



The Government of The Bahamas



**The Ministry of Agriculture & Marine Resources:
Department of Marine Resources**

**FINAL
Five Year Sector**

Strategic Plan

2010-2014

February 2010

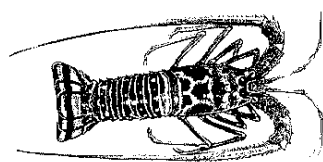




Figure 1. Chart showing The Commonwealth of The Bahamas.

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A draft report was reviewed at a Fisheries Stakeholders Meeting in Nassau, Bahamas on February 3-4, 2010. Comments have been incorporated into this final report. The agenda and list of attendees are attached.

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1. Broad Sectoral Policy & Strategy for Fisheries & Aquaculture

General Fisheries Policy

Government policy presently reserves the commercial fishing industry, as far as is practical, for the exploitation by Bahamian Nationals. Only commercial fishing vessels that are 100% Bahamian owned are considered Bahamian and therefore allowed to fish within the country's Exclusive Economic Zone (EEZ). No fishing treaties have been established with any foreign states and fishing by foreign commercial fishing vessels has been prohibited. Seafood processing facilities have been placed on the list of areas specifically targeted for overseas investors. Further, all investment projects with non-Bahamian interest must have the approval of the Government's National Economic Council (NEC).

2. Sector Profile – Key Indicators

2.1 Contribution of the Fisheries & Aquaculture Sector to the National Economy

Table 1: Sectoral Performance Indicators					
PERFORMANCE INDICATOR	2008	2007	2006	2005	2004
NATIONAL GDP (US Dollars)	\$7.21 Billion	\$7.33 Billion	\$7.28 Billion	\$6.98 Billion	\$6.60 Billion
FISHERY GDP=2%-3% of National GDP	\$144-\$216 Million	\$147-\$220 Million	\$146-\$218 Million	\$140-\$209 Million	\$132-\$198 Million
EMPLOYMENT LEVEL (# of persons)*	9,300	9,300	9,300	9,300	9,300
VALUE OF EXPORTS (US Dollars)	\$82,112,262	\$91,174,892	\$96,477,301	\$97,620,052	\$94,806,825
IMPORTS (US Dollars)		\$11,282,612			
EXPORTS (US Dollars)	\$5,375,403	\$5,670,740	\$5,815,387	\$6,487,602	\$6,694,447
FOOD IMPORT DEPENDENCE (Net IMPORTS in US Dollars)		\$5,611,872			

*Employment level is from 1995 Fisheries Census.

Note: Currently the aquaculture sector does not produce any significant quantity of product.

2.2 The following are the main Factors impacting on the Sector's overall performance:

(Note: The following list is based on consultations with various government officials and stakeholders. Many scientific studies, working group reports, and briefing papers were reviewed and information has been extracted from a number of these documents.)

- (1) **Market Access Issues** - food safety issues have already been addressed but effort needs to be continually expended to ensure no problems arise. More recent issues include:
 - (a) **Illegal Unreported and Unregulated (IUU) fishing** - continued access to seafood markets in the EU requires, *inter alia*, that The Bahamas be able to demonstrate that it is dealing with IUU fishing issues in a manner that meets internationally accepted standards.
 - (b) **Eco-labeling** - "Over the past decade eco-labels and related certification have become a feature of international trade and marketing of fish and fish products. Eco-labels are a market-based mechanism designed to provide incentives for more sustainable fisheries management by encouraging buyers, from large scale retailers to individual consumers, to only purchase fish and seafood certified as having come from a sustainable fishery. Commitments to sustainable fish sourcing have become increasingly common in the procurement strategies and corporate social responsibility strategies of large-scale retailers and commercial brand owners. (Source: FAO Roundtable on Eco-Labeling and Certification in the Fisheries Sector, April 2009.)" Some current customers of major Bahamian spiny lobster exporters are insisting on such labeling/certification beginning in 2011.
- (2) **Lack of biological, economic, and social data.** Lack of biological data prevents completion of stock assessments and will require more conservative catch specifications which could put unnecessary restrictions on the fishing sector. Economic and social data are necessary to evaluate the impacts of existing and proposed regulations, as well as, to understand the social well-being of the fisheries sector.
- (3) **Lack of adequate enforcement.** Lack of enforcement is negatively impacting the spiny lobster, grouper, snapper, and conch fisheries. Illegal Unreported and Unregulated (IUU) fishing by foreign commercial vessels (e.g., Dominican Republic), foreign recreational vessels (e.g., U.S.), and Bahamian vessels/fishermen is a growing problem.
- (4) **Lack of adequate human & financial resources:**
 - (a) **The Department of Marine Resources** currently lacks adequate resources to meet existing much less the increasing demands (e.g., data collection, certification of wild fisheries, international agreements, research for major fisheries, establishment of marine reserves, and stock assessments).

- (b) **Crew members** - vessel owners/captains report difficulty in finding sufficient Bahamians with the necessary training and willingness to work as crew; it is also difficult to retain crew members. Employment of individuals from the Dominican Republic is viewed negatively by some.
- (5) **Lack of adequate regulations.** Protection of spawning aggregations needs to be expanded to cover species other than Nassau grouper (e.g., other groupers and snappers). Adequate closed areas (marine reserves) are necessary for conch to reach a sufficiently high density level necessary for successful reproduction to occur. Caps on total harvest by species are lacking, as well as the regulations necessary to limit landings/mortality to the specified caps (e.g., size/bag/trip limits and closed seasons/areas). Additional regulations are necessary to improve data for use in stock and socio-economic assessments.
- (6) **Invasive lionfish.** The Pacific Lionfish was first reported in The Bahamas in 2004. Lionfish are now found throughout the Bahamas and the Caribbean and represent a major threat to the Bahamian ecosystem. Lionfish eat commercially important species such as spiny lobster, groupers, and snappers. They also eat ecologically important species such as parrotfishes and other herbivorous reef fishes which are crucial for preventing seaweeds from overgrowing corals. Lionfish impacts on tourist recreational activities have been observed (e.g., signs warning of lionfish presence).
- (7) **Lack of aquaculture policy.** There is no clear government policy or legal framework for the aquaculture sector and this has limited growth. There is activity ongoing to raise cobia, tilapia, and sponges at the Cape Eleuthera Institute and a grow-out facility for shrimp in Freeport.
- (8) **Public education, consultation, and outreach.** Public education is needed to ensure that when consulted, the public responds in a timely manner. Now it appears that only those who feel adversely impacted respond and usually after the fact. The recent issues surrounding the prohibition on harvest of sea turtles indicate a more formal method of communicating with the public is necessary (e.g., web site, Environmental Impact Assessment (EIA) process and public involvement, open public process, etc.).
- (9) **Marine Reserve Network/National Marine Parks.**
- (a) The Department of Marine Resources (DMR) will continue its work to establish a Network of Marine Reserves throughout The Bahamas. Efforts related to the implementation of management plans in the first 5 of the Reserves and the establishment of their respective boundaries will be made. Efforts to ensure the integrity of the Reserves once formally

established will also be made through public education and active enforcement of the regulations/rules governing such sites.

- (b) The DMR will continue to work with the Bahamas National Trust (BNT) to implement the Master Plan for The Bahamas National Protected Area System. The Nature Conservancy is an important partner working with the DMR and BNT to meet the requirements of The Caribbean Challenge and the UN Convention on Biological Diversity. The Caribbean Challenge is an unprecedented commitment by Caribbean governments to build political support and financial sustainability for protected areas in the Caribbean. The UN Convention on Biological Diversity established a target of 10% of the area protected by 2010 (land-based) and 2012 (marine-based) for all state parties to protect marine and land ecosystems. The Bahamas is applying the 10% target to the total shelf edge area within the Bahamas. The Government of the Bahamas is committed to the orderly expansion of the national park system and is committed to meeting the 2010 and 2012 targets.

