



CRFM Secretariat



**Socio – Economic and Demographic
Concerns in
Fisheries and Coastal Area
Management**

Turks and Caicos Islands Case Study

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Submitted by:

Wesley Clerveaux and Tatum Fisher
Department of Environment and Coastal Resources
Ministry of Natural Resources
Turks and Caicos Islands

1. General Country Information

The Turks and Caicos Islands (TCI) are a small group of low lying calcareous limestone islands situated on three distinct platforms; the Caicos, the Turks and Mouchoir Banks. The archipelago is located to the southeast of Florida, United States, at the end of The Bahamas island chain and to the north of Hispaniola (Figure 1).

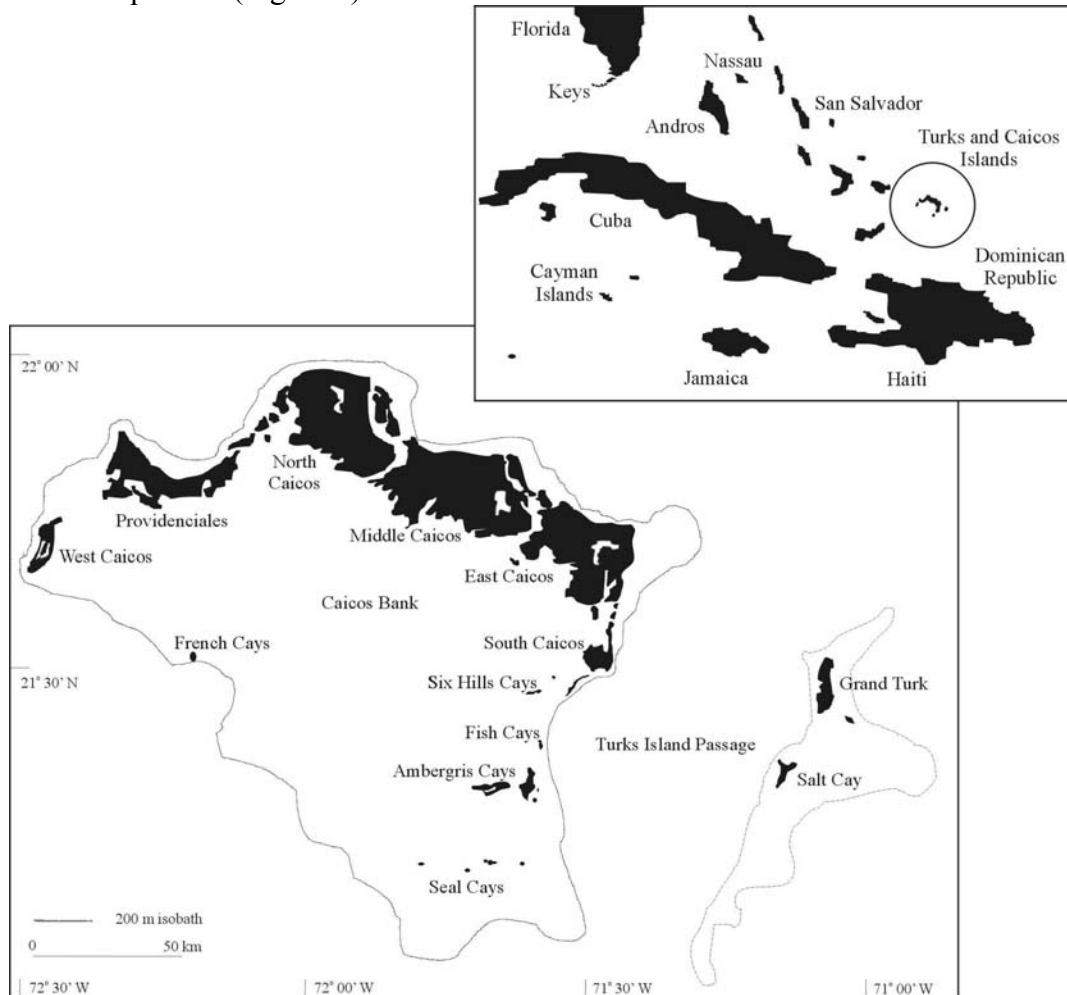


Figure 1: Location of the Turks and Caicos Islands in the Caribbean region highlighting the fishing banks (Caicos and Turks Banks) which are important for the queen conch (*Strombus gigas*) and the spiny lobster (*Panulirus argus*) fisheries.

The Turks and Caicos Islands are made up of two distinct groups of islands; the Turks Islands and the Caicos Islands, which are separated by a 35 km wide and 2,134 m deep channel called the Turks Island Passage. The Turks and Caicos Islands comprises of six populated and two unpopulated islands and a series of uninhabited cays totaling 491 km² in land mass area. The marine area is far more significant, accounting for more than 90 % of TCI's territorial extent. There are three fishing banks within this marine territory; the Turks Bank, which is approximately 299 km², the Mouchoir Bank, approximately 958 km² (University of Miami, 2003), and the Caicos Bank which is the largest of the three, measuring some 6000 km².

