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THE IMPACT OF MARINE PROTECTED AREAS ON POORER COMMUNITIES LIVING IN AND AROUND THEM: INSTITUTIONAL OPPORTUNITIES AND CONSTRAINTS

Appendix 2 – Case Study of Princess Alexandra Land and Sea National Park, Turks and Caicos Islands

December 2002



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Acronyms

AGM	Annual General Meeting
AGRRA	Atlantic and Gulf Rapid Reef Assessment
BAS	Belize Audubon Society
BBRWHS	Belize Barrier Reef World Heritage Site
BEST	Belize Enterprise for Sustainable Technology
BFD	Belize Fisheries Department
BTIA	Belize Tourism Industry Association
CANARI	Caribbean Natural Resources Institute
CBO	Community Based Organisation
COMPACT	Community Management of Protected Areas Conservation Project
CRMP	Coastal Resources Management Project, TCI
CZMAI	Coastal Zone Management Authority and Institute, Belize
DECR	Department of Environmental and Coastal Resources
DFID	UK Department for International Development
EFJ	Environment for Jamaica
EPA	Environment Protection Area
EU	European Union
GEF	Global Environment Fund
GRMR	Glover's Reef Marine Reserve, Belize
HCMR	Hol Chan Marine Reserve, Belize
ICZM	Integrated Coastal Zone Management
LAC	Local Advisory Committee
MOU	Memorandum of Understanding
MPA	Marine Protected Area
MRAG	Marine Resources Assessment Group Ltd
NCRPS	Negril Coral Reef Preservation Society, Jamaica
NEPT	Negril Environmental Protection Trust
NGO	Non-Governmental Organisation
NMP	Negril Marine Park
NPEAC	National Parks Environmental Advisory Committee, TCI
NR	Natural Resources
PA	Participatory Appraisal
PACT	Protected Areas Conservation Trust, Belize
PALSNP	Princess Alexandra Land and Sea National Park, TCI
PAP	Public Awareness Programme
PRA	Participatory Rural Appraisal
PS	Permanent Secretary
RRA	Rapid Rural Appraisal
SEA	Socio Economic Assessment
SI	Statutory Instrument
TCI	Turks and Caicos Islands
TCNT	Turks and Caicos National Trust
UDC	Urban Development Corporation, Negril, Jamaica
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
UWI	University of the West Indies
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

2 Princess Alexandra National Park, Providenciales - Turks and Caicos Islands

The following information presents the results of field research undertaken in Providenciales in January/February 2002 relating to the Princess Alexandra Land and Sea National Park (PALSNP) in the Turks and Caicos Islands (TCI). Only the *results* for this research are presented here. Methodology can be found in Appendix 1 of this report. Princess Alexandra National Park was one of four case studies investigated, the others forming other appendices in this report.

Details of the main contributors of information are mentioned in text where relevant and a list of respondents presented in section 2.12. As will be seen in section 2.12, the number of respondents was low, with emphasis being placed on fewer, but in depth, interviews. Whilst this meant that it was possible that opinions collected were not representative of the particular group in question, the principles of triangulation were applied to crosscheck information¹ and representative results were not an overriding requirement of the research in any case. Being exploratory in nature, views of any individual were useful, and to the extent that they helped to build up an explanation of a case and develop hypotheses, were considered valid. It should be noted that in the case of TCI, huge social tensions caused by a substantial immigrant migration problem on the island meant that many of the immigrants, legal or otherwise, were cautious about speaking to us. Every effort was made to talk to them in an environment, and under circumstances, that they found comfortable. However, some interviews proved to be impossible, whilst with others this cautiousness should be borne in mind when interpreting the responses given.

Princess Alexandra Land and Sea National Park (PALSNP) is one of 33 protected areas formally established under the National Parks Order 1992 (Turks & Caicos National Parks Brochure, 1998). It is one of three National Parks on, and surrounding, Providenciales, the principal tourist island of the TCI². PALSNP itself encompasses Grace Bay, a seven mile stretch of beach that is the most famous in the TCI. Tourism is a relatively new industry only developing in the last 15 years. However, it has now replaced the export trade (fish, conch, lobster, sponges and cotton (Government Visitors Guide, 2001)) as the major economic industry of the country.

2.1 History of park and management

As mentioned above, PALSNP was legally enacted by government, along with other protected areas in 1992 under the National Parks Order. According to Geoghegan *et al.* (2001), of the eight protected areas classified as Marine Parks only the three on Providenciales (including PALNSP) have more than a low level of management³.

An important thrust behind the establishment of the Park was to protect the natural beauty of the islands for further development of the tourist industry (Garland, pers.

¹ This involves obtaining information from a range of sources, using a range of methods and a range of investigators and/or disciplinary approaches. Such a method also involves actively seeking out diversity and different perspectives, and investigating, in situ, contradictions and anomalies.

² 98% of tourist arrivals to TCI visited Providenciales, a total of 121,000 visitors in 1999 (TCI Tourist Board records in Homer and Shim, 2000).

³ For definition of level of management see (Geoghegan *et al.*, 2001)

comm.⁴). At the time of establishment there was no local consultation regarding plans for this, or any of the other Parks.

Table 2-1 shows the major events in the development of PALSNP. Information came from a group session with staff⁵ of the Coastal Resources Management Project (CRMP), the organisation with responsibility for the day-to-day management of the PALSNP and all other Marine Parks⁶.

As can be seen from the Table, whilst the Park had been legally established in 1992, there had not been not much activity until the Coastal Resource Management Project, funded by the UK Department for International Development (DFID) was set up in 1998. It was after this time that demarcation and enforcement of zones, scientific monitoring, and education and awareness raising started to take place.

Table 2-1 Significant developments in the history of the National Park

Year	Activity
1991	Watersports operators started mooring buoy system
1992	Park legally established through the National Parks Order
1993	
1994	1st management plan drawn up (van t'Hof, 1994)
1995	
1996	
1997	
1998	Coastal Resources Management project (CRMP established) Push of government towards ICZM
1999	First signs of active management Scientific monitoring started Stakeholder meetings
2000	Management plan for period 2000-2004 (Homer, 2000) Demarcation
2001	Start of Young Warden's programme Jet ski ban imposed Start of micro-project programme Start of public awareness programme

2.2 Current (or recent) management practices and park activities

2.2.1 Activities within the National Park

Figure 2-1 shows a location map of the National Park and Figure 2-2 indicates its different zones. The park is approximately 26km² along the northeast coast of Providenciales island including beaches, coral reefs and sea grass ecosystems. Within the Northeast sector of the park are three small Cayes (designated the Princess Alexandra Nature Reserve).

⁴ Judith Garland, Project Manager; Coastal Resources Management Project (CRMP)

⁵ Staff present included the CRMP project manager, chief warden, wardens, scientific officer and public awareness officer from the National Trust

⁶ Currently CRMP were concentrating on management of the three most heavily used Parks in the areas around Providenciales and West Caicos.



Figure 2-1 Map of Turks and Caicos Islands indicating its position within the Caribbean, and the location of the Princess Alexandra Land and Sea National Park⁷

Many of the regulations relating to the use of the PALSNP came from the National Parks Regulations, made under the National Parks Ordinance in 1992. These regulations gave a comprehensive list of the activities that are prohibited within the Park and apart from in the Ordinance itself, these regulations can be found in Best (2001). Prohibitions included: removal of sand, rock, coral; anchor damage to coral reef structures; jet skis and hovercraft; making of fires; noise or recreational activities to the discomfort of other persons. Zones could also be set up within the Park and at the time of this research, zones in the Park included a swim zone, access zone, aquatic sports and training zone and a water ski zone. Fishing was completely prohibited within the Park boundaries.

Being in a prime tourist area, activities occurring in the park, besides those of staff included:

- Snorkelling
- Diving
- Parasailing
- Waterskiing
- Kayaking
- Cruises
- Beach recreation

⁷ Taken from O'Sullivan (2002).