2.3 The Major Fisheries Based Industries are:

Table 2: The major fisheries-based industries in The Bahamas

Major Industries (i.e., Commodity or Product)	Criteria for Importance
A. Spiny lobster tails	<i>quantity/value landed and exported; contribution to GDP; employment</i>
B. Snappers	<i>quantity/value landed; employment; food security</i>
C. Conch	<i>quantity/value landed and exported; employment; food security</i>
D. Nassau grouper	<i>quantity/value landed; employment; food security</i>
E. Other groupers	<i>quantity/value landed; employment; food security</i>

2.4 The performance of the TOP THREE FISHERIES for the past three years are summarized in Table 3a. Landings and exports by year are shown in Tables 3b and 3c.

Table 3a: Top three fisheries for the past three years (Source: Tables 3b & 3c from DMR.)

INDUSTRY	PERFORMANCE INDICATOR	LAST YEAR (2008)	TWO YEARS AGO (2007)	THREE YEARS AGO (2006)
A. Spiny Lobster tails	VALUE OF PROD'N (US Dollars)	\$60,095,719	\$70,366,282	\$74,058,891
	LANDINGS (POUNDS)	5,063,070	5,109,225	6,817,098
	VALUE OF EXPORTS (US Dollars)	\$77,525,063	\$86,653,670	\$92,188,676
	QUANTITY OF EXPORTS (LBS)	4,569,046	4,943,546	5,218,060
	IMPORTS (US Dollars)		40,396 lb/\$130,310	
B. Snappers	VALUE OF PROD'N (US Dollars)	\$4,559,114	\$2,848,370	\$4,261,945
	LANDINGS (POUNDS)	2,062,396	1,252,328	1,831,163
	QUANTITY OF EXPORTS (LBS)		21,700 lb/\$77,450	
	IMPORTS (US Dollars)		6,481 lb/\$26,672	
C. Conch (frozen)	VALUE OF PROD'N (US Dollars)	\$6,311,977	\$3,051,282	\$6,607,886
	LANDINGS (POUNDS)	1,890,426	834,751	1,875,329
	VALUE OF EXPORTS (US Dollars)	\$2,048,872	\$1,546,125	\$1,558,185
	QUANTITY OF EXPORTS (LBS)	362,300	267,200	249,050
	IMPORTS (US Dollars)		120 lb/\$224	

Note: (1) Imports of spiny lobster and conch are low; exports and imports of snappers are very minor. As a result figures are only shown for 2007. (2) Conch landings in 2007 were low due to 3 hurricanes that year and it is felt that landings were missed in the existing data collection program.

Table 3b: Commercial landings by year

Table 1. TOTAL BAHAMAS FISHERY PRODUCT LANDINGS: 1997 - 2008

YEAR →	1997		1998		1999		2000		2001		2002		2003		2004		2005		2006		2007		2008	
PRODUCT	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)	LBS.	VALUE (\$)
<i>Crawfish Tails</i>	5,674,127	58,669,158	5,478,508	53,364,247	6,026,508	62,592,798	6,622,733	70,518,489	5,172,831	56,119,063	7,356,885	81,356,956	7,625,120	80,591,058	6,780,450	72,438,144	6,817,098	78,058,891	6,066,309	74,732,830	5,109,225	70,366,282	5,063,070	60,095,719
<i>Crawfish Meat</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,041	16,275	1,155	8,078	21,737	233,412	16,896	165,849	35	208
<i>Crawfish Whole</i>	167,069	677,628	215,144	776,233	51,327	221,908	24,550	102,096	6,044	37,317	500	4,000	2,774	9,659	193,248	1,684,734	24,516	213,523	19,737	153,361	39,586	418,715	6,839	60,545
<i>Crawfish Heads</i>	0	0	0	0	0	0	0	0	1,883	942	349	175	189	19	0	0	3,989	4,671	3,090	1,545	2,716	1,358	2,152	1,250
<i>Conch (frozen)</i>	1,428,745	2,942,065	1,477,374	3,651,628	1,040,307	2,619,768	1,469,783	4,412,067	1,468,196	4,382,838	1,152,951	3,031,766	1,365,844	4,071,187	1,278,648	3,741,972	1,506,473	5,283,912	1,875,329	6,607,886	834,751	3,051,282	1,890,426	6,311,977
<i>Stone Crab</i>	92,801	658,967	85,126	609,001	109,599	680,894	101,351	810,278	104,085	695,284	109,988	797,214	108,488	846,377	112,636	680,139	75,543	597,015	126,586	1,047,310	68,221	582,527	50,131	435,734
<i>Green Turtle</i>	5,328	5,923	5,072	6,571	2,513	4,336	2,855	5,220	2,329	3,675	750	1,125	0	0	16,688	74,701	95	258	3,924	11,548	0	0	0	0
<i>Loghd. Turtle</i>	1,690	2,557	2,052	3,693	744	1,454	1,575	2,807	1,257	2,841	3,267	11,566	3,065	7,870	7,956	42,276	4,170	7,961	5,484	14,036	2,357	3,880	2,623	4,056
<i>Nassau Grouper</i>	1,132,264	2,477,255	1,125,817	2,674,401	841,044	1,999,204	497,810	1,337,053	619,695	1,859,998	884,324	2,463,211	930,087	2,760,716	580,856	1,695,677	433,443	1,389,792	459,618	1,573,377	346,780	1,592,827	340,837	1,276,873
<i>Other Grouper</i>	167,512	365,099	228,235	460,581	228,034	426,670	145,598	320,945	211,187	469,196	213,102	496,448	242,066	514,665	219,557	486,619	152,203	432,688	166,977	445,135	129,969	401,214	223,959	645,918
<i>Grouper (fillet)</i>	149,087	438,563	108,803	327,422	79,534	259,594	58,565	207,666	70,395	266,052	58,464	211,848	78,047	262,840	123,321	350,299	33,687	126,480	44,224	1,062,307	14,682	64,374	14,162	69,911
<i>Snappers</i>	1,655,756	2,303,289	1,721,359	2,363,558	1,908,443	2,388,552	1,590,535	2,412,411	1,712,927	2,735,707	1,759,622	2,783,585	1,544,031	2,823,444	1,429,410	2,702,692	1,291,868	2,770,920	1,831,163	4,261,945	1,252,328	2,848,370	2,062,396	4,559,114
<i>Jacks</i>	227,626	220,602	202,411	216,381	175,058	184,849	178,423	258,352	222,118	304,461	189,086	243,357	201,793	279,903	215,443	341,140	143,986	219,269	174,160	256,484	183,925	619,452	113,525	168,449
<i>Grunts</i>	148,396	121,516	198,232	155,601	144,441	104,916	135,933	119,328	146,713	144,976	110,434	110,483	159,263	164,257	167,824	184,972	127,938	149,644	138,478	168,140	86,455	102,967	109,181	128,622
<i>Sharks</i>	6,013	14,252	4,312	10,248	3,202	7,223	389	794	179	123	0	0	620	930	5,347	5,040	89	297	40	160	0	0	0	0
<i>Others</i>	581,004	644,148	343,214	415,479	307,156	337,802	242,474	341,705	292,732	415,852	218,254	304,057	263,096	401,505	157,614	216,720	126,458	182,276	187,958	296,977	63,033	114,235	88,156	160,276
TOTAL	11,437,414	69,541,020	11,195,659	65,035,044	10,917,910	71,829,968	11,072,574	80,849,211	10,032,571	67,438,325	12,057,976	91,815,791	12,524,483	92,734,430	11,291,039	84,661,400	10,742,711	89,445,675	11,124,814	90,866,453	8,150,924	80,333,332	9,967,493	73,918,651

Note: Landings data do not include catch consumed by fishermen or catch marketed outside of main markets.