Population

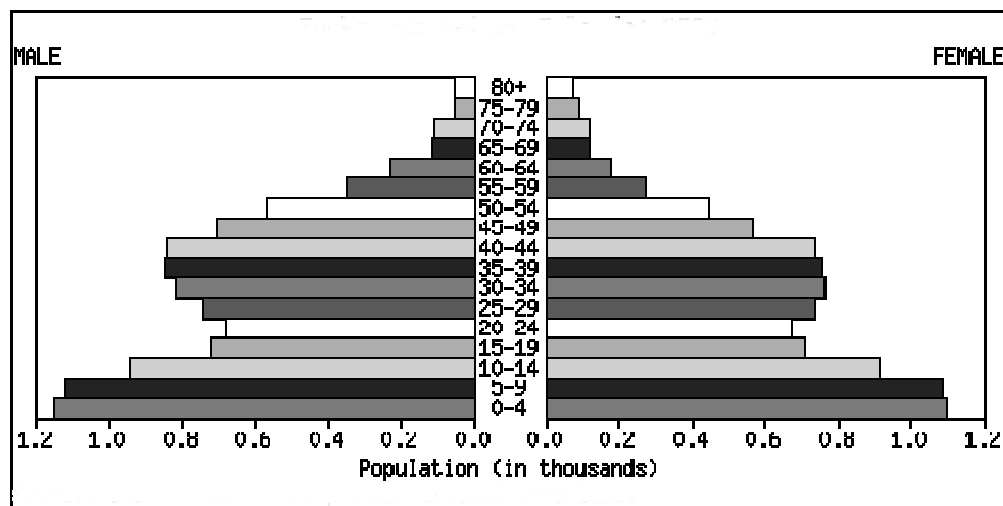
The latest population census (2001) documented the population size of the TCI as 20,014 persons. However, it is suspected that there are approximately 3,000 illegal migrants that the census data does not account for. The population is unequally dispersed over the main islands. The two most developed islands, Grand Turk, the nation's capital and Providenciales, the hub of the tourism industry, support the bulk of the population, accounting for approximately 85.47% of the total population. The more rural areas, South Caicos (the fishing capital), North Caicos and Middle Caicos house the remaining 14.53%. The table below presents a summary of the population distribution.

Table 1: Distribution of resident population by Islands (2001)

Island	Area (km ²)	Population	Population Density
Grand Turk	11	3976	361
Salt Cay	5	120	24
South Caicos	13	1063	82
East Caicos	29	-	-
Middle Caicos	77	301	4
North Caicos	66	1405	21
Providenciales	61	13021	213
Uninhabited Cays	77	-	-

Source: Department of Economics and Statistics, TCIG.

The Turks and Caicos Islands population is growing at a rate of 3.14% per annum (2003 est.). The Islands' populations are predominantly young in age, with only 3.7% of the population over the age of 65 years. The greater part of the population (63.7%) is within the age group of 15 - 64 years, while 32.5% of the population is below the age of 14 (Figure 2).



Source: U.S. Census Bureau, International Data Base

Figure 2: Age composition of the resident population of the Turks and Caicos Islands grouped by sex category (2003 est.).

As a small island developing State that has just begun to mature, a high percentage of its labour force is derived from outside the country, more often from within the region. As such, the ethnic composition of the resident population is relatively diverse. Over 87% of the population is black, while Caucasians (whites) make up 7.9% (Figure 3).

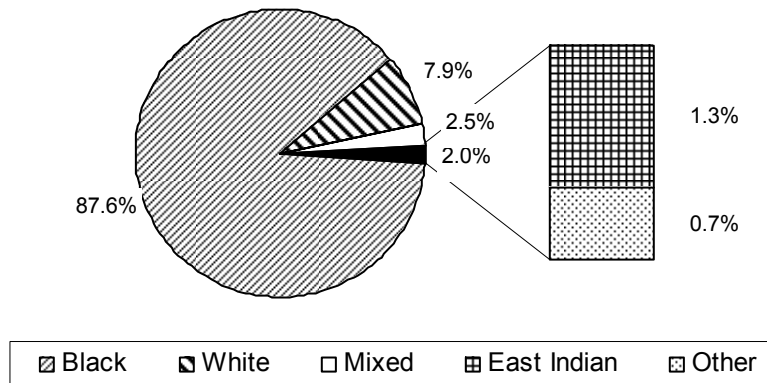


Figure 3: Ethnic composition of the resident population of the Turks and Caicos Islands

1.2 Economy

Like most other islands throughout the region, TCI's economy is based predominantly on tourism, fishing, and offshore financial services. Most food for domestic consumption is imported. However, there is some subsistence farming - mainly corn, cassava, citrus, and beans - on the island of North Caicos. The major sources of government revenue include fees from offshore financial activities and customs receipts, as the Islands rely on imports for nearly all consumption and capital goods.

The Turks and Caicos Islands derives an average annual income of approximately \$9 million through exports, primarily in the export of food sector such as lobsters, dried and fresh conchs, and fin-fish. While, yearly expenditure on imports commodities such as food and beverage, tobacco, clothing, manufactures, construction averages at \$177.3 million.

Given that the Turks and Caicos Islands import over 95% of its food, beverage and manufactured materials, there is a high disparity between the expenditure on imports and revenues generated from exports. Expenditure on imports far outweighs revenue derived from export by a factor of seventeen (17). In 2003, the TCI generated a combined total of \$9.8 million for export and re-exports, while accruing \$168.7 million on imports (Table 2).

Sixty six percent of the resident population of the TCI earns more than \$10,000 annually, while only 34% earns \$10,000 or less. The TCI has an average annual GDP purchasing power parity of approximately \$231 million, and a per capita purchasing power parity of \$9,600 (2000 est.). The thriving economy is for the most part attributed to the vibrant tourism industry, creating investment and employment opportunities. In 1997, the Caribbean Development Bank estimated an unemployment rate of only 10%. Unemployment, for the most part has declined, despite the increase in the population size.