Whilst fishing had been banned in the Park, it was widely perceived to still be occurring, particularly for subsistence purposes. Whilst most of the activities listed above were for the benefit of tourists, locals also used the Park for:

- Swimming
- Volleyball
- Beach parties
- Meeting points
- Picnicking



Figure 2-2 Map of PALSNP indicating the boundaries of the Park⁸

2.2.2 Current activities of National Park staff

There were eight National Park staff members⁹ who explained the activities they were involved in (outlined in Table 2-2). These activities can be related to the five different Programmes outlined in the CRMP literature (CRMP, 1998) also presented in the table.

⁸ Map taken from O'Sullivan (2002) indicating ecological survey sites referred to in Section 2.6.

⁹ Staff of PANLSP include: CRMP project manager; 1 chief warden; 3 wardens; 1 scientific officer; 1 administrative officer; 1 education officer (employed by National Trust); 1 co-management specialist.

Table 2-2 Current or recent activities of CRMP staff

Programme (CRMP, 1998)	Specific activities
1. Park infrastructure and zoning	<ul style="list-style-type: none"> • ²Replacement of buoys and better demarcation of swim zones & access zones • ² Maintaining equipment
2. Public Awareness and Outreach	<ul style="list-style-type: none"> • ³ Talks at <ul style="list-style-type: none"> ○ Primary schools (~ 90% of time) ○ Hotel staff (~9%) ○ Church groups (~1%) • National Environment Visitors Centre (under construction) • Micro projects programme (carried out by NPEAC¹⁰) • Broadening of the NPEAC • Young Wardens' Programme
3. Revenue Generation	
4. Surveillance & enforcement	<ul style="list-style-type: none"> • ²Boat patrolling and issuing warnings (DECR must be called in if arrest required)
5. Monitoring & research	<ul style="list-style-type: none"> • ¹Baseline data to establish monitoring programme (refs, sea grass) • ¹Revitalising diver statistics programme • ¹Island wide water quality monitoring programme

It should be noted that not all activities carried out by the Park are necessarily presented here, only those deemed important by staff or brought up in discussions with them. Some of these activities are discussed in more detail below. The superscript numbers represent the following:

¹ Activity taking up substantial amount of scientific officer's time

² Activity taking up substantial amount of wardens' time

³ Activity taking up substantial amount of education officer's time.

2.2.2.1 Public Awareness Programme

The Public Awareness Programme (PAP) was managed by the Turks and Caicos National Trust (TCNT). Whilst, according to the TCNT Executive Director, the area of responsibility for this programme in PALSNP was unclear, public awareness was a specialisation of TCNT and they had agreed to be engaged for the Public Awareness Programme and National Environmental Visitors' Centre in PANSNP. There was apparently still an outstanding issue of whether TCNT was a partner or a contractor (Gibbs-Williams, pers. comm.¹¹). For TCNT, this work was seen as an opportunity for strengthening their capacity (staff) and increasing funds. TCNT had launched their first PAP with the Iguana programme in 1996, which had addressed all areas of the community (businesses, schools, churches). With PALSNP, there had been no objection to using the same method and the work had been ongoing since April 2001. TCNT met with CRMP each quarter to review the programme.

The programme was achieved through talks, publications, posters and magazines (one for adult and one for children). Currently most of their work was occurring in

¹⁰ National Parks Environmental Advisory Committee

¹¹ Evelyn Gibbs-Williams, Executive Director, Turks and Caicos National Trust (TCNT)

schools, with some public awareness at the larger hotels such as displays (posters, brochures) and staff meetings at Club Med. There was still a need to develop their outreach programme. For example, they had not yet been able to reach fishers or the largely Creole speaking immigrant population¹², though it was hoped that their involvement with church groups would increase communication with the latter. They were also thinking about producing publications in Creole or French to improve communication with immigrants, many of whom did not speak English, or spoke it poorly. In the opinion of the director, the majority of infractions were caused by immigrants, but reasons for this were due more to ignorance than to deliberate lawbreaking. Reaching such people would therefore be a step towards solving this.

2.2.2.2 Young Wardens Programme

This had its origins in a stakeholder meeting in February 2001 at which watersports operators highlighted a problem of being unable to recruit suitably qualified and interested Turks and Caicos Islanders.

Originally it was promoted via visits to the three secondary schools in Provo and via two radio adverts, attracting 23 applicants. Whilst training had started in June of that year, six months later, at the time of this research (01/02), it had stopped and this was put down to an insufficient programme budget. CRMP had appealed to watersports operators (who had welcomed the initiative) for sponsorship at meetings and by letter, but they had only received one donation (Clarke, pers. comm.¹³).

2.2.2.3 Micro-Projects Programme

The objective of this programme was to target communities and get local people involved in National Parks in a way that they hadn't been when the National Parks were originally established (it was a TCI wide programme not just for those living in and around PALSNP). Projects sponsored by the programme had to have a conservation theme, anyone could apply for a grant and the maximum grants given were US\$20,000. In its own advertising material the fund sought to "bring positive contributions to each island, and to the people living there. Proposals are encouraged to make community involvement an integral part of the project. It is necessary to show active benefit to the local community, and to women in particular – both during the project and afterwards" (Conservation Fund Micro Projects Programme Leaflet, 2001).

Funds for the Programme represented 20% of the conservation fund collected from tourists (accommodation tax) held in the Ministry of Environment and Natural Resources. As well as a means to encourage local participation, the programme evolved partly in response to complaints from the tourism sector that monies raised from their industry were not earmarked and 'disappeared' (Garland, pers. comm.¹⁴).

Since its inception in 2001 there had been 37 project applications.

The last eight projects sponsored were¹⁵:

- Handicraft project (N Caicos)
- Chamber of Commerce project

¹² Predominantly from Haiti

¹³ Roderick Clarke, Chief Warden, PALSNP

¹⁴ Judith Garland, Project Manager, CRMP

¹⁵ NPEAC meeting report, (Dec 2001)

- Feral Dog Programme (Provo)
- Bight Community Cedar Park to develop beach access (Provo) with picnic tables etc between Alexandra resort and Island Park hotel
- Methodist church restoration (Salt Cay)
- Snorkel impact data study on Bight Reef (Provo)
- TCNT: national bird book
- TCNT: Cheshire Hall development project (Provo)

There was concern from the CRMP Project manager that not all projects sponsored were fulfilling the objectives of the programme, or the criteria for acceptance, lacking community involvement, and/or direct benefits to local communities.

2.2.2.4 Surveillance and enforcement

At the time of the research Park wardens did not have powers of arrest (having to rely on DECR Wardens when they wished to make an arrest) and this was seen as a significant constraint by Park management¹⁶. Whilst patrols of CRMP staff wardens were reasonably regular, they were only within office hours and according to Best (2002) and backed up by our own observations, “enforcement agencies did not seem to be very responsive to breaches of MPA regulations” (Best, 2002, p.97). Best also reported that on average two cases were prosecuted per year (Best, 2002, p.97), far less than the number of breaches which, as will be seen in later sections, seemed fairly commonplace.

2.2.3 CRMP and its linkages with other organisations or decision-making bodies

The Coastal Resources Management Project (CRMP) of the Department of Environmental and Coastal Resources (DECR) had day to day responsibility for the management of PALSNP and the other Marine Parks. Funding for this project came from two sources;

- Capital costs (including those for the new environmental centre), equipment and some salaries were paid for by DfID UK.
- Recurrent costs in the future would be supported by the conservation fund, which was financed by a 1% increase in the Accommodation Tax paid by hotels countrywide.

The project manager reported directly to the Permanent Secretary, Ministry of Natural Resources. Other parts of DECR concentrated on fisheries though they were also responsible for licensing and enforcement in the Marine Parks as unlike the CRMP wardens, their wardens had powers of arrest.