Table 3c: Exports by year

Table 3. TOTAL BAHAMAS FISHERY PRODUCT & RESOURCE EXPORTS: 1998 - 2008

YEAR →		1998		1999		2000		2001		2002		2003		2004		2005		2006		2007		2008	
PRODUCTS	UNITS	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)	QUANTITY	VALUE (\$)
Crawfish	LBS.	5,055,578	57,412,398	5,615,950	71,586,006	6,256,760	84,846,912	4,974,129	68,020,061	6,026,990	95,846,078	7,461,234	106,272,530	6,239,020	92,112,608	5,906,000	93,600,000	5,218,060	92,188,676	4,943,546	86,653,670	4,569,046	77,525,063
Scalefish	LBS.	465,380	890,770	211,185	401,027	27,039	46,092	82,143	151,102	92,389	434,947	182,362	525,400	15,841	42,851	10,632	27,970	49,500	160,850	177,799	461,413	92,842	325,279
Conch Meat	LBS.	201,810	561,101	200,612	556,402	259,270	977,299	361,808	1,389,553	245,040	911,672	149,288	404,840	214,628	904,012	380,904	2,496,349	249,050	1,558,185	267,200	1,546,125	362,300	2,048,872
Stone Crab Cl.	LBS.	96,500	770,677	105,127	903,150	83,079	740,700	100,888	811,814	96,797	814,108	62,171	642,431	92,730	867,286	57,355	673,550	92,321	1,103,139	130,021	1,576,346	106,112	1,101,175
Total Sponge	LBS.	131,175	1,324,460	190,241	1,650,678	179,046	1,542,602	156,336	1,634,328	135,880	1,263,071	121,400	943,001	92,228	878,568	69,521	728,523	111,568	1,065,432	73,790	755,390	80,813	828,680
Q. Helmet Sh.	Pieces	3,795	163,015	1,326	90,000	3,988	333,181	1,327	32,765	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conch Shells	LBS.	76,488	66,644	42,067	23,927	6,800	2,144	2,807	16,834	44,000	17,050	0	0	40,000	1,500	60,440	11,160	82,281	103,309	73,605	35,578	156,888	28,568
Other Shells	LBS.	0	0	9,705	2,426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar. Tropicals	Indiv.	350	1,012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar. Invert.	LBS.	0	0	1,636	49,080	3,876	116,280	6,924	207,720	6,012	194,220	0	0	0	0	2,750	82,500	12,607	297,710	4,779	146,370	7,402	254,625
Aquaculture	Indiv.	3,413	83,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Live Rock	LBS.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. Crabs (live)	LBS.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL			61,273,217		75,262,696		88,605,210		72,264,177		99,481,146		108,788,202		94,806,825		97,620,052		96,477,301		91,174,892		82,112,262

(Source: Department of Fisheries)

Note: *Rate of Exchange – B\$1 = US\$1

2.5 The Key issues impacting (negatively or positively) on the Major Fisheries are as follows (Table 4):

Table 4: Key issues as they impact the major fisheries in The Bahamas

FACTOR	SPINY LOBSTER	GROUPERS & SNAPPERS	CONCH	AQUACULTURE
Market Access Issues	export market could be negatively affected if not certified by 2011	export market could be negatively affected if not certified	export market could be negatively affected if not certified	will need some type of certification
Data	data not sufficient for stock assessment which will have a negative impact	data not sufficient for stock assessment which will have a negative impact	data not sufficient for stock assessment which will have a negative impact	not applicable
Enforcement	harvest of shorts, harvest in closed season & illegal fishing (poaching) are having a significant negative impact	illegal fishing (poaching) is having a significant negative impact	illegal fishing (poaching) is having a significant negative impact	not applicable
Human & Financial Resources	not sufficient to meet current demands which is having a negative impact	not sufficient to meet current demands which is having a negative impact	not sufficient to meet current demands which is having a negative impact	not sufficient to meet current demands which is having a negative impact
Regulations	current regulations appear sufficient with the exception of a cap on total landings (and associated regulations to limit landings/mortality to cap), data, and sales during the closed season	current regulations appear sufficient with the exception of a cap on total landings, spawning season closures, data, and sales during the closed season	current regulations appear sufficient with the exception of a cap on total landings, closed areas and/or time for spawning, data, and difficulty enforcing shell-based size limit when only meat landed	need legal framework
Lionfish	lionfish represent a potential major threat by decreasing survival of native animals by up to 79%	lionfish represent a potential major threat by decreasing survival of native animals by up to 79%	lionfish represent a potential major threat to the coral-reef ecosystem	not applicable
Aquaculture Policy	potential for development since the larval cycle has been closed	unknown potential for development; other finfish species (e.g., cobia & tilapia) have good potential	high potential for development	lack of policy & legal framework has limited growth and negatively impacted this sector

Table 4 continued: Key issues as they impact the major fisheries in The Bahamas

FACTOR	SPINY LOBSTER	GROUPERS & SNAPPERS	CONCH	AQUACULTURE
Public Education, Consultation & Outreach	public education is needed to ensure that when consulted, the public responds in a timely manner. Now it appears that only those who feel adversely impacted respond and usually after the fact; the public is unhappy with the current level of consultation & outreach.	public education is needed to ensure that when consulted, the public responds in a timely manner. Now it appears that only those who feel adversely impacted respond and usually after the fact; the public is unhappy with the current level of consultation & outreach.	public education is needed to ensure that when consulted, the public responds in a timely manner. Now it appears that only those who feel adversely impacted respond and usually after the fact; the public is unhappy with the current level of consultation & outreach.	public education is needed to ensure that when consulted, the public responds in a timely manner. Now it appears that only those who feel adversely impacted respond and usually after the fact; the public is unhappy with the current level of consultation & outreach.
Marine Reserve Network/National Marine Parks	would provide positive biological & socioeconomic impacts by protecting habitat & spawning; would meet obligations under the UN Convention on Biological Diversity and The Caribbean Initiative.	would provide positive biological & socioeconomic impacts by protecting habitat & spawning; would meet obligations under the UN Convention on Biological Diversity and The Caribbean Initiative.	would provide positive biological & socioeconomic impacts by protecting habitat & spawning; would meet obligations under the UN Convention on Biological Diversity and The Caribbean Initiative.	not applicable

2.6 The Emerging Issues, Domestic and International, which are expected to impact significantly, either positively or negatively, on the Overall Sector are briefly summarized below:

EMERGING ISSUES & EXPECTED IMPACT ON FISHERIES & AQUACULTURE

1. **MARKET ACCESS ISSUES** - Continued access to seafood markets in the EU requires, *inter alia*, that The Bahamas be able to demonstrate that it is dealing with IUU fishing issues in a manner that meets internationally accepted standards. Some customers of major Bahamian spiny lobster exporters are insisting on eco-labeling/certification beginning in 2011. Lack of certification could result in disruptions of the current U.S. and European markets for spiny lobster beginning in 2011. Similar requirements will also impact other exported products, including aquaculture products.
2. **INVASIVE LIONFISH** - The Pacific Lionfish was first reported in The Bahamas in 2004. Lionfish are now found throughout the Bahamas and the Caribbean and represent a major threat to the Bahamian ecosystem. Lionfish eat spiny lobster, groupers, snappers, and parrotfishes and other herbivorous reef fishes which are crucial for preventing seaweeds from overgrowing corals. Lionfish impacts on tourist recreational activities have been observed.
3. **MEASURES INITIATED BY OTHER COUNTRIES** - Individual States are implementing regulations that require other, independent States to consider and/or develop laws that may have limited utility in some countries. The United States and European Union have implemented such laws. Examples include the U.S.-led requirement for Turtle Excluder Devices (TEDs) in shrimp trawls. This requires time to respond to requests in the Bahamas even though the Bahamas does not have a shrimp fishery. Another example is the U.S. law banning shark finning. Again, there is no shark fishery in the Bahamas but time and effort must be expended on this topic. Other examples include CITES and Sea Bird regulations.

3. The Mission Statement for the Fisheries & Aquaculture Sector

There is no current mission statement that has been approved at the Ministerial level. However, there is an operational mission statement used at the Departmental level:

“Our mission has been the development of the fisheries sector through sustainable use and integrated management of the fishery resources, coastal zone, and marine environment for the well-being of Bahamians.”

4. The Vision for Fisheries & Aquaculture

There is no current vision statement that has been approved at the Ministerial level. However, there is an operational vision statement used at the Departmental level:

“Our vision has been to optimize sustainable utilization of the fishery resources, in particular, for the maximum benefit of the Bahamian people.”