Table 2: Value and Distribution of Imports, Exports and Re-export for the 2003 Financial Year.

S.I.T.C. SECTIONS	Imports (U.S \$)	Exports (U.S \$)	Re-exports (U.S \$)	Balance of Visible Trade (U.S \$)
Food	30,319,593	3,786,521	0	-26,533,072
Beverages and Tobacco	7,569,488	0	1,290	-7,568,198
Crude Materials, Inedible except Fuel	5,480,086	260,572	1,380	-5,218,134
Mineral Fuels, Lubricants, etc.	14,650,249	281	0	-14,649,968
Animals and Vegetable Oils and Fats	279,035	0	0	-279,035
Chemicals	11,432,962	25,897	5,378	-11,401,687
Manufactured goods	31,868,290	371,675	135,188	-31,361,427
Machinery and Transport Equipment	47,507,359	3,749,961	195,918	-43,561,480
Miscellaneous Manufactured Articles	19,607,132	1,192,015	95,329	-18,319,788
Miscellaneous Transactions	4,420	0	0	-4,420
ALL SECTIONS	168,718,614	9,386,922	434,483	-158,897,209

Source: Department of Economics and Statistics, TCIG.

The fisheries industry, although its contribution to the GDP over the years appears somewhat miniscule (approx. 2.5% per annum), it is of significant socio-cultural importance, providing a ready supply of fresh marine product for local consumption, the tourism industry and for export. The industry directly provides employment to local people of the countries as fishermen, and indirectly employs an additional person in the fish processing industry (Table 3). The importance of the industry is further accentuated in the lesser develop islands such as South Caicos, Middle Caicos and North Caicos, in which there are few alternative to fishing.

Table 3: Annual employment and production of the TCI fisheries sector

Parameters	Fishing Seasons			Units
	2000-2001	2001-2002	2002-2003	
Primary Employment (Fishermen)	353	370	448	Individuals
Secondary Employment (e.g. Plant Managers, plant workers)	240	246	205	Individuals
Total Production (Lobster, Conch Fin-fish)	1099	998		mt
Export (Lobster, Conch, Fin-fish)	380	359		kg

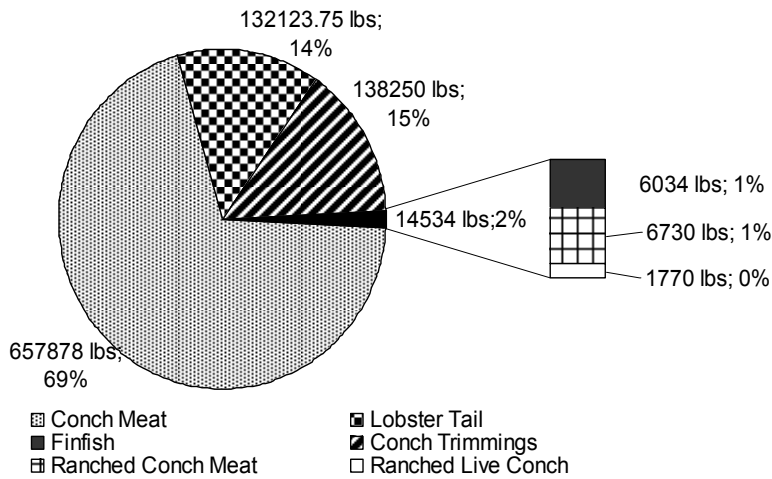


Figure 4: Fisheries export in TCI by product type

1.3 Political, legal and administrative structure

Government
Type: Constitutional Parliamentary Democracy
Capital: Grand Turk
Administrative divisions: Centralised administration.
Independence: Overseas territory of the UK
Constitution: Introduced 30 August 1976, suspended in 1986, restored and revised 5 March 1988
Legal system: Based on laws of England and Wales, with a few adopted from Jamaica and The Bahamas.
Head of State: Queen ELIZABETH II (since 6 February 1953), represented by a Governor
Head of Government: Chief Minister
Executive branch: Executive Council consists of three ex officio members and five appointed by the governor from among the members of the Legislative Council
Legislative branch: Unicameral Legislative Council (19 seats, of which 13 are popularly elected; members serve four-year terms)
Judicial branch: Privy Council, Supreme Court; and Magistrates Court

2. Institutional and legal arrangement for the management, development and conservation of fisheries, aquatic and other resources

2.1 Administrative arrangements and legal for the management, development and regulation of fisheries and aquaculture

The management, development and conservation of the fisheries, aquatic and other resources falls under the responsibilities of the Ministry of Natural Resources, which is headed by an elected official, the Minister of Natural Resources. Since the 2003 national elections, and with the shuffling of the Ministerial cabinet, the portfolio of the Ministry of Natural Resources was amalgamated under the umbrella of the Chief Ministers' Office.

The Minister responsible for fisheries and natural resources conservation and management serve as the ultimate policy maker. He and his associate Ministers of Executive Council, via a consultative process with various stakeholders and interest groups develop policies that direct the conservation, use and development of the Islands' natural resources.

The Policies and directives of the Minister, is filtered down to the Department Of Environment and Coastal Resources (DECR) through the Permanent Secretary of Natural Resources, who is also responsible for overseeing and ensuring that the various policies of the Minister are executed.