2.2.3.1 Turks & Caicos National Trust (TCNT)

The TCNT had a broad remit to preserve the natural environmental resources. It was a membership-based NGO dedicated to the preservation of the cultural, historic and natural heritage of the Turks & Caicos Islands. It was founded in 1992 after the passing of the National Parks Order. The TCNT mandate was to advise different

¹⁶ Not all interviewed agreed though, with some believing that frequently all that was required was a warning

levels of government and if there was incorrect management of natural resources, then they were legally required to speak out.

Within PALSNP, the TCNT had management rights over the nature reserve of Little Water Cay. They had also recently acquired the long-term lease for Dana and Mangrove Cay (within PALSNP) and other cays in the area. TCNT had a draft management plan for the nature reserve but when we spoke to them, they were not aware of the management plan for PALSNP.

As described in the previous section, their main linkages with CRMP were through their involvement in the Public Awareness Programme.

2.2.3.2 National Parks Environmental Advisory Committee (NPEAC)

The National Parks Environmental Advisory Committee (NPEAC) arose out of recognition that 'government only' MPA's were less likely to be successful than those involving local stakeholders (Robinson, 2002 pers. comm.¹⁷). The committee, at the time of the research (01/02), was made up of representatives from the following;

- Tourist Board
- TCNT
- DECR
- Hotel and Tourism Association
- Watersports Association
- PS Ministry of Environment and Natural Resources
- Rotary club
- Private Sector

CRMP were currently trying to broaden representation on the NPEAC to other sectors of the community, in particular the legal immigrant community and other local users of the Parks. NPEAC's objectives were to advise the CRMP Project Steering Committee¹⁸ and Project Manager, and also to approve the project's conservation funds to ensure that communities were part of the project cycle. Meetings were currently held once per month but it was expected that after the initial teething period they would be quarterly. Actions from meetings were reported as recommendations to the Permanent Secretary of the Ministry of Environment and Natural Resources who would then enforce them. The Committee was still in its infancy and had had some problems. For example, the representative from the Watersports Association had recently resigned, as he hadn't felt the meetings were organised enough.

2.3 Opportunities and constraints of management as perceived by implementing organisations

In this section positive and negative attributes of management are those cited by the 'service providers' themselves (e.g. CRMP, TCNT, DECR). Those perceived by members of the local community ('service users') are presented later in section 2.10.

¹⁷ Rory Robinson, Chairman NPEAC

¹⁸ This committee comprised a representative from the Ministry of Finance, and the TC National Trust and was chaired by the Permanent Secretary of the Ministry of Natural Resources

2.3.1 Strengths and/or opportunities recognised by PALSNP staff and other decision-making bodies

Many of the activities currently underway at the Park had not been in place for that long and so focus was more on the future than on past achievements. It was hoped that activities currently in place would bring benefits in the future and improve the way the Park operated. Particularly important to those in management positions was increasing stakeholder participation and moving towards a system of 'co-management'. The way the Park had been set up was largely criticised and a move towards greater local community involvement seen as one of the greatest opportunities for the future.

2.3.2 Weaknesses and/or constraints recognised by PALSNP staff and other decision-making bodies

Unlike the other case studies in this research, funding did not stand out as the one largest single constraint faced by the Park. It had been an issue (for example for the junior rangers programme) but other issues were considered more of a problem. In particular, the wider social tensions on the island relating to immigration split the current inhabitants of Providenciales, (into 'belongers' and 'non-belongers') and made the task of developing systems of co-management for the park far more difficult. This constraint, and other issues raised by staff, are presented in Table 2-3. As can be seen, other problems cited are diverse but the majority can be split into the following categories;

- Inter-agency 'conflict'
- Personnel problems
- Enforcement problems
- Lack of outreach or local 'community' involvement

Table 2-3 Constraints of management perceived by park staff and other linked organisations

Constraint	Some of problems caused
Extreme social tension caused by wider immigration problem	<ul style="list-style-type: none"> • Lack of cohesive 'community' • Lack of trust and social capital to build on
Overlapping responsibilities & lack of clearly defined roles between implementing agencies	<ul style="list-style-type: none"> • Inefficient use of resources • Confusion & conflict between implementing agencies • Difficulty in setting up proposed National Parks Service
CRMP not always consulted by Planning Department regarding new development	<ul style="list-style-type: none"> • New tourism developments go ahead unchecked
Low motivation of park wardens	<ul style="list-style-type: none"> • Do the minimum work required
Absence of powers of arrest for wardens	<ul style="list-style-type: none"> • Park regulations broken e.g. illegal fishing
Lack of resources for enforcement	<ul style="list-style-type: none"> • Illegal fishing
Lack of Creole speaking personnel	<ul style="list-style-type: none"> • Difficulties in communicating with largely Creole speaking immigrant population
Projects funded by micro-projects not	<ul style="list-style-type: none"> • No yet helping to build interest in, and

Constraint	Some of problems caused
always focused on needs of local communities	commitment to, park management
Previous lack of local consultation and involvement	<ul style="list-style-type: none"> Perception amongst locals ('belongers and 'non-belongers') that Park is not for them
No regulations for beach vending	<ul style="list-style-type: none"> Vendors annoy tourists and have arguments amongst themselves
Lack of funding	<ul style="list-style-type: none"> Young wardens programme stalled

2.4 Identification of stakeholders groups, including the poorest, using, or living in and around, the MPA

At the time of the case study research the only literature available to build up a picture of the extent of poverty and livelihood options for poorer groups living in and around PALSNP was a Standard of Living report (poverty assessment) for the Turks & Caicos Islands produced by Kairi consultants for the government (Kairi, 2000). Some results from this report are presented below. In addition to this, the full complement of CRMP staff worked together to develop a profile of park 'users' and their relative socio-economic status and results of this activity are also presented Table 2-6.

Table 2-4 shows the extent of poverty in Turks & Caicos Islands¹⁹.

Table 2-4 Extent of poverty in Turks & Caicos Islands (Kairi, 2000)

	% of total TCI population poor	% of particular island poor
All Turks & Caicos Islanders	26% individuals (3.2% extremely poor) (18% households)	
Providenciales	30.9%	15.3%
Grand Turk	38.5%	32.8%
South Caicos	21.6%	45.2%

As can be seen, within the Turks and Caicos Islands as a whole, 18% of all households were considered to be poor, though much less (3.2 % of individuals) were considered 'extremely poor'. Whilst, having the least % of their total population being poor, Providenciales, owing to its larger total population size, still contained just under 31% of the country's poorer individuals. Table 2-5 shows the nationalities of those considered to be in the poorer groups.

Table 2-5 % Nationalities of poorer groups within Turks & Caicos as a whole (Kairi, 2000)

Nationality	% of the poor (proportion of this nationality poor)
TC Islander	49.5 % (25.7%)
Bahamian	1.7% (26.5%)
Haitian	38% (33.1%)
Dominican Republic	3.4% (25%)
Other	7.4% (12.8)

¹⁹ Definitions of poverty were those that were said to be standard in the literature. Four key poverty measures were used. These were the Head Count Index, The Poverty Gap, the FGTP₂ and the Gini Ratio. For more details see Kairi (2000, Vol. 1, p.5).

NB. Many of Haitian immigrants lived outside household setting and were therefore not captured by these statistics.

Surprisingly, given comments of respondents during our research, almost 50% of those considered to be poor were TC Islanders. This was surprising as most respondents had reported that it was the Haitians and Dominican Republicans who made up the poorest sectors of the community. Given that the figures in the table are for the whole of TCI not just Providenciales (and respondents were talking about the latter), it is possible that the % compositions varied greatly between Providenciales and other islands. Another possibility for the difference of opinion was that many of the Haitian immigrants (particularly illegal ones) lived outside of the household setting and therefore were not captured by these statistics. This suggested that the true nature of poverty on the islands was not entirely captured by these figures. However, given the figures above, it appeared that contrary to public perception, issues of poverty on the islands were not just related to the immigrant populations.

