants and sceptic tanks should be phased out.

IMA should be requested to identify sensitive ecological areas (coral and sea grass beds, possibly spawning and traditional fishing grounds) where anchoring should not be allowed.

Trinidad and Tobago request technical cooperation from the IMO for:

- (a) the assessment of the implications of ratifying, accepting, approving, or acceding to and complying with the Convention on the control of harmful anti-fouling systems on ships;
- (b) the development of national legislation to give effect to the Convention; and
- (c) the introduction of other measures, including the training of personnel, for the effective implementation and enforcement of the Convention.

9.6 Property management

A zoning plan for Chaguaramas Bay and Welcome Bay with particular reference to the waters should be prepared with some urgency.

The provisions of the revised Harbour Act should be implemented and a harbour master for the Chaguaramas area should be appointed.

Governance for the marine area needs to be clarified and simplified. In this context government may wish to consider an evaluation of the role and functioning of the CDA and those agencies responsible for marine management. It may consider the possibility of establishing a new private public sector management company along the line of Point Lisas for that area of Chaguaramas that is currently zoned for light industrial development (from about the former heliport to the military base) and the adjoining waters.

10. FRAMEWORK OF A YACHTING POLICY

Yachting is tourism. We began the study with this recognition and we end with it because of its importance in developing a longer-term vision. It is not certain whether government and the private sector accept this recognition. Certainly there are exceptions like the Immigration and Custom and Excise Departments, TIDCO on the government side and YSATT and the concerned entrepreneurs in the private sector. Still many awareness and, therefore, policy gaps remain. Therefore a most important aspect of the strategy would be to increase the awareness of yachting as a valuable component of tourism throughout Trinidad and Tobago.

A second aspect of the yachting policy would be the development of a medium-term vision of where the stakeholders would want to see the industry heading. This would not only pertain to the industry itself but also to the future of the Chaguaramas area.

A third aspect of the policy would be to develop a short-term programme to address the current problems and issues in the industry. Areas for attention could include:

- Conduct economic study
- Assessment competitive position
- Improvement data systems
- Development recreational facilities
- Development apprentice scheme
- Support to Allmoorings
- Support to small business

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