The DECR, attached to the Ministry of Natural Resources has been designated as the functionate institution to assist the Minister in exercising the management of environmental protection activities in terms of policy-making and the development of related legislations, strategies, planning and plans. This Department is headed by a Director who has overall responsibility to formulate strategies to ensure sustainable utilization of the natural resources, to protect and promote biodiversity and economic prosperity, which are in keeping with the overall environmental policies.

The Department is separated into two Divisions; the Protected Areas Division, and the Fisheries Division. The Fisheries Division is headed by the Assistant Director/Chief Conservation Officer who develops and implements management plans for the fisheries resources that are consistent with the policies of the Minister. The Deputy Director oversees the Protected Areas Division, and has the fundamental responsibility for the overall management of the 34 Protected Areas (including national parks, nature reserves, sanctuaries, and sites of historical interest) established within the Turks and Caicos Islands.

Both Divisions are equipped with Conservation Officers, the law enforcement arm of the Department. The Conservation Officers strive to ensure compliance with the range of Fisheries and Environmental Conservation Laws. Scientific research and monitoring on the other hand are conducted by the Scientific Research Officers.

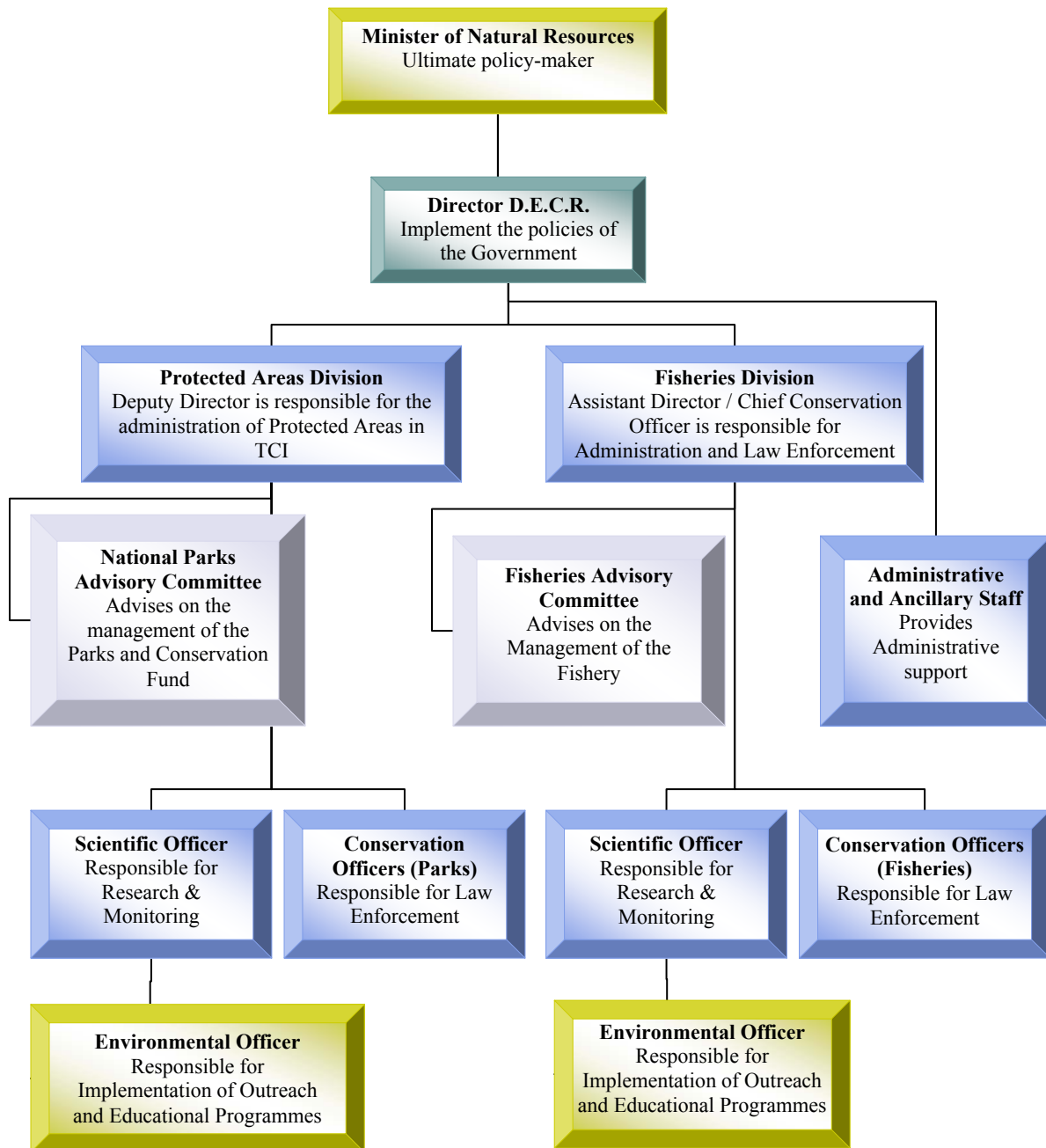
Apart for enforcement and research the Department has an established Public Awareness Policy. Education is viewed as an integral part of the Department's work programme, as education is a tool by which knowledge can be disseminated to the community and raise the level of awareness

concerning conservation issues. As such, Environmental Officers are assigned to carry out the environmental education and awareness programme.

In addition to the Department's permanent staff there are several established committees that act as advisory bodies to the DECR. A Scientific Authority has been instituted to guide the type of research that is conducted throughout the Islands. The Authority plays an integral role in setting and / or recommending guidelines and standards for fisheries and other research, aquacultural development and environmental impact assessments. The Authority also doubles as the Convention on Trade in Endangered Species (CITES) Scientific Authority, which is responsible for recommending the total allowable catch for the queen conch fisheries among other functions outlined in the Draft Wildlife and Endangered Species Bill.