5. Core Values – The Philosophy Underpinning the Development Process

Stakeholders expressed concern about non-Bahamians working in fisheries and wanted #4 modified to stress employment of Bahamians. In addition, #5 was modified to focus more on the marine environment rather than habitat in general.

CORE VALUES – THE DEVELOPMENT PHILOSOPHY

1. Sustainable resource use.
2. Provide safe food for consumption (local & export).
3. Meet treaty and international agreement responsibilities.
4. Maximize employment of Bahamians while also recognizing the need to match the number of commercial fishermen and recreational guides to the available resources.
5. Protect the marine environment (including mangroves) necessary for continued growth and development of the fisheries sector.
6. Develop a sustainable aquaculture sector that does not negatively impact on habitat/environment.

6. Strategic Analysis

Table 5: The Environmental Scan

Strategic Areas	Issues	Comments
Resources	<i>Land</i>	Land is available for aquaculture but need to be careful about negative impacts to mangroves, estuaries, freshwater supply, etc.
	<i>Water</i>	Freshwater resources are limited except on the larger islands. Desalination is widespread but need to be careful about disposal of saline.
	<i>Labour</i>	Owners/captains of vessels report difficulty in finding and holding on to qualified crew members.
	<i>Other</i>	Water and habitat quality have been degraded through development. This is having a negative impact on marine resources (e.g., loss of juvenile habitat and virus/parasites showing up in spiny lobsters). Lionfish have invaded the Bahamian ecosystem and in some instances have reduced net recruitment of finfish species by 79%. This represents a major negative threat to coral-reef ecosystems in the entire Caribbean region.
Technology	<i>Access</i>	Internet access is widespread. More governmental sectors are putting information on the web which will improve access. Once the Department of Marine Resources' web site is launched, more of the information will be accessible by the public and this will save the public time, effort, and money in obtaining information. This will also allow staff to focus on other areas.
	<i>Training</i>	Training is available but lack of time and finances make it difficult to obtain the necessary training. Training in conducting stock assessments is an important need.
	<i>S&T Support</i>	To make better use of existing and future computer resources, the Department of Marine Resources (DMR) needs to have technical support closer at hand rather than relying on centralized support which takes longer to resolve issues.
	<i>Other</i>	Very long and arduous process to get the Department of Marine Resources' web site up and running.

Table 5: The Environmental Scan (cont'd)

Strategic Areas	Issues	Comments
Marketing	<i>Intelligence</i>	The processing sector has sufficient knowledge and ability about marketing, particularly in the spiny lobster industry.
	<i>Facilitation</i>	The processing sector is beginning to work with fishermen to train them in the proper ways to ice product, clean their boats, and maintain high product quality throughout the entire process.
	<i>Packing</i>	Availability and use of ice remains a problem.
	<i>Transport</i>	Sufficient transport exists for the available resources.
	<i>Shipping</i>	Sufficient shipping exists for the available resources.
	<i>Other</i>	Some current customers in the U.S. and European markets will require Eco-Labeling/Certification beginning in 2011; this could affect the lobster fishery if it is not certified by 2011. This will also apply to the other fisheries (finfish and conch) and to aquaculture products.
Social	<i>Income</i>	The average 2007 wage in the hotel industry was \$361/week. The median weekly wage for skilled agriculture and fisheries workers was \$437 in New Providence and \$266 in Grand Bahama. In mid-2008, wages for a 40 hour work week were \$150 for a farm labourer and \$250 for a sponge worker. Since January 2002, the minimum wage in the private sector has been \$4/hour, \$30/day, and \$150/week.
	<i>Food Security</i>	Currently, the future of food security in The Bahamas is in severe jeopardy, especially as the focus of economic development shifts from extractive natural resources and agriculture to tourism. According to recent statistics, if trade ties were ever severed, food already imported would only allow The Bahamas to feed itself for six weeks.
	<i>Stealing</i>	Fishermen report serious problems with other fishermen stealing spiny lobsters from their traps and codos. Fishermen also report damages to their gear from this stealing.
	<i>Employment</i>	The National unemployment rate was 8.7% in 2008 and increased to 14.2% in 2009. Approximately 7% of the labour force or 9,300 (1995 Fisheries Census) are employed through fishing. The fishing industry is comprised of over 4,000 vessels ranging in size from 3.1 m - 30m; 600 are over 6.1m. In 2001, there were 51 fish vendors/hawkers.
	<i>Labour</i>	Owners/captains of vessels report difficulty in finding and holding on to qualified crew members. Approximately 7% of the labour force or 9,300 (1995 Fisheries Census) are employed through fishing.
	<i>Other</i>	Use of foreign workers is causing some concern among Bahamians in the fishing sector.

Table 5: The Environmental Scan (cont'd)

Strategic Areas	Issues	Comments
Trade Policy & Regulatory Environment	<i>Compliance</i>	Beginning in 2011, some current customers who purchase spiny lobster will require the spiny lobster sector be certified or the U.S. and European markets will be affected. This will follow for other fisheries and aquaculture products. In addition, the European Union has required catch certification starting January 1, 2010 whereby the shipper must document the origin of each pound of product shipped.
	<i>SPS, HACCP</i>	Processors are beginning to train day-boat fishermen in the proper way to clean their vessels. They are beginning a training/certification program whereby fishermen will be given a card identifying them as someone who can sell to the processors.
	<i>Other</i>	Lack of adequate enforcement (IUU fishing) continues to be a big problem.
Public Infrastructure	<i>Docks/Launch Sites/Landing Sites</i>	In New Providence there is a lack of adequate public docking sites and a shortage of space for docking commercial vessels. In addition, there are few public boat ramps.
	<i>Access Roads</i>	The road system is sufficient to meet the current needs in New Providence. However, in many of the Family Islands fishermen are using farm roads that Government maintains to get to launch sites on the northern side of the island and these are not always adequately maintained. There is not always adequate access to the ocean-side of the island in the southeastern Islands.
	<i>Utilities</i>	The electrical supply nationally is not sufficient to prevent significant interruptions and/or damage to processing activities and computer systems.

Table 5: The Environmental Scan (cont'd)

Strategic Areas	Issues	Comments
Financing	<i>Access/Availability</i>	The Bahamas Development Bank (BDB) was created to help Bahamians establish new businesses or expand existing ones. Commercial banks also provide loans that would be available to the fisheries and aquaculture sectors. However, fishermen report having difficulty obtaining financial assistance.
	<i>Other</i>	<p>Seafood processing facilities and aquaculture operations have been placed on the list off areas specifically targeted for overseas investors.</p> <p>Processors offer subsidized ice for storage of catch.</p> <p>Government offers duty-free concessions to fishermen registered with the Minister responsible for Fisheries for use in the commercial fishing industry and the bone fishing sector. Current items are specified in Minister Order No. 3 (under Tariff Act 1975) for: (1) materials for fish traps and assembled traps; (2) fishing vessels; (3) engines for fishing vessels; (4) bait and feed; (5) major fishing gear; (6) freezing units and insulation for fishing vessels only (excluding chest freezers and refrigerators); (7) navigational equipment; (8) reverse osmosis and ice making machines to be fixed on the vessel only; and (9) bone fishing skiffs/vessels/boats and engines.</p>
Economic	<i>Competitiveness</i>	This is not an issue in the fishery sector. The cost of living in The Bahamas is high and high value products are exported (e.g., spiny lobster and conch); however, The Bahamas would have difficulty competing pricewise on lower value products. This may become a factor in the aquaculture sector as it develops.
	<i>Linkages</i>	There is a strong linkage with the tourism sector. Eco-tourism continues to grow and relies on the health of the fisheries sector and the Bahamian environment. The fishery sector contributes 2-3% of the GDP annually.
	<i>Other</i>	Fishermen stated that decreasing prices received for fishery products combined with increasing operating costs (e.g., fuel), is making it very difficult to stay in business. They have also stated that changes to the list of duty free items have increased their costs.