No statistics or literature could be found regarding the employment status and occupations of these poorer groups. However, information on this was provided by the CRMP staff and by a Haitian pastor. The pastor, whose church was adjacent to the PALSNP discussed the make up of his Haitian community and the problems they faced.

According to him, the major problem was getting work permits and the pastor estimated that 50% of his congregation were unemployed due to work permit problems. The problem was that if you didn't have a permit, you couldn't work, and if you weren't a resident you had to apply for a work permit every year. Whilst in previous times, after 10 years it had been possible to apply for residency, the Pastor suggested that now, permits and in particular residency, were much more hard to come by. There was no doubt that immigration was considered a huge problem on the island and stricter policies had been brought in to try and control it. The pastor estimated that at one stage boats were landing each night with 80-100 immigrants at a time.

Even without permits (which were relatively costly) many of his congregation took a chance and worked anyway. It was not clear what percentage of immigrants in his congregation, and the island in general, were working illegally. Jobs that his congregation worked in included the construction industry, hotel work, painting and masonry, gardening and tailoring. Those in the construction industry, maids and gardeners were, he considered, the worst off. Whilst many of the Haitians were skilled, permits for skilled jobs were even more costly and therefore most stayed in unskilled work. Some jobs required Turks and Caicos citizenship and examples given were fishing and nursing.

Table 2-6 shows the results of a group session with CRMP staff who developed a socio-economic profile of local inhabitants in and around the park. Respondents were first asked to consider what they thought were the main indicators of poverty and/or wealth. They were then asked to identify skills, opportunities and constraints for the different wealth groups and then suggest occupations/livelihood options that were predominant in the different groups. Finally a star rating system was applied to ascertain which occupations they thought were most impacted on by the park (***) maximum). These results were used to identify priority stakeholder groups for interview (and these groups are *italicised* in the table²⁰).

²⁰ Whilst it was hoped that we would be able to interview individuals and/or groups from all these stakeholder groups, time constraints meant that this was not possible and groups were

As can be seen from the table, according to respondents, poverty was multidimensional, not just relating to lack of capital, productive assets or poor living conditions, but also characteristics causing a lack of *access* to these things (including low education, lack of legal status, language constraints). According to CRMP staff, the main assets of the poorer groups were their traditional knowledge and their resourcefulness, though there was significant debate amongst the CRMP staff as to the extent to which poorer groups possessed these²¹.

Table 2-6 Socio-economic profile of Providenciales as suggested by CRMP staff

Poorer (<30%)	Medium	Wealthier (>70%)
Assets Skills	Assets Skills	Assets Skills
Industrious		Money – collateral
Resourceful		Jobs
Knowledge to be self sufficient (live off land/sea)		Education
Knowledge of local water		Businesses
Local agriculture		Airplanes sets
Early learning of marine & fishing skills		Expensive houses, property
Knowledge/skills of medicinal plants (bush doctors)		
Other opportunities (O)/ constraints (C)	Other opportunities (O)/ constraints (C)	Other opportunities (O)/ constraints (C)
C: large family	C: Legal status	O: Access to bank loans
C: Poor housing (shacks)		O: Good location
C: No, or low, education		C: Class stratification
C: No legal status		O: Access to proper health
C: Poor sanitation		O Access to beach property/ nicer areas/ real estate
C: No access to finance		O: Afford immigration status
C: Lack of transportation		O: Recreational boaters
C: Poor clothing		O: Private, exclusive schools
C: Inability to speak the local dialect		O: Access to decision makers
C: Few educational skills		
C: No insurance (health)		
Jobs/ Livelihood options	Jobs/ Livelihood options	Jobs/ Livelihood options
<i>Hotel staff (maids) **</i>	Park staff *	European investor
<i>Kitchen staff as only occupation **</i>	Tourist Board staff	Canadian investor
<i>Peddler (into vending) **</i>	<i>Vendors **</i>	American investor
<i>Poachers **</i>	<i>Construction workers *</i>	Thompson Cove
<i>Homemakers/ dwellers living adjacent to PALSNP*</i>	<i>Fishermen *</i>	Fish plant operators

prioritised according to socio-economic status, impact and their accessibility. Lists of those interviewed can be found in section 2.12.

²¹ CRMP staff were made up of native islanders and expatriates and the wider disagreements between 'belongers' & 'non-belongers' on the island as a whole were also reflected to a certain extent in the differing opinions of, and arguments between, the CRMP staff.

Poorer (<30%)	Medium	Wealthier (>70%)
Housekeeping in private home	Environmental consultants	Professional Occupations (Accountants, lawyers, doctors, banking)
Shelf stackers	Boat captains **	Water sport operators/owners **
Scavengers (the poorest)	Dive masters	Engineers *
Wash cars	Homemakers/ dwellers living adjacent to PALSNP*	Building & real estate businesses*
Weeding		Tourism** (hoteliers, airline owner)
		Money launderers
		Drug dealers
		Government ministers

2.5 Identified potential benefits and costs to poorer stakeholders

After developing an understanding of, firstly, the PALSNP and its activities and secondly, poorer groups and their use (or potential use) of the marine park area or the services of the marine park staff, it was possible to identify potentially beneficial and non-beneficial impacts on poorer communities. These are outlined in Figure 2-3 and Figure 2-4 respectively. All possibilities, large or small, likely or highly unlikely are listed here. Some of the more important or relevant potential impacts became the objects of further investigation and these are discussed in the remaining sections of this appendix.