The Fisheries Legislation makes provision for the establishment of a statutory body, known as the Fisheries Advisory Committee (FAC). The FAC, is comprised of 5-6 members. The members are generally stakeholders or community members that have an interest in the fishery resource of the TCI. The FAC is charged with the responsibility of advising the Minister on aspects of management and development of the fisheries resources. Correspondingly the National Parks Ordinance provides for the establishment of a similar committee.

Organogram highlighting the organizational structure of the Department of Environment and Coastal Resources



Legal Arrangements

There are several pieces of legislations and legal documents that form the legal basis for the programmes of the DECR.

- **The Environmental Charter (2001):** This is a formal agreement between the UK and TCI to develop and implement sound environmental management practices. The Charter outlines the roles and responsibilities of the UK government, TCI government, the private sector, NGO's and local communities in the conservation and management of TCI's environment.
- **Fisheries Protection Ordinance Chap. 104:** This is the main legislation which provides the legal basis and regulations for managing the fishery resources of the Turks and Caicos Islands. This legislation makes provision to guide the licensing, harvesting, conservation and the management processes of fisheries in the TCI.
- **Fishery Limit. Chap. 105:** Defines the Territorial Waters and Economic Exclusion Zones (EEZ) of the Turks and Caicos Islands.
- **Coastal Protection Ordinance. Chap. 85:** This legislation offers protection to the coastal zone by restricting persons from extracting materials (living and non-living) from the coast without a licence.
- **National Park Ordinance Chap. 80:** Provides the legal basis for the establishment and management of a protected areas system which includes National Parks, Marine Reserves, Sanctuaries and Areas of Historic Interest.
- **Mineral (Exploration and Exploitation) Ordinance. Chap. 79:** Provides for the protection of the marine habitat from direct mining impacts or from indirect terrestrial mining activities.
- **Endangered Species Bill (Draft):** this legislation is currently in draft form. On completion, it will provide the legal basis for protection of endangered species in the Turks and Caicos Islands

2.2 Administrative arrangements for the conservation and rehabilitation of the coastal environment and aquatic resources.

The islands are relatively small, and as such the entire State is considered as the coastal zone and is managed as such. The management of the Islands takes a multi-disciplinary approach and as such requires strong inter-agency collaboration. The three main Government Departments that are involved in conservation, management and rehabilitation of the coastal environment are the DECR, the Planning Department and the Environmental Health Department. The DECR, as previously stated, deals mainly with the conservation issues, the Physical Planning Department plays a key role in land use planning and managing infrastructural developments and the

Environmental Health Department that monitors and regulates waste (solid, liquid and hazardous) management. While there are no formal legal mechanisms for vertical or horizontal integration of these departments, in the majority of cases they do try to work together when dealing with large-scale developments.

The TCI is one of the fastest growing islands in the region owing to its strategic geographical location and rich historical, cultural, economic and ecological values. The rapid economic development, however, brings about environmental problems, such as pollution from domestic and industrial sources, booming tourism, habitat and biodiversity loss and overexploitation of resources, which threaten the integrity of the coastal and marine ecosystems. The TCIG acknowledges that development of the Islands and protection of the coastal and marine ecosystems and their resources must be mutually supportive to promote sustainable development. For that reason the government has implemented several strategies that are conducive with the Environmental Charter so as to safeguard the natural resources and ensure the conservation of natural feature as far as possible.

The enactment of the Physical Planning Ordinance (1989) is one such strategy. This Ordinance provides a code of conduct for development activities to ensure that conservation and management of natural resources are treated as an integral part of development planning, to name a few. The Ordinance mandated the production of a development manual which provides stringent regulations to minimize development impact on the environment. These regulations include setback limits for coastal developments, land clearance, the requirement of an environmental Impact Assessments (EIA) for large-scale development. The DECR and the Planning Department work closely together to formulate the terms of reference for EIAs, which are guided by predetermined development priorities and well-formulated environmental protection objectives.

Apart from the efforts to ensure that the development process is holistic and does not compromise the natural environment, a protected areas system was legislated in 1992 to safeguard key natural features. Of the 34 protected areas in the TCI, 56% has a marine component spanning great distances along the coast. The potential developmental and pollution threats to the fragile marine ecosystems within these protected areas are of great concern to the effective management of these areas. As such, the Protected Areas Division of the D.E.C.R. plays an instrumental role in the management, conservation and rehabilitation of the coastal environment and aquatic resources. The management of these systems is financed by the Conservation Fund which was legally established in 1998. This fund is reserved for environmental management programmes, and is financed by 10% of Accommodation Tax. The Fund supports the majority of the operational costs of the Protected Area Division of the DECR. It also supplies core funding to the National Trust and provides funds for community based conservation projects.