Stakeholder Input on Financing and Economic Strategic Areas

Stakeholders expressed a lot of concern about changes to the items fishermen are allowed to bring in duty free. They noted that the agriculture sector receives much more subsidy than the fisheries sector and stated that this is not fair given that the entire fisheries sector does not earn as high an ex-vessel price as does the spiny lobster fishery. Processors also pointed out that they do not get any duty free relief on supplies (gloves, boxes, bags, etc.) even for those items such as boxes that are imported and then used to export spiny lobster.

Stakeholders suggested the following items be added to the list of duty free concessions: (1) chest freezers - they suggested using the serial number as a way of tracking that the freezer is used on the vessel and not merely imported and then sold; (2) generators - use the serial number to track use; (3) trailers - they recognized that if a boat is purchased with a trailer, then both can be imported duty-free. However, a replacement trailer or a trailer for a boat that may not currently have a trailer is not covered; (4) replacement parts - replacement parts for engines, ice machines, and generators should be allowed; (5) motor oil - motor oil costs about \$48 per gallon and increases the effective price per gallon of gas from about \$5.75 to \$7.00; and (6) lionfish harvesting equipment - polespears, spears, nets, traps, gloves, tools, and kits for promoting safe and effective harvesting and consumption of lionfish.

Stakeholders expressed grave concern about the high cost of fishing and the level of support the Department of Marine Resources is able to provide under the current funding levels. They noted that the import tax on fuel that they pay does not benefit the fisheries sector. Stakeholders strongly supported dedicating fees from fishing, export duties on fishery products, fines, etc. associated with the fisheries sector to the operation of the Department of Marine Resources for data collection, research, and law enforcement. It was noted that in the mid 1970s there was some dedicated funding within the Bahamian Government's budget and perhaps that could serve as guidance on how this could be implemented in the near future.

Table 6: The SWOT Analysis – Identification of Opportunities & Challenges

Opportunities	Challenges
Market Access Issues (e.g., eco-labeling/certification for the spiny lobster fishery and other fisheries down the line, including aquaculture products)	Completing the certification process and addressing the shortcomings. This will require collecting additional data and, over the long term, will require changes to existing fishery regulations.
Collect the biological, economic, and social data necessary for biological and socio-economic assessments.	Some of this will require changes to fishing and licensing regulations. Providing sufficient funding.
Improve enforcement	Identifying sufficient funding and making the necessary diplomatic contacts with the U.S., Dominican Republic, etc.
Improve human & financial resources	Identifying sufficient funding. Changes to the licensing regulations could generate some funding if the income were dedicated to fisheries.
Revamp fishery regulations	How to make this a priority given all the other pressing economic and social issues facing government. Provide necessary staff time to assist in drafting regulations.
Address lionfish threat	How best to provide the necessary incentive(s) for a fishery targeting lionfish. Identifying sufficient funding to conduct additional research. Distributing information to the public. The DMR will continue to work with the BEST Commission, through the Global Environment Facility (GEF) project, to reduce the risk from invasive alien species like lionfish.

Table 6 continued: The SWOT Analysis – Identification of Opportunities & Challenges

Opportunities	Challenges
Develop aquaculture policy	Making this a priority given all the other pressing economic and social issues facing government. Provide necessary staff time to draft regulations. Draft Aquaculture Legislation, developed in 1988 through a FAO project, can be used to form the basis of a current policy.
Improve public education, consultation, and outreach	Working with the College of the Bahamas, NGOs, and other government agencies to incorporate information into the education system (ongoing) and to educate the public about the need to comment on fisheries/aquaculture issues and the timing for appropriate comments. Getting the DMF web site up and running. Establishing a formal public consultation process (e.g., NEPA in the U.S.).
Marine Reserve Network/National Marine Parks	Working with the Bahamas National Trust (BNT) to implement the Master Plan for The Bahamas National Protected Area System; working with The Nature Conservancy and BNT to meet the requirements of The Caribbean Challenge and the UN Convention on Biological Diversity. The UN Convention on Biological Diversity established a target of 10% of the area protected by the end of 2010 (land-based) and 2012 (marine-based) for all state parties to protect marine and land ecosystems.

Stakeholders stated that more information must be provided to the public on the benefits of marine reserves/parks. Questions were raised about whether the 10% would be applied to the total area of the Bahamas and when in 2010 was the target. It was clarified that the 10% is being applied to the shelf-edge area of the Bahamas and that the Bahamas is targeting to meet the goals by the end of 2010 and 2012. Stakeholders asked about progress towards meeting these goals and it was noted that with the recent announcement of new parks at the annual Bahamas National Trust meeting in 2009, The Bahamas is on track to meet the land-based goal of 10% by 2010 but the marine-based goal of 10% by 2012 will be hard to meet.

7. Policy Adjustments to Support the Strategic Plan having regard to the Opportunities & Challenges identified:

Vision - proposed

A vibrant and sustainable ecosystem for the benefit of current and future generations of Bahamians while fostering tourism, subsistence fishing, recreational fishing, commercial fishing, and aquaculture through adequate data collection, management, and enforcement.

Stakeholders discussed the proposed vision statement and agreed on the following:

A vibrant fishing sector based on a healthy ecosystem developed for the benefit of current and future generations of Bahamians through ecologically sustainable practices, adequate data collection, research, management, and enforcement. Fishing sector includes commercial fishing, recreational fishing, subsistence fishing, tourism, and aquaculture.

General Fisheries Policy - proposed revision

The Government of The Bahamas is committed to the conservation and sustainable use of fisheries resources and the marine environment for the benefit of current and future generations of all Bahamians. The Government is committed to the orderly expansion of the national park system (no-take zones) that are important for stock replenishment.

Government policy reserves the commercial fishing industry, as far as is practical, for the exploitation by Bahamian Nationals. Only commercial fishing vessels that are 100% Bahamian owned *and operated by Bahamian captain and crew* are considered Bahamian and therefore allowed to fish within the country's Exclusive Economic Zone (EEZ). No fishing treaties have been established with any foreign states and fishing by foreign commercial fishing vessels has been prohibited. Seafood processing and aquaculture facilities have been placed on the list of areas specifically targeted for overseas investors. Further, all investment projects with non-Bahamian interest must have the approval of the Government's National Economic Council (NEC).

Stakeholders expressed a lot of concern about foreign individuals operating commercial fishing vessels. This starts with a "spousal permit" which allows a foreign individual that marries a Bahamian to legally work in the Bahamas. Individuals may start as "engineers" on vessels but end up as fishermen and even operators of the vessel. Stakeholders recommended adding "and operated by Bahamian captain and crew" to the statement about 100% Bahamian. They also recommended information be shared between immigration and fisheries so that existing laws may be better enforced.

Mission - proposed revision

Our mission for the fisheries and aquaculture sectors is development through sustainable use and integrated management of the fishery resources, coastal zone, and marine/freshwater environment for the well-being of current and future generations of all Bahamians.