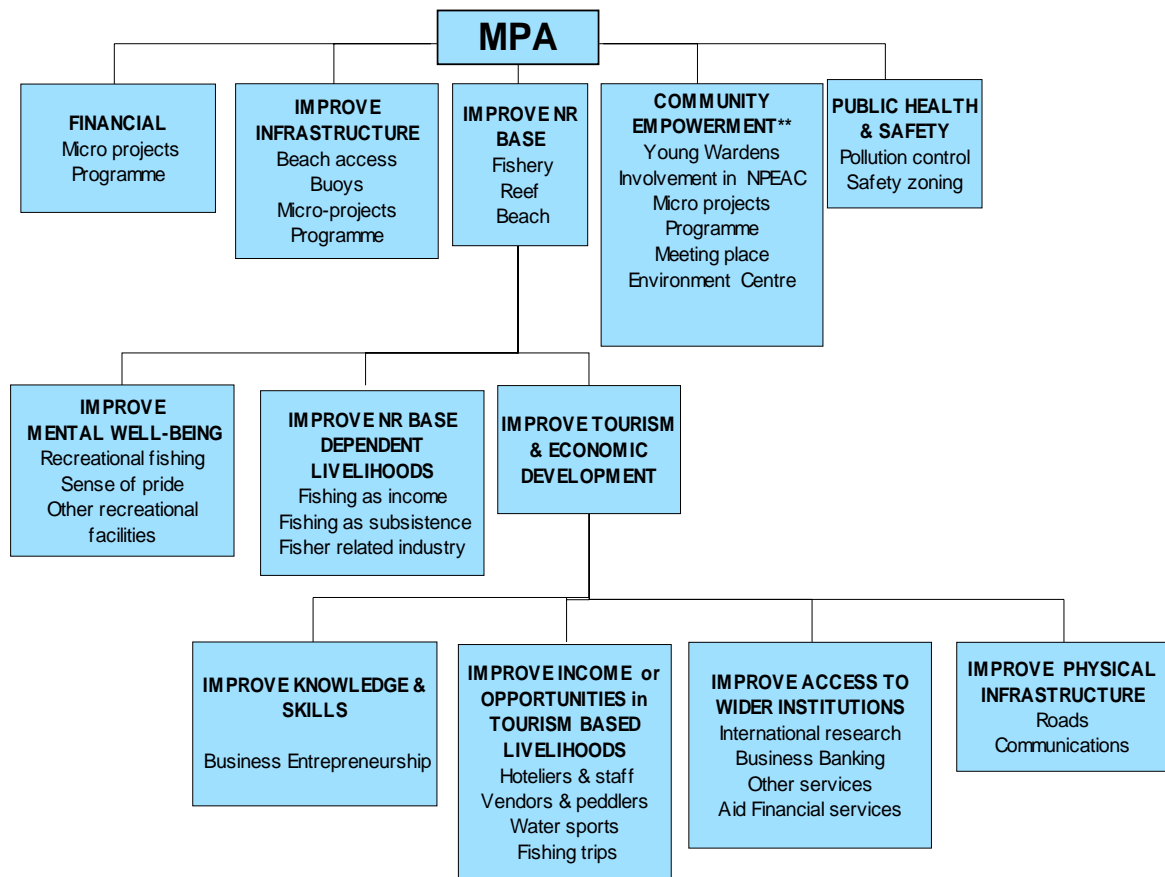


Figure 2-3 Potential beneficial impacts of PALSNP management and services (22)**

²² Empowerment, as meant here, is concerned with capacity building of individuals and the community in order for them to have greater social awareness, to gain greater autonomy over decision-making, or to establish a balance in community power relations. Used here, it covers a range of issues including the following; community access to information and services, community participation, consciousness raising, business and enterprise management skills, reducing conflicts, and gaining control over the utilisation and management of coastal resources.

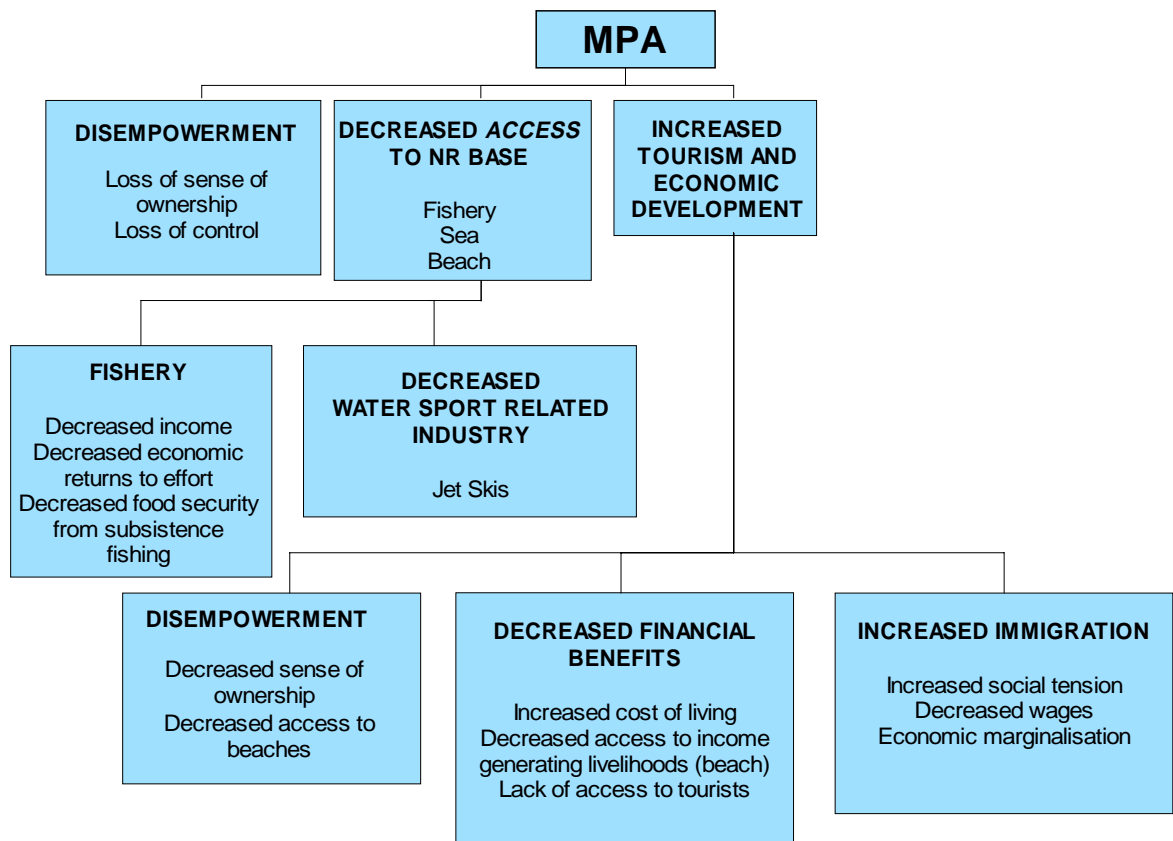


Figure 2-4 Potential costs of PALNSP to poorer groups

2.6 Ecological impacts of PALNSP

PALNSP covers an area of approximately 2,645 hectares (Geoghegan, Smith and Thacker, 2001) encompassing marine and coastal areas with fringing coral reef 0.8-2.4 km offshore and an extensive beach. There was no monitoring programme of coral reef benthos and fish in the TCI (Homer and Shim, 2000) and available historical datasets covered the period of 1988-9 (Operation Raleigh, 1990 cited in O’Sullivan, 2002), 1999 (Manfrino and Riegl, 1999) and some rapid surveys since 2000 conducted by CRMP. The information in this section draws heavily on research conducted by O’Sullivan (2002) during the current project.

2.6.1 Fishery

Little information existed on the state of coral reef fisheries, including commercial, subsistence, recreational and aquarium trade (Homer and Shim, 2000). DECR had data on the grouper and lobster fishery but this was not available. Fish census surveys by O’Sullivan (2002) did not record enough individuals of commercially important species to allow analysis and comparison of the protected and unprotected areas.

2.6.2 Coral reef

There were no long term data sets available to fully investigate impacts of PALSNP since its establishment. In general, 1999 data showed that coral mortality was low (<1%), diversity was high with 37 scleractinian species, and coral cover as high as 30% in places (Manfrino and Riegl, 1999). Results from CRMP surveys in 2000 were comparable and more detailed, recording that hard coral cover was generally between 2-5% and up to 10-30% at a few sites around Providenciales and West Caicos. However, live cover of *Acropora palmata* was found to be significantly reduced by 0-2% in most areas and 5-15% in the best sites, most likely a result of disease (Homer and Shim, 2000). Macroalgal cover in 1999 was also high and recorded at 10-50% in some areas and as high as 70% (Homer and Shim, 2000). Coral bleaching was also noted in areas in 1999-2000 and was associated with popular near shore locations where there is repeated stress from snorkellers through trampling and breakage, especially during low water levels (e.g. Bight Reef) (Homer and Shim, 2000).

Recent research by O'Sullivan (2002) compared a protected site (Sellar's Cut) within PALSNP and an unprotected site (Fort George Cut) outside the Park (refer to Figure 2-2) and data showed that the most dominant benthic cover at the protected site was macroalgae (44%) compared to only 7.6% cover at the unprotected site. As suggested by McClanahan *et al.* (1999, cited in O'Sullivan, 2002), the dominance of macroalgae at the protected site meant that it was more likely to have reduced coral recruitment and reduced fish abundance. Encrusting coralline algae was also significantly higher at the unprotected site (21.6%) than at the protected site (6.8%), which indicated that the reefs are healthier at the unprotected site (O'Sullivan, 2002). These results were in line with stakeholder responses from a questionnaire on observed changes in PALSNP (O'Sullivan, 2002).

2.6.3 Summary

There was a lack of long term data available to enable assessment of ecological impacts of PALSNP. Results from different benthic surveys suggested that there was a decline in health of the coral reef ecosystem as macroalgae cover was high and live hard coral cover had decreased. Research by O'Sullivan (2002) indicated that the site outside PALSNP was healthier than the protected site.