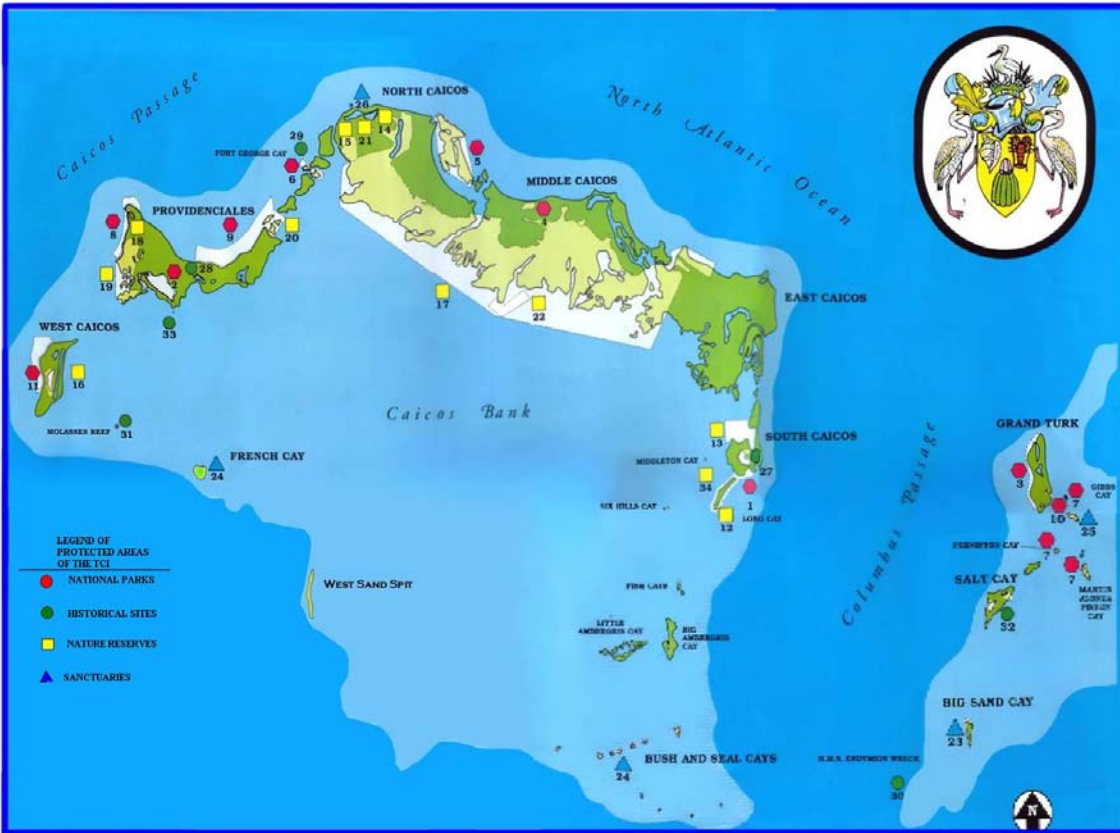


Figure 5: Map of the Turks and Caicos Islands showing distribution of the protected areas.

The rehabilitation of the coastal system in the TCI is based on the “polluter pays principles” which is embodied in several legislations. The agency responsible for ensuring that compensation is had for restoration is dependent on the type of environmental degradation or damage that is committed. For instance, violations within the Protected Areas System and the fisheries limit would be handled by the DECR. Whereas, incidents that involve breach of the environmental health or planning regulations would be dealt with by Environmental Health Department and the Planning Department respectively. All three Departments have the support of the Royal Turks and Caicos Police Force if required.

2.3 Administrative arrangements for regional planning and development in coastal regions.

In recognition of the need to preserve and develop the coastal and marine resources, the TCI has in recent years been a very active participant in a number of important regional initiatives. Besides participating in several regional workshops and conferences on sustainable development and environmental conservation issues, the TCI is party to several regional bodies that addresses development and environmental conservation concerns in coastal regions.

Most recently, the TCI has signed on to the Caribbean Regional Fisheries Mechanism (CRFM) which was launched in March 2003. TCI is an active partner in this regional initiative that

promotes the sustainable use of the fisheries and aquacultural resources throughout the region. Through collaboration with this organization the TCI is in the final stages of formulating a Fisheries Policy and Management Plan.

In 1998, the Turks and Caicos Islands became a member of the Caribbean Planning Association (CPA) and has since actively participated in this regional body that assist member countries in formulating planning policies and preparing land-use regulations. CPA's objective is to encourage planning that will meet the needs of people and society more effectively

TCI is also a member of Caribbean Environmental Health Institute, which is a regional body that provides technical and advisory service on all areas of environmental management, including but not limited to environmental quality monitoring, watershed and coastal area management, waste management and environmental health information.

Other regional initiatives that have helped shape the development process in the TCI include the various United Nations (UN) funded projects. For example, collaboration with Coast and Beach Stability in the Lesser Antilles (COSALC), a UNESCO funded project resulted in the decision to increase the set back limit for coastal development to 100 ft from the vegetation line.

Through these arrangements the TCI is able to work with neighbouring territories to better understand and meet the challenges of sustainable development.

2.4 Efforts undertaken in the past and present, in the field of co-management of fisheries and coastal aquatic resources

In the TCI, there has been over the course of years varying degree of co-management, that is, shared management between government and the fisheries. Probably the greatest degree of co-management is the institution of the FAC, established under the Fisheries Protection Ordinance. Representatives from the fisheries industry, public members and the DECR sit on this committee which advises the Minister responsible for the fisheries and / or Governor on the overall management of the industry. This body therefore has a great deal of influence and say in the management, conservation and development of the fisheries.

Other efforts towards co-management of the coastal aquatic resources include the DECR working closely with formally established community groups. For example, the Hotel and Restaurant Association and the Water Sports Association are quite involved in the conservation efforts of the Department. These groups assist the DECR with dive mooring installation and maintenance, research initiatives and educational programmes.

Advice is also sought from the general public on management issues through periodic consultations. These consultations take the form of community meetings, radio and television talk shows. This strategy allows the general public to voice their concerns and share their views on matters regarding the development and management of the Islands' natural resources.