Goals

- | | |
|---|---|
| <input type="checkbox"/> Develop and increase the potential of marine living resources to meet human nutritional needs, as well as other social, economic, and development goals. | <input type="checkbox"/> Maintain or restore populations of marine species at levels that can produce the maximum sustainable yield as qualified by relevant environmental and economic factors, taking into consideration relationships among species. |
|---|---|

Objectives

- | | |
|---|---|
| <input type="checkbox"/> Ensure that the fishing industry is integrated into the policy and decision-making process concerning fisheries and coastal zone management. | <input type="checkbox"/> Protect and restore endangered marine and freshwater species (e.g., marine turtles). |
| <input type="checkbox"/> Take into account traditional knowledge and interests of local communities, small-scale artisanal fisheries and indigenous people in development and management programs. | <input type="checkbox"/> Promote the development and use of selective fishing gear and practises that minimize waste in the catch of target species and minimize by-catch of non-target species. |
| <input type="checkbox"/> Ensure effective monitoring and enforcement with respect to fishing activities. | <input type="checkbox"/> Cooperate with other nations in the management of shared or highly migratory stocks. |
| <input type="checkbox"/> Promote scientific research with respect to fisheries resources. | <input type="checkbox"/> Preserve rare or fragile ecosystems, as well as habitats and other ecologically sensitive areas, especially coral reef ecosystems, estuaries, mangroves, sea grass beds, and other spawning and nursery areas. |
| <input type="checkbox"/> Promote a collaborative approach to freshwater and marine management. | <input type="checkbox"/> Develop and increase the potential of living marine resources to meet human nutritional needs, as well as social, cultural, economic and development goals in a manner that would ensure sustainable use of the resources. |
| <input type="checkbox"/> Maintain or restore populations of marine species at levels that can produce the optimal sustainable yield as qualified by relevant environmental and economic factors, taking into consideration relationships among various species. | |

8. Priority Areas for Development - The Strategic Direction

Table 7: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
1: Market Access Issues	<i>Development Goal: Meet Eco-Labeling/Certification requirements. (Note IUU fishing is addressed under Item #3. Enforcement.)</i>	<i>Some current customers of spiny lobster exporters in the U.S. and Europe will require that spiny lobster be certified (eco-labeling) beginning in 2011. The Bahamas' spiny lobster export market (\$78-\$92 million) could be affected. The lobster industry and the Department of Marine Fisheries are working to achieve Marine Stewardship Council certification.</i>
	<i>Strat. Action #1. Complete Bahamian Spiny Lobster Fishery Improvement Project (FIP) Work Plan.</i>	<i>This work is being coordinated by the Department of Marine Resources (DMR), Spiny Lobster Processors, World Wildlife Fund (WWF), and Marine Resources Assessment Group (MRAG) Americas and will continue to require work by DMR staff. Funding will be a combined effort by Industry, Government, and external sources. This will be completed by April 2010.</i>
	<i>Strat. Action #2. Implement the projects and activities outlined in the FIP Work Plan.</i>	<i>These are expected to start in 2010. These projects and activities will require work by DMR staff, spiny lobster processors, and fishermen. Funding will be necessary for some of the projects.</i>
	<i>Strat. Action # 3. Complete the certification process for spiny lobster.</i>	<i>In order to meet current customer demands, this must be completed by January 1, 2011.</i>
	<i>Strat. Action # 4. Determine the schedule for conch and finfish.</i>	<i>A similar deadline is anticipated for conch and finfish but this should be verified. There is also a CITES requirement to ensure conch are sustainable in order to continue exporting conch in the future. Answer by the end of 2009.</i>
	<i>Strat. Action # 5. Determine whether certification should be pursued for conch and finfish.</i>	<i>Certification is costly and time consuming. Given the low available yield and current stock status, It may be better to market these wild-caught products domestically. Decision by the end of 2010.</i>

Stakeholders asked whether certification could be pursued on a regional basis with other countries to help defray costs. It was clarified that the existing certification efforts are being directed at a fishery level and at even finer scales within a fishery/country.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
2: Data (biological, economic & social)	<i>Development Goal: Data collection system in place to provide necessary biological, economic, and social data for assessment & management for all major species/fisheries.</i>	<i>Data needs have been identified and are known. Fisheries regulations need to be modified to require licensing by gear type and other data requirements. Adequate resources need to be identified to collect and analyze the data; data are to be published on the DMR web site. Data system complete and fully implemented by the end of 2014.</i>
	<i>Strat. Action #1. Collect all data on spiny lobster fishery under existing laws.</i>	<i>Data needed for the spiny lobster fishery will be collected beginning in 2010 (see Strat. Action #2 for Priority Area #1 above). Experience gained from the spiny lobster fishery will be applied to designing the data system for other fisheries.</i>
	<i>Strat. Action #2. Conduct the Fisheries Census.</i>	<i>The last census of the fishing industry was conducted in 1995. Current data on the industry is necessary to evaluate the well-being of participants and to determine the impacts of proposed policy/regulatory changes. The census will provide information on the numbers of both part-time and full-time fishermen and the socio-economic impact of the fishing industry on these individuals and their communities. Conduct census by the end of 2011.</i>
	<i>Strat. Action #3. Identify regulatory changes that are necessary.</i>	<i>Licensing requirements for gear and vessels must be changed. Additional regulatory changes will also be identified. Complete by the end of 2010.</i>
	<i>Strat. Action # 4. Draft proposed rewrite of Fisheries Legislation.</i>	<i>Committee/work group or DMR (see Section 11) and consultant will draft a rewrite of Fisheries Legislation to address data issues. Complete by the end of 2011.</i>
	<i>Strat. Action # 5. Fisheries Advisory Committee and public review.</i>	<i>The Fisheries Advisory Committee will provide input during the drafting. Public stakeholders will then have an opportunity to comment. Complete by the end of 2012.</i>
	<i>Strat. Action # 6. Revise as necessary and provide Draft Fisheries Legislation to Minister.</i>	<i>Committee/work group or DMR and consultant will revise the draft legislation based on public input and provide a final opportunity for review by the Fisheries Advisory Committee. The Committee/work group or DMR and consultant will finalize the draft legislation for presentation to the Minister. Complete by the end of 2013.</i>

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Stakeholder input on Data

Stakeholders stated that the whole data collection system needs to be improved. A new data form should include all gear types. The group felt that the Fisheries Census should be conducted once every 10 years.

The group discussed registration and licenses and developed the following recommendations:

1. Commercial fisherman's licenses or registration - the group had no opposition to a fee of around \$20 to produce a photo ID similar to a driver's license.
2. Commercial vessels - all commercial vessels should be licensed regardless of vessel length.
3. The funds generated from licenses or registration should stay in the Department of Marine Resources.
4. Recreational fishing license - there was support for having all recreational fishermen licensed while some felt that if an individual only wanted to make one trip with a child, they should not have to get a license. Charging a fee for someone who only makes infrequent trips was a point of objection to some individuals but not all.
5. Require that in order to sell marine resources, the individual must have a commercial fisherman's license.
6. Data should be collected on the amount of gear being used by each commercial fisherman.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
3: Enforcement	<i>Development Goal: Reduce illegal fishing/poaching (IUU fishing) and improve compliance with existing laws.</i>	<i>Enforcement shortcomings have been identified and are known. Adequate resources need to be identified to improve enforcement; law enforcement reports are to be published on the DMR web site. Improved enforcement approach complete and fully implemented by the end of 2014.</i>
	<i>Strat. Action #1. Prepare a National Plan of Action (NPOA) to combat Illegal Unreported and Unregulated (IUU) fishing.</i>	<i>The preparation of such a national plan supports implementation of the International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) in accordance with recommendations of the 2002 World Summit on Sustainable Development (WSSD) and Resolutions of the UN General Assembly in 2003. Continued access to seafood markets in the EU requires, inter alia, that The Bahamas be able to demonstrate that it is dealing with IUU issues in a manner that meets internationally accepted standards. Plan complete by the end of 2010.</i>
	<i>Strat. Action #2. Make the necessary diplomatic contacts to reduce illegal fishing/poaching by Dominican Republic fishermen in the southern and U.S. fishermen in the north western Bahamas.</i>	<i>Diplomatic discussions can help to identify ways to reduce illegal fishing/poaching. It is hoped that the foreign states can exert some control over their nationals fishing in foreign waters because the catch is landed in the home country. Make diplomatic contacts during 2010 and develop joint recommendations for action by the end of 2011.</i>
	<i>Strat. Action # 3. Conduct additional enforcement patrols and investigations.</i>	<i>Conduct additional law enforcement patrols and investigations during the spiny lobster and Nassau grouper closures and to address illegal fishing in the southeastern and northwestern areas of the Bahamas. Begin in 2010 and make an ongoing activity.</i>
	<i>Strat. Action # 4. Draft proposed rewrite of Fisheries Legislation.</i>	<i>Committee/work group or DMR (see Section 11) and consultant will draft a rewrite of Fisheries Legislation (and any other relevant legislation) to address law enforcement issues. Complete by the end of 2011.</i>
	<i>Strat. Action # 5. Fisheries Advisory Committee and public review.</i>	<i>The Fisheries Advisory Committee will provide input during the drafting. Public stakeholders will then have an opportunity to comment. Complete by the end of 2012.</i>
	<i>Strat. Action # 6. Revise as necessary and provide Draft Fisheries Legislation to Minister.</i>	<i>Committee/work group or DMR and consultant will revise the draft legislation based on public input and provide a final opportunity for review by the Fisheries Advisory Committee. The Committee/work group or DMR and consultant will finalize the draft legislation for presentation to the Minister. Complete by the end of 2013.</i>