2.7 Importance of PALNSP to the tourist industry

As mentioned at the beginning of this appendix, tourism had replaced the export trade as the major economic industry of the country (Government Visitors Guide, 2001). Providenciales was the most important tourist destination, and the area within PALSNP the principal tourist area. Little information existed on the impact of the park on the tourist industry. However, according to the CRMP Project Manager, tourism was a significant catalyst for the establishment of the National Parks Order of 1992 in the first place, the government recognising the importance of its natural resources for the continued growth and development of the tourist industry (Garland, pers. comm.). There is no doubt therefore that the National Parks (including PALSNP) were expected to play a significant role.

Francis (2002) conducted a survey to assess the impacts of PALNSP on the livelihoods of stakeholders in Providenciales. Data from this survey is presented below, along with results from discussions with individuals and/or groups involved in the tourist industry (for list of respondents see section 2.12).

In his survey of stakeholders involved in the tourist industry, Francis (2001) asked whether stakeholders thought their profession/business had expanded or improved due to the establishment of the Marine Protected Area. The percentages of those who thought they had were quite low with only 30% of the watersports operators (n=20), 38% of hoteliers (n= 8) and 10% of beach vendors (n=11) thinking that this was the case. Whilst not obvious from the other information collected, the fact that tourist numbers had doubled since the Park was established (59,899 in 1993 compared with 117,263 in 1999 (Homer, 2000)) suggests that reasons for these low positive responses was not due to lack of business expansion *per se*, but lack of the Park's role in that.

Given that the Park activities were minimal before at least 1998, (whilst tourist numbers continued to rise) this was not an entirely surprising result. One hotelier spoken to during the research period explained that in the 1996/1997 season, when she had started to work at Club Med, she had not been aware that the area was a National park (Carrier²³ pers. comm) and some of the vendors spoken to only found out it was a National Park 2 months ago.

Despite the small numbers perceiving that PALNSP had had a positive effect on business expansion, according to Francis's survey, the need for an MPA was well supported with 100% of the watersports operators (n=20), 100% of hoteliers (n= 8) and 60% of beach vendors (n=11) in agreement. This suggests that, at the very least, stakeholders saw a role for the Park now, or in the future, to protect the resources on which they perceived the industry depended.

Through discussions with stakeholders during the research period, the overwhelming majority opinion was that tourists came for the sun, the beach and, to a lesser extent, for the watersports. If the Park protected or improved these assets, or facilitated these activities, it was important. Regarding whether park management *had* protected/improved the natural assets of the area, more comments were made about the beaches, which most considered cleaner (less litter, less fish slop) and safer (zones for swimming, no jet skis), than were made about the reefs.

In conclusion, it appeared that stakeholders did not feel that the Park itself had been important to tourism, (in the sense that tourism would have grown irrespective of whether there had been a park or not), but the resources it aimed to protect were crucial and therefore its activities should be supported.

2.8 Impact of PALSNP on poorer groups involved in, or trying to access, the tourism industry

As was seen in the last section, according to opinions in one study, PALNSP had not had a positive effect on business expansion but it was (or would be) important to protect the natural resources on which the industry depended (Francis, 2001).

In the last section, it was suggested that both the reef and the beach were considered crucial assets of the tourist industry and given PALSNP's role was to protect both, its potentially beneficial impact on the tourist industry was substantial.

With the tourist industry came opportunities for employment and from information in 2.4 it was shown that the tourist industry did employ some of those considered to be

²³ Suzanne Carrier, Director of Public Relations at Club Med.

the poorest in the community (including hotel and kitchen staff, some vendors, builders in the construction industry, gardeners). As discussed in section 2.4, unemployment was a big problem amongst certain sectors of the local community and tourism was the principal industry they were trying to get into. This section looks at the views and experiences of both of these poorer groups, those employed and those wishing to be employed in the industry. Table 2-7 summarises potential impacts of PALSNP. The extent to which these had or had not been realised formed the basis of our discussions with these groups. PALSNP could impact specifically on these stakeholders by improving opportunities in the tourism industry. However, it could also affect them more directly as users of the Park area itself, or of the services the management provided. These potential impacts were also considered.

Table 2-7 Summary of potential impacts of PALSNP on poorer stakeholders involved in the tourist industry

Beneficial impacts	Non-beneficial impacts
Improve tourist environment, hence Increased tourism development with advantageous economic or social consequences e.g. <ul style="list-style-type: none"> • Improved conditions, more opportunities for employment • Improved services 	Increased tourism development with deleterious economic or social consequences e.g. <ul style="list-style-type: none"> • Loss of sense of ownership of beach and sea • Decreased access to beaches and sea for own use • Increased costs of living • Too much in-migration and deleterious social consequences of that • Pollution
Community empowerment, Reduction in conflicts between park users	Increased conflict between users of park
Improved knowledge and skills	

Interviews were held with vendors, hotel and kitchen staff, builders from the construction industry, and individuals from the local Haitian community in, or wishing to be involved in, the tourism industry. Both ‘belonger’ and ‘non-belonger’ populations were interviewed. All were asked about their personal use of the Park as well as the extent to which they thought it had benefited the tourist industry and themselves.

2.8.1 Impact of PALSNP on income or opportunities within the tourism sector

In general the Park was not a big issue for most interviewed. Some were not aware that it was a National Park, though almost all were aware of some of the regulations for that area, including, in particular, the ‘no fishing’ regulation. In contrast, tourism was a big issue, but explicit links between tourism and the Parks role in that were not made – a more common response being that *if* it was good for tourism then it was a good idea. What was important for tourism was clean beaches and a good reef, but again the Park’s role in that wasn’t recognised suggesting that the Public Awareness Programme still had not reached these sectors²⁴. Unsurprisingly, given these

²⁴ This was in stark contrast to a user survey conducted by Best which found “relatively high users knowledge of the Park” (Best, 2002 p.101), indicating the effectiveness of the ongoing public awareness campaign. The difference may be due to the different stakeholder groups

opinions, most interviewed did not feel that the park impacted either positively or negatively on their opportunities in the tourism sector.

However, there were opinions on what did and these differed between the 'belongers' and 'non-belongers', reflecting the differing circumstances the different groups found themselves in.

The problems that immigrants to the Turks & Caicos had with work permits were described in section 2.4. These problems had two effects. Firstly they greatly restricted the work these individuals could do within the tourism sector and secondly, according to some in the construction industry, kept them employed at low wages. This was said to be because employers were able to threaten non-renewal of work permits if they were not happy with wages and, given the desperate situation with work permits, there were plenty of other immigrants who would step in.

Whilst native islanders did not have problems with work permits, their situation was also difficult. According to those native islanders interviewed, particularly in the construction industry (who were the most vocal and critical of all interviewees), the presence of a large and cheap immigrant labour force on the island drove wages down and made many of the lower level jobs in the tourism industry not financially viable. On the other hand, whilst there were no legal restrictions on what they could do, the ability of local islanders to benefit directly from the tourist industry by, for example, setting up their own small business ventures (restaurants, shops, stalls) was severely hampered by the all-inclusive nature of the vast majority of hotels on the island, which kept the tourists in the hotels, and their money in the hands of the predominantly expatriate hotel owners.

There appeared to be a great frustration for the native islanders spoken to that they were not getting the benefits due to them and were being squeezed out by 'non-belongers' both at the top and bottom ends of the industry. This frustration manifested itself in the extreme social tensions, and in many cases, overt racism between groups.

2.8.2 Impact of National Park on personal use of designated area

Where the Park, or its regulations, were most felt to affect those involved in the tourism industry was in their personal use of the Park area.

Uses of the Park, trends in use and reasons for trends are outlined in Table 2-8. In all interviews, individuals themselves or members of their households, had, at some time or other used the park area for recreational activities (e.g. volley ball, swimming, family days out, beach parties) and/or subsistence fishing.