Despite these initiatives to garner stakeholder participation, community involvement is generally limited to the same individuals. The Department finds it difficult to gather wide community input in the management of the fisheries and other coastal aquatic resources.

The DECR however plans to convene more frequent community meetings in the hope that the increased presence will make individuals more comfortable and improve trust in the Department among the masses.

2.5 Efforts undertaken in the past and present, in the field of integration of fisheries and coastal aquaculture into coastal area management, planning and conservation

Prior to 1994, the Fisheries Department was responsible for fisheries and aquaculture management, while the then Environment, Heritage and Parks Department took the lead in the management of the protected areas systems and the general environment. The two departments shared many common objectives; consequently their merger was designed to maximise limited resources and enhance the Islands' ability to manage natural resources of the nation.

This holistic approach to coastal area management has resulted in increased man power, increased funding, reduced overlap in management efforts, thereby improving the overall management effectiveness.

3. Availability of socio-economic and demographic information on coastal communities

Literature that focuses largely on socio-economic and demographics of the fisheries has been difficult to obtain. This is partially due to the limited research in this area, but also because the documentation that does exist is largely found in what is known as the 'gray literature'. This is usually literature that remains within research organisations or various government departments. Still, very few formal publications have been identified that speaks specifically to the socio-economic, demographic and political characteristics of the fisheries resource users and uses in TCI. Below is a list of research that has been conducted that outlines socio-economic aspects of the TCI fisheries industry.

Bennett, E and W. Clerveaux. 2001. Size matters: Fisheries and Social Capital on the Turks and Caicos Islands. *Proc. Gulf Carib. Fish. Inst.* 54.

Bennett, E., A. Neiland, E. Anang, P. Bannerman, A. Atiq Rahman, S. Huq, S. Bhuiya, M. Day, M. Fulford-Garidner, W. Clerveaux. 2001. Towards a Better Understanding of Conflict Management in Tropical Fisheries: evidence from Ghana, Bangladesh and the Caribbean. *Marine Policy* 25, pp 365-376.

Clerveaux V. 2004. Resource Utilization and Migration Issues in the Turks and Caicos Islands. Mphil Thesis, Department of Geography, University of the West Indies, Mona, Jamaica

Clerveaux V. 2002. The Impact of Tourism on the Fishing Industry of the Turks and Caicos Islands. BA Thesis, Department of Geography, University of the West Indies, Mona, Jamaica

Holness, A. P. 1981. Turks and Caicos Island Report & Recommendations to be Considered for Possible Improvement to the Fishery.

Mokoro. 1990. Turks and Caicos Islands Strategic Review. Report prepared for the Government of the Turks and Caicos Islands.

Stevens, R. N. 1975. Report to Voluntary Service Overseas on a Two Year Tour to the Turks and Caicos Islands, West Indies.

Although research on the socio-economic characteristics of the fisheries industry has been limited, it is increasingly being recognised as an area in need of greater understanding. As such this area has been highlighted in the Research Plans for the Fisheries Division of the DECR. More recently, the Department's staff were trained in the Socio-economic Monitoring (Socmon) protocol in an effort to build capacity in this area.

3.1 Use of Socio-economic and demographic indicators in the preparation of coastal area profiles and management / development plans.

The environmental problems generated by rapid development, the spatial concentration of human and commercial activities, and changes in production and consumption experienced in the islands (particularly Providenciales) are generally not well-documented. The lack of comprehensive analytical and descriptive information has been a major impediment to improved environmental analysis, and to the selection of policy options, the formulation of management strategies and the implementation of action plans.

Although socio-economic data is somewhat lacking, both bio-physical and socio-economic factors as well as factors influencing environmental deterioration and mismanagement are considered in the development of various coastal area management / development plans, including the management plans for several protected areas and the fisheries.

The North West Point Sustainable Master Plan

The North West Point Sustainable Master Plan is a development plan for the northwest section of Providenciales. This area is currently virtually undeveloped and features several protected areas including nature reserves and national parks. The plan was designed to ensure that there are minimum negative impacts on the natural environment and will act as a catalyst for social development and conservation. The development of the plan involved extensive fact finding and personal contributions made by many residents in Providenciales. Socio-economic and demographic information that was considered during the preparation of this plan included the existing social dynamics; population size, growth rate, belonger: non-belonger ratio and employment/skill level. These data were obtained from the Department of Economics and

Statistics, based on various national surveys, and a report on the standard of living in the Turks and Caicos Islands by KAIRI™.

Other pertinent information used included an examination of existing infrastructure (communication, transportation, waste disposal, etc.) and land uses, which was obtained from the DECR and the Planning Department and other secondary sources (reports) also held within the Planning Department. Emerging market trends were considered to assist in the determination of development concept for the area. This included information on tourist arrivals, tourists profiles, etc. based on data collected by the Tourist Board.

In general the development of the North West Point Sustainable Master Plan took a holistic approach, taking into account both the physical features of the area and the social, cultural, economic and political conditions of the Providenciales community. The resultant plan is envisioned to create a balance between the natural beauty of the area and the built environment while satisfying the needs of the local community.

The Ramsar Nature Reserve Project

The North, Middle and East Caicos Nature Reserve (Ramsar Site) is a wetland site of international importance containing a variety of habitat types representative of the region. The area possesses several archeological and historical sites and a variety of plants within the area are used for traditional craft making and bush-medicine. Fishing and farming in this area is also of great importance to the local diet. Due to the diversity of the area, a plan for the biodiversity management and sustainable development of this extensive area was developed. The plan incorporated ecological aspects as well as the socio-economic dimensions of the area and surrounding communities. It took into account the population density, growth rate, the employment / skill level of the residents, traditional uses of the area and the importance of these activities to local livelihoods. Majority of the socio-economic data that was used in the formulation of the management/development plan was collated through public consultation (community meetings and one on one interviews with residents), some of which are presented in the appendix of the report. Other socio-economic and demographic information was obtained from secondary sources, namely, demographic statistics from the Department of Environment and Statistics, fisheries data from the Fisheries Division, historical data from the National Trust.

Section of the plan has already been implemented and has proven to be successful. The creation of nature trails and training of local tour guides have facilitated the development of the capacity of locals to establish small business based on eco-tourism. This has provided an economic incentive to conserve the rich biodiversity of this coastal area.

The Turks and Caicos Islands Draft Fisheries Management Plan

Apart from management / development plans for specific areas socio-economic and demographic data have been incorporated into the management plan of specific natural resources, for example, the fisheries resource. The Draft Fisheries Management Plan (DFMP) has integrated socioeconomic data and concerns as well as fish stock and biological data to produce a plan that will protect the ecological integrity of the fish stocks and associated environment while at the

same time facilitate the development and diversification of the fisheries sector and promote economic prosperity. Historical data on the fisheries, including, the socioeconomic background of fishermen and how it has changed over time due to the declining profit and resources was examined. Information on the population density in major fishing islands, demographic dynamics of the fishers, the number of fishers and fishing vessels in the fishery, the number and condition of fish vending facilities, the average income of the various players, existing market value of fish products, and the fisheries contribution to the country's GDP are some of the socioeconomic data that were utilised. Majority of these data (mainly the fisheries statistics) are housed in the Fisheries Division. Other data were obtained through public consultation or from published papers and gray literatures. Several interviews with local fishermen were conducted and public meetings held to ascertain some of the information listed above. The population statistics and economic/financial data were acquired from the Department of Economics and Statistics.

Although socioeconomic and demographic data on the TCI is not well documented and to some extent fairly limited, the Government does, as far as possible incorporate social, cultural, political and economic factor when designing plan for the development of the islands.

3.2 Preparation and implementation of special projects and activities in the context of fisheries and coastal area management and conservation programmes, which aim at improving the socioeconomic well-being of coastal fishers and their families.

The Fisheries Division has undertaken several initiatives to protect the fisheries resources while at the same time improving the standard of living of the fisher folks. One of the major activities in this area was the establishment of a Fishermen's Day which began in 2003 and will be held annually. The day was established as a way by which the Government could publicly recognise and acknowledge fishermen and their valuable contribution to the Islands' economy and well-being. Fishermen's input and intellect in the decision-making process for managing the fisheries resources was also acknowledged. Fishermen's Day is a three day celebration, filled with fun activities and workshops for fishermen and their families. The DECR also uses the opportunity to promote conservation and best fishing practices. A few fishermen were recognised for their conservative effort, knowledge sharing, among other things.

South Caicos Fisheries Infrastructure Project

Other activities that the DECR and the TCI Government has been involved in to improve conservation and general well-being of individuals within the fishing industry include the improvement of existing docking/landing facilities in South Caicos. The fishermen landing area in South Caicos was in a deplorable condition. Discarded conch shells and garbage lined the bank of the small bay. This created a foul smell and polluted water. The project began with the removal of the conch shell and other debris from the water and shoreline. Gabion basket were then installed to stabilise the shoreline and reduce landward runoff. The improved docking facility serves to facilitate boat safety and reduce congestion while unloading products.

The second phase of the project involves the creation of a children's park adjacent to the docking facility which is currently under construction. This park endeavours to provide a play area for fishermen and their families.

The TCI Government has also amended policies and legislations to improve the general welfare of the fishing community. With the rapid development of the tourism industry more and more young people are taking employment in tourism or related sectors and hence, fewer youths are recruited into the fishing industry. As such most of the fishermen in the industry are above forty-five years old and find great difficulty in free diving to depths. To accommodate the aging fishermen the TCI Government recently amended the Fisheries Protection Ordinance to allow non-nationals in the fisheries as assistant to these fishermen.

As the Government continues to explore ways to improve the socio-economic well-being of fishermen and their families, the TCIG has committed to exploring new markets for better prices for TCI fisheries products and also, to identify ways to better utilize existing products and minimize waste. These initiatives would increase the overall income for all the players in the fishery.

Fishermen and their families are an important part of the Turks and Caicos Islands' social matrix and are the strength of the fishing industry. As such, special considerations are given to this group in order to sustain the long-term future of the industry and the life and welfare of the communities.

3.3 Use of socio-economic and demographic indicators in monitoring the impact of management regulations and measures on the socio-economic well-being of fishers, their families and other segment of the coastal population.

At present there are no initiatives to monitor or assess the management effectiveness of the various fisheries management strategies. However, one component of the Draft Fisheries Management Plan (DFMP) involves regular (every 3-5 years) evaluation of the effectiveness of the plan. The DFMP proposes a research plan and incorporates socio-economic studies that will assist in evaluating the impacts of management, among other things. To address the need for information on key economic indicators, the DFMP presents a plan for periodic user-surveys to acquire information on fishermen and consumer expenditures, preferences, and demand regarding the commercial and sports fishery as well as non-extractive uses and environmental qualities.