As can be seen, with the exception of one response, use of the Park area had lessened. This was either due directly to Park regulations (in the case of fishing and cook-outs) or because the interviewees did not feel that the area was for their use. It appeared that this view was positively encouraged by some of the hotels, who, despite the fact that the area was public and open to all, had security guards who asked the locals to leave the beach areas. This was most obvious when interviewing members of a Haitian congregation, who were very surprised to hear that the Park was a public area.

questioned, with the survey by Best comprising interviews with those involved in watersports operations, teachers, students, hotel employees and tour companies

Table 2-8 Uses of park by poorer stakeholder groups

Use	Who	Trend in use	Reason
Beach sports (e.g. volley ball/ swimming)	Haitian construction workers	No longer use	Go to areas outside Park. Park area full of hotels and for tourists
	Non-native hotel workers	Very rarely used area, but more likely to go there now	More hotels and activities now
	Native construction workers	Much less now	Go to areas outside Park. Park area full of hotels and for tourists
	Non – native construction workers	Vary rarely used	Not close to where they lived
Cook outs & beach parties	Native island hotel staff	No longer used area	Park regulations
Subsistence fishing	Haitian congregation	No longer fished there (and bought fish instead) but knew that poaching occurred Stopped fishing.	Park regulations
	Native island hotel staff Native construction workers	Implied that some of them still fished and that there was a lot of poaching in the Park	
Beach Parties	Native island hotel staff		
Group outings (e.g. church meetings, school trips)			
General	Members of Haitian church group	Not as much now	Hostility Told to leave beach areas by hotel security

Use of the park area had diminished but feelings on the matter were not running high with most accepting it and, again, saying that if it was good for tourism then it was not a problem. The issue of fishing was a slight exception in that some, and in particular the native islanders, felt that locals should be allowed to fish in the area for their own consumption. It was suggested that many still did and there was no sense amongst interviewees that those who did would suffer any sort of social sanctioning from their community. The only other opinion on the Park with respect to personal use was that one group felt that the Park management should develop the area more for local use, and provide more local facilities.

2.8.3 Other impacts of PALSNP

As can be seen in the sections above, opinions on the Park were not strong with many believing it had minimal impact, positive or negative on their livelihoods at all. With a substantial number knowing about individual regulations but not knowing about the Park as a whole, awareness of the Park, its objectives and its role was low in this sector generally, and as already mentioned, much lower than for the stakeholders interviewed in other studies (Best, 2002). The lack of coverage of these sectors in the Public Awareness Programme had already been recognised by the National Trust and how they hoped, in part, to address it was mentioned in section 2.2.2.1.

No other impacts of the park regulations or services were mentioned by those interviewed from this sector.

2.9 Impact of PALSNP on fishers

The potential beneficial or non-beneficial impacts of PALSNP on fishers, as developed by the project team were presented in section 2.5. These frameworks guided the project team in discussions with fishers. This section looks at the opinions of fishers with regards the impact the reserve had had on them, and the opportunities and/or constraints it had presented. Firstly, it describes the nature and extent of fishing practices in and around the reserve.

2.9.1 Fishing practices in and around PALSNP

Only one of the fishers interviewed (total of 6 interviews with 10 fishermen) reported to have ever fished in PALSNP, though four of the interviews were with Haitians, none of whom had been on the island for more than 5 years. The fisher who had fished in PALSNP stopped when he got caught and fined for doing so (\$250) in, he said, 1986. He had never fished there again.

Those interviewed went fishing from the South side of Providenciales, travelling to the Banks and Sand Spit (towards South Caicos), and South Point (towards West Caicos). Reasons for not fishing in PALSNP, except in one case, were not to do with the regulations there (in fact the Haitian fishers interviewed said they didn't know about the Park or the regulations), but because it just wasn't where they fished. Interviews were held at the Five-Cays fish Plant but it is not clear whether going to an alternative landing site would have revealed different fishing practices (in terms of location).

Whilst none fished in PALSNP, in two of the interviews fishers said that they often saw fishing boats and divers in the Park in the early morning and late evening. The Native islanders, whilst saying that these were predominantly Haitians,²⁵ (fishing without permits and licenses) said that native islanders also fished there.

The principle fishing methods on the island were diving (using a Hawaiian sling as opposed to a spear gun which was banned) and traps. Fishing was for lobster, conch and, to a lesser extent, finfish. We were unable to get estimates of the number of fishers on the island. Both lobster and conch had closed seasons, the first from 1st August to end March, the second beginning April until the end of July. Permits were

²⁵ This observation may have reflected tensions between native and non-native islanders as much as it did the identity of the poachers.

required for a boat and fishers also required licenses, though licenses were not required for recreational fishing (up to 10lb). It was possible to get day licenses as some fishers complained that non-fishermen got day licenses for the starts of the lobster and conch fishing seasons and this they saw as unfair.

2.9.2 Impact of park management on the fishery, and through this fishers' livelihoods

None interviewed had an opinion on this²⁶, not that unsurprising given that many did not even know of the Park's existence. Those that did, had not seen any spillover (though they didn't fish in those parts anyway) though they could see the potential for it. The park therefore had not impacted on the lives of those interviewed at all in this respect. The only impact mentioned was that of the fisher who used to fish in PALNSP, who said that now he had to go further than before and that was more expensive. However, this seemed more of an inconvenience than a major constraint, and, in his opinion, was offset by the tourism benefits of the Park.

In fact, more information was obtained from native island construction workers (who reported that it was possible to find big fish there) on the status of the fishery in the Park!

2.10 Opinions of park management as perceived by poorer communities

It would be true to say that, of all the sites, there were fewer opinions of Park management here than any of the other case study sites and this could have been for a number of reasons. Firstly, the awareness of the Park and its activities was not high amongst those we interviewed (identified as being in 'poorer' occupations), suggesting that the public awareness campaign had not yet reached these groups. Secondly, given the social tensions on the islands, the immigrant populations (mainly Haitian but also from the Dominican Republic) may not have felt comfortable giving opinions for fear of some kind of reprisal (or just because they were just not used to doing so).

The general opinion was that the Park was a good idea but that the issues presented in Table 2-9 should be addressed. Lack of patrolling and enforcement was the most widespread and perceived to be the most significant.

Table 2-9 Constraints of park management as perceived by local 'users'

Constraint/weakness	Impact	User group
Lack of patrolling and enforcement	Poaching Beach not as clean as should be Hustlers hassling tourists	All groups Hotel staff Vendors
Lack of facilities for locals (children's areas/ picnic tables) Banning jet skis	Locals not able to use beaches	Hotel Staff Vendors
Fishing regulations	Stop catching fish for subsistence purposes	Construction workers Peddler

²⁶ Or, at least, one that they were willing to share. It should be noted that the Haitian fishers were very nervous and cautious about speaking to us.

2.11 Summary

This section is split into four parts: ecological outcomes of resource management;; the benefits, or lack of benefits that the MPA brings the local community, specifically poorer groups and the extent to which these might be affecting management effectiveness; and finally factors believed by *staff* to be affecting management effectiveness.

Whilst scientific data to assess ecological impacts of MPA's was limited at most of the case study sites, it was particularly so at PALNSP. The complete lack of long term data or historical data made assessment particularly problematic. Whilst fisheries data was collected by the fisheries department and had been for some time, it was not available for analysis. It was therefore not possible to make any scientific assessment of the status of the fishery.

There was more evidence concerning the status of the reefs and all evidence pointed to there having been deterioration in reef condition (McClanahan *et al.* (1999), Homer and Shim (2000)) and that its condition was worse than that of reefs in an unprotected site (O'Sullivan (2002)). Results from different benthic surveys suggested that macroalgae cover was high and live hard coral cover had decreased. Coral bleaching was also noted and was associated with popular near shore locations where there was repeated stress from snorkellers through trampling and breakage, especially during low water levels.

In terms of benefits that the Park brought to the local community, particularly the poorest groups, perceptions were that this was minimal. Whilst all saw the importance of tourism, less appreciated or saw the Park's role in this, certainly in the past. This was the case with poorer groups and with the principal benefactors/users of the Park area (hoteliers, watersports operators, vendors). In fact among the poorer groups, whilst many were aware of individual regulations within the Park area (particularly those relating to fishing), many were not really aware that it was a National Park at all. Public awareness was still therefore relatively low at this level, though there was evidence from other studies that it was higher amongst other stakeholder groups. Those interviewed saw the hypothetical benefits of the Park suggesting that it was good *if it* protected the natural resources (beach and reef) on which tourism depended.

Whilst benefits of the Park were low, costs to the local community were also considered low, or at least offset by the benefits that tourism brought. For example, whilst personal use of the Park area had declined as tourism developed, this was considered a price worth paying (though many did not realise that it was not a price they should be paying with the beach area being public and therefore open to all). The ban on subsistence fishing was thought unreasonable by some (though not the commercial fishers who had little opinion on this) but there was an indication that this activity was still continuing to a certain extent anyway.

Rather than the Park, people's principal concerns were their lack of access to, or low benefits from, the tourist industry that the Park was aiming to protect. For 'non-belongers' this was linked to an inability to get work permits and being paid extremely low wages. For the 'belongers' it was related to being squeezed out of the lower end of the market by the availability of cheap 'non-belonger' labour and at the higher end by the all-inclusive nature of the vast majority of hotels on the island, which kept the tourists in the hotels, and their money in the hands of the predominantly expatriate hotel owners.

With regards the effect that these benefits and costs were having on management effectiveness, they may be correspondingly minimal. An important question is the extent to which illegal fishing is still occurring and the impact that might be having on the fishery. Answers to both questions are unknown. The lack of impact on management effectiveness is less to do with peoples' agreement and compliance with regulations and more to do with the lack of impact their use of the Park has on the Park. It seems that the total ban on fishing was acceptable to commercial fishers as this was not a prime fishing spot (not at least for those we interviewed) and therefore compliance was not an issue. Given the non-consultative manner in which the fishing regulations were set up, and the fact that the restrictions were total, it is likely that there would have been considerable problems if this had not been the case.

Ecological deterioration was linked in some instances to damage by snorkellers, suggesting that tourists were not being adequately educated on reef 'etiquette' or that their activities were not being monitored or enforced. It is possible that such damage may also have been related to illegal fishing activities. What is clear is that whilst impacts on management effectiveness may have been minimal, opportunities for *improving* management effectiveness through the involvement and interest of the local community were also minimal. Monitoring and enforcement were considered key problems by staff but in the current climate there was no possibility that the communities would play a role in monitoring or self-enforcement. The Park and its activities seemed to them none of their business and there was no reason to be involved. This lack of a sense of ownership of the resources being protected may be in part a result of the fact that throughout the history of the Park, the local community had rarely, if ever, been consulted on its operation. This was something that the current Park management recognised as a significant constraint and involvement of the local community was now seen as a principal management aim (leading towards co-management), with several initiatives to develop it underway.

Other constraints recognised by the park fell into the following categories: inter-agency 'conflict'; personnel problems; enforcement problems; and, as already mentioned, lack of outreach or local 'community' involvement. Surrounding these problems were the wider social tensions on the island relating to immigration, which split the current inhabitants of Providenciales, (into 'belongers' and 'non-belongers') and apart from anything else, made the task of developing systems of co-management for the park far more difficult. Funding, whilst there were some issues, was not considered the fundamental problem it was perceived to be at the other case study sites, and in fact funding through the accommodation tax was considered a significant success.

Ecological evidence at Princess Alexandra Land and Sea National Park points towards a need to improve the enforcement of existing regulations regarding tourist and fishing activities. Up until recently, management had occurred without the involvement, and in some cases even the knowledge, of the local community. Investing in them, and increasing their sense that these resources are an important part of *their* future may be a means whereby socio-economic and ecological benefits can be mutually re-enforcing and improved.

2.12 List of respondents

The tables below detail the individuals and groups spoken to during the field study research.

Table 2-10 Interviews with park management and other relevant organisations/ bodies

Respondents	
CRMP staff	Individual and group interviews with all project staff <ul style="list-style-type: none"> • Project Manager • Chief Warden • Wardens • Scientific Officer • Co-management specialist
National Trust	<ul style="list-style-type: none"> • Executive Director • Education Officer
DECR	<ul style="list-style-type: none"> • Enforcement Officer
Involved in education programme	<ul style="list-style-type: none"> • Club Med PR Officer
NPEAC	<ul style="list-style-type: none"> • Chairman • Jet Ski operator

Table 2-11 Interviews with poorer communities working in and around the Park

User group	Interview
Fishers & fish processors / vendors	6 interviews with total of 10 fishermen
Craft Vendors	4 interviews with total of 5 vendors
Hotel Staff	2 group interviews (1 native islanders, 1 non-native islanders) with a total of 23 people
Construction workers	4 group interviews (2 native islanders, 2 non-native islanders) with a total of 21 people
Local Haitian community	<ul style="list-style-type: none"> • Interview with church pastor • Group interview with Haitian congregation members (10 people) • Interview with housewives (2 people)

Table 2-12 Participants at presentation and discussion session

Role	Name
Ministry of Natural Resources	Permanent Secretary Under Secretary
DECR	Mark Day
Scientific Officer CRMP	Michele Taylor
Rangers	Delroy Glinton, Galvin Hall, Gregory Hutchinson
Education Officer National Trust	Gigi Williams
Manager PANLSP	Judith Garland
Co-management specialist CRMP	Robert Wilde

2.13 References used during case study research

Anon (2001) *Turks and Caicos National Trust – Review for the Year*. Providenciales, Turks and Caicos National Trust: 1

Anon (2001) *Visitors map & guide - Providenciales 2001*. Olympia Publishing company, Town Centre Building, Providenciales, TCI, BWI.

Best, M. (2001) *A review of legislation, policy and institutional arrangements, assisting or constraining, the implementation of Marine Protected Areas in Dominica and the Turks & Caicos Islands*. Draft MSc thesis, University of West Indies, Barbados.

CRMP (1998) *Coastal Resources Management Project – Managing the National Parks system of the Turks and Caicos Islands*. Department of Environment and Coastal Resources: 4

Francis, S. (2002) *An assessment of the Impacts of two successfully implemented MPA's on the livelihoods of stakeholders in Jamaica and the Turks and Caicos Islands*. Draft MSc. University of West Indies, Cave Hill, Barbados.

Garland, J. (1996) *Willingness to pay survey*. MSc Thesis dataset. Natural Resources Management Unit, Cave Hill, University of West Indies:73-74

Geoghegan, T., Smith, A., Thacker, K. (2001) *Characterisation of Caribbean Marine Protected Areas: an analysis of ecological, organisational, and socio-economic factors*. CANARI Technical Report No. 287. July 2001 Prepared for DFID NRSP LWI Project R7976.

Homer, F. (2000) *Management plan for the Princess Alexandra Land and Sea National Park 2000-2004*, Providenciales, Turks and Caicos. Ministry of Natural Resources, Coastal Resources Management Project.

Homer F. and Shim, D. (2000) *Status of Coral Reefs in the Turks & Caicos Islands. An overview for the Global Coral reef Monitoring Network*. Typescript

Kairi (2000) *Review of the country poverty assessment report of the Turks and Caicos Islands*. National Seminar, Turks & Caicos

Kairi (2000) *Standard of living report (poverty assessment) – Turks and Caicos Islands*, Trinidad, Kairi Consultants Ltd. 163pp.

Manfrino, C. and Riegl, B. (1999) *Preliminary results from the Turks and Caicos Islands Reef Assessment*. Typescript.

O'Sullivan, C.H. (2002) *A preliminary assessment of the ecological impacts of two marine protected areas in the wider Caribbean*. Draft MSc Thesis. UWI, Cave Hill, Barbados.