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Stakeholder input on Enforcement

Stakeholders were very concerned about enforcement and expressed a lot of frustration with the current state of enforcement. The group offered the following suggestions:

1. Poaching is destroying the spiny lobster fishery. We recognize it is hard to stop but if it can't be stopped, the Bahamas spiny lobster fishery will not receive certification.
2. Communication - regular meetings and information sharing must take place between the (a) police force, (b) defense force, and (c) fisheries. Some suggested having Inter-Agency meetings and having the involvement of immigration.
3. Rapid deployment capability - some suggested having a fast boat with a fisheries officer and a defense force officer for fire power with the capability to rapidly respond and conduct enforcement activities.
4. Foreigners obtaining work permits - a concern was expressed that individuals are forming "marriages of convenience" to obtain work permits and that if the police/immigration dug a little deeper they would find individuals breaking the law. It was pointed out to the group that anyone with the appropriate permission from Immigration (a permit to work without restrictions) could legally fish on Bahamian vessels.
5. The group felt enforcement would improve if:
 - a. A commercial fisherman's permit was required to sell marine products.
 - b. Penalties/fines were higher.
 - c. Fisheries Prosecutors and a Fisheries Court were established.
 - d. Educate individuals making rulings on fisheries cases about the importance of the resource and why the fines should be substantial.
 - e. Remove discretion about issuing fines and establish a minimum fine amount (e.g., \$500 per spiny lobster tail for closed season violations and undersize lobsters).
 - f. Change from criminal system to civil system.
 - g. Assign a lawyer from the Attorney General's Office to fisheries.
 - h. Educate the public about the importance of our marine resources and why the regulations should not be violated.
 - i. Department of Marine Resources should be enforcing fishing laws because the police and defense force have other duties. DMR should have 2-3 vessels dedicated to fisheries enforcement.
 - j. Sensitize Defense Force and Police Force Officers about the importance of fisheries and enforcement.
 - k. Establish a toll free number for the public to call to report violations.
 - l. It was recognized that the Department of Marine Resources does currently have the necessary legal powers but they need more resources and need a commitment from the Defense Force to train officers as fisheries specialists or retain appropriate DMR staff to train and put on Defense Force boats.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
4: Human & Financial Resources	<i>Development Goal: Provide sufficient resources for the DMR to meet their current and projected needs. Also, provide a mechanism to train fishermen & crew members.</i>	<i>Financial needs have been identified and are known. Fisheries legislation could be changed to provide funding for the DMR. Additional sources of funding will be identified. In addition, a mechanism will be identified to adequately train fishermen and crew members. Funding and training systems complete and fully implemented by the end of 2014.</i>
	<i>Strat. Action #1. Compile a draft budget.</i>	<i>Information in this plan (see Section 13) will be used to prepare a detailed draft budget. The Fisheries Advisory Committee will provide input. A draft budget will be completed for presentation to the Minister by the end of 2010.</i>
	<i>Strat. Action #2. Identify regulatory changes that are necessary.</i>	<i>Licensing requirements that could generate funding will be identified. Complete by the end of 2010.</i>
	<i>Strat. Action # 3. Draft proposed rewrite of Fisheries Legislation.</i>	<i>Committee/work group or DMR (see Section 11) and consultant will draft a rewrite of Fisheries Legislation (and any other relevant legislation) to address human & financial resource issues. Directed utilization of funds derived from legislation (e.g., license fees, permit fees, fines, etc.) will be evaluated. Complete by the end of 2011.</i>
	<i>Strat. Action # 4. Fisheries Advisory Committee and public review.</i>	<i>The Fisheries Advisory Committee will provide input during the drafting. Public stakeholders will then have an opportunity to comment. Complete by the end of 2012.</i>
	<i>Strat. Action # 5. Revise as necessary and provide Draft Fisheries Legislation to Minister.</i>	<i>Committee/work group or DMR and consultant will revise the draft legislation based on public input and provide a final opportunity for review by the Fisheries Advisory Committee. The Committee/work group or DMR and consultant will finalize the draft legislation for presentation to the Minister. Complete by the end of 2013.</i>

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Stakeholders felt that more funding and resources needed to be provided to the Department of Marine Resources. They suggested funding from license fees, fines, etc. go directly to the DMR. The recommendations on enforcement identify needed resources.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
5: Adequate regulations	<i>Development Goal: Ensure all major fisheries are covered by adequate regulations.</i>	<i>The range of management regulations has been identified and many analyses have been completed. What has been missing is implementation of a range of precautionary regulations to ensure proper management. Adequate regulations fully implemented by the end of 2014.</i>
	<i>Strat. Action #1. Identify appropriate management measures that should be implemented based on research to date and using precautionary principles.</i>	<i>Management measures needed for all major fisheries will be identified during 2010.</i>
	<i>Strat. Action #2. Identify regulatory changes that are necessary.</i>	<i>Proposed revisions to size limits, bag limit, trip limits, gear regulations, quotas, closed seasons, closed areas, etc. will be identified. Proposed revisions to existing regulatory language will also be identified. Complete by the end of 2010.</i>
	<i>Strat. Action # 3. Draft proposed rewrite of Fisheries Legislation.</i>	<i>Committee/work group or DMR (see Section 11) and consultant will draft a rewrite of Fisheries Legislation to address needed changes to management regulations. Complete by the end of 2011.</i>
	<i>Strat. Action # 4. Fisheries Advisory Committee and public review.</i>	<i>The Fisheries Advisory Committee will provide input during the drafting. Public stakeholders will then have an opportunity to comment. Complete by the end of 2012.</i>
	<i>Strat. Action # 5. Revise as necessary and provide Draft Fisheries Legislation to Minister.</i>	<i>Committee/work group or DMR and consultant will revise the draft legislation based on public input and provide a final opportunity for review by the Fisheries Advisory Committee. The Committee/work group or DMR and consultant will finalize the draft legislation for presentation to the Minister. Complete by the end of 2013.</i>

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Stakeholder input on Adequate Regulations

Stakeholders were concerned that existing regulations were not sufficient and offered the following suggestions:

1. Closed seasons - some felt that there should not be any sale allowed during closed seasons and some felt that sufficient safeguards (inspections and reporting) could be put in place to allow sale of product purchased prior to a closure.
2. New fisheries - a mechanism needs to be developed to address concerns about new fisheries as they develop.
3. Spiny lobster fishery - some felt that only traps should be allowed because then fishermen could return short lobster to the water without harm. Others felt that condos were a necessary gear for the fishery.
4. Conch - a number of suggestions were offered:
 - a. Require conch be landed whole - this would not work for some of the distant fisheries and would require shell disposal.
 - b. Size - use size of shell or lip thickness or size of actual conch meat. Some suggested a weight-based measurement be used for skinned and slopped conch meat.
5. Enforcement of existing regulations was a big concern.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
6: Lionfish	Development Goal: Promote efforts to reduce the numbers of lionfish present in the Bahamian environment.	Invasive lionfish are a recent problem and can have very negative impacts on the Bahamian ecosystem. National Lionfish Response Plan and measures to reduce the numbers of lionfish complete and fully implemented by the end of 2014. Continue to work on The Bahamas Environment, Science & Technology Commission (BEST)/Global Environment Facility (GEF) project through December 2012.
	Strat. Action # 1. Adopt the National Lionfish Response Plan (NLRP).	The College of The Bahamas Marine and Environmental Studies Institute (COB-MESI) in collaboration with the Department of Marine Resources (DMR) has initiated a long-term National Lionfish Response Plan (NLRP) that entails a partnership between both local and regional government and non-governmental agencies. The plan focuses on: a. Developing invasion policies and regulation, b. Building research and information management, c. Building outreach and educational initiatives, and d. Financing and identifying resources. The Government of The Bahamas should adopt this plan by the end of 2010.
	Strat. Action # 2. Provide funding to address the lionfish problem.	Direct funding to support the NLRP should be identified (e.g., The Bahamian Government, NGOs, FAO, etc.). The Government could allow duty free importation of fishing gear to harvest lionfish as a means of indirect funding. Implement direct and indirect funding as early as possible in 2010.
	Strat. Action # 3. The DMR will continue to work with BEST on the GEF funded project to address lionfish as one of the invasive alien species in The Bahamas.	The Bahamas identifies Invasive Alien Species (IAS) as one of the five major human-related drivers that destroy biodiversity. Their control is among the primary goals of the National Biodiversity Strategy and Action Plan (NBSAP). The Bahamas has already established a National Invasive Species Strategy (NISS) in 2003, which lists 19 aquatic and 55 terrestrial species (including 34 plant and 21 animal species) as invasive on the islands. The GEF project will contribute to the fulfillment of the NBSAP and NISS, by building awareness through further development of existing databases, providing training, identifying specific sites for regular monitoring on IAS impact and management success, and amending and enforcing existing legislation.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
6: Lionfish continued	Strat. Action # 4. Identify regulatory changes that are necessary.	Currently fish cannot be speared while using SCUBA. Appropriate regulatory changes that could help promote harvest of lionfish should be identified; the BEST/GEF project will identify some of the modifications needed. Complete by the end of 2010.
	Strat. Action # 5. Draft proposed rewrite of Fisheries Legislation.	Committee/work group or DMR (see Section 11) and consultant will draft a rewrite of Fisheries Legislation to address lionfish issues. Complete by the end of 2011.
	Strat. Action # 6. Fisheries Advisory Committee and public review.	The Fisheries Advisory Committee will provide input during the drafting. Public stakeholders will then have an opportunity to comment. Complete by the end of 2012.
	Strat. Action # 7. Revise as necessary and provide Draft Fisheries Legislation to Minister.	Committee/work group or DMR and consultant will revise the draft legislation based on public input and provide a final opportunity for review by the Fisheries Advisory Committee. The Committee/work group or DMR and consultant will finalize the draft legislation for presentation to the Minister. Complete by the end of 2013.

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Stakeholder input on Lionfish

Stakeholders were concerned about impacts from lionfish and requested that lionfish gear be added to the list of items that can be imported duty free. They also suggested modifying the rules and regulations to allow spearing of lionfish with SCUBA and within the parks and marine reserves.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
7: Aquaculture policy	<i>Development Goal: Approve a government policy for aquaculture and provide the legal framework for aquaculture in The Bahamas.</i>	<i>There is no clear government policy or legal framework for the aquaculture sector and this has limited growth. Government policy and legal framework fully implemented by the end of 2014.</i>
	<i>Strat. Action #1. Consult institutions/organizations with experience conducting aquaculture research.</i>	<i>Institutions/organizations with experience conducting aquaculture appropriate for use in the Bahamas will be contacted to help draft a policy statement to guide aquaculture development in the Bahamas. Complete consultation and obtain their recommendations by 2010.</i>
	<i>Strat. Action #2. Develop a draft policy statement for aquaculture.</i>	<i>The Government should develop a policy statement to guide development of aquaculture in the Bahamas. Draft Aquaculture Legislation, developed in 1988 through a FAO project, can be used to help develop a draft policy statement and reasons the 1988 legislation did not get implemented should be examined for any lessons learned. Complete draft policy statement by the end of 2011.</i>
	<i>Strat. Action #3. Identify regulatory changes that are necessary.</i>	<i>The appropriate regulatory language for aquaculture must be developed as none currently exists. Complete by the end of 2011.</i>
	<i>Strat. Action # 4. Draft proposed Aquaculture Legislation.</i>	<i>Committee/work group or DMR (see Section 11) and consultant will draft new Aquaculture Legislation. Draft Aquaculture Legislation, developed in 1988 through a FAO project, can be used to form the basis for new legislation. Complete by the end of 2011.</i>
	<i>Strat. Action # 5. Fisheries Advisory Committee and public review.</i>	<i>The Fisheries Advisory Committee will provide input during the drafting. Note: May want to add someone from the Cape Eleuthera Institute to the advisory committee or consider developing a separate Aquaculture Advisory Committee. Public stakeholders will then have an opportunity to comment. Complete by the end of 2012.</i>
	<i>Strat. Action # 6. Revise as necessary and provide Draft Aquaculture Legislation to Minister.</i>	<i>Committee/work group or DMR and consultant will revise the draft legislation based on public input and provide a final opportunity for review by the Fisheries Advisory Committee. The Committee/work group or DMR and consultant will finalize the draft legislation for presentation to the Minister. Complete by the end of 2013.</i>

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Stakeholder input on Aquaculture

Stakeholders requested that the issue of leasing the sea bed for aquaculture purposes be addressed in any legislation. They felt this would be required for successful aquaculture operations.

Stakeholder input on Public Education, Consultation & Outreach

Stakeholders expressed support for more efforts to educate the public about the importance of marine resources and the need to follow existing rules and regulations.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
8: Public education, consultation & outreach	<i>Development Goal: Consult with the public and provide information/education to the public on an ongoing basis.</i>	<i>No formal process exists for the public to provide input and for the Government to respond. Lack of a web site hinders public outreach/education. Establish a formal public consultation process that is fully implemented by the end of 2014.</i>
	<i>Strat. Action # 1. Establish a Department of Marine Resources (DMR) web site and provide adequate & timely support to keep the site current.</i>	<i>The web site should be up and running by the end of 2009. Adequate and timely support should be provided on an ongoing basis. The web site will require constant updating and expansion. The review process for approving information to be published on the web site needs to be timely and non-obstructive.</i>
	<i>Strat. Action #2. Educate the public on importance of commenting and timing for comments..</i>	<i>Work with the College of the Bahamas, NGOs and other government agencies to incorporate information into the education system and to educate the public about the need to comment on fisheries/aquaculture issues and the timing for appropriate comments (ongoing).</i>
	<i>Strat. Action # 3. Identify regulatory changes that are necessary.</i>	<i>A formal process for the public to comment and for the Government to respond should be developed. This can be similar to the U. S. National Environmental Policy Act or similar legislation. The College of the Bahamas should be able to provide assistance in drafting this process. Complete by the end of 2010.</i>
	<i>Strat. Action # 4. Draft proposed Legislation.</i>	<i>Committee/work group or DMR (see Section 11) and consultant will draft the necessary Legislation to address public consultation and outreach. Complete by the end of 2011.</i>
	<i>Strat. Action # 5. Fisheries Advisory Committee and public review.</i>	<i>The Fisheries Advisory Committee will provide input during the drafting. Public stakeholders will then have an opportunity to comment. Complete by the end of 2012.</i>
	<i>Strat. Action # 6. Revise as necessary and provide Draft Fisheries Legislation to Minister.</i>	<i>Committee/work group or DMR and consultant will revise the draft legislation based on public input and provide a final opportunity for review by the Fisheries Advisory Committee. The Committee/work group or DMR and consultant will finalize the draft legislation for presentation to the Minister. Complete by the end of 2013.</i>

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
9: Marine Reserve Network/National Marine Parks	<i>Development Goal: Consult with the public and develop a network of marine reserves.</i>	<i>The Department of Marine Resources (DMR) and the Bahamas National Trust (BNT) are currently consulting with public stakeholders to gather input concerning a network of marine reserves. The DMR will continue to work with the Bahamas National Trust (BNT) to implement the <u>Master Plan for The Bahamas National Protected Area System</u>. The Nature Conservancy is an important partner working with the DMR and BNT to meet the requirements of <u>The Caribbean Challenge</u> and the <u>UN Convention on Biological Diversity</u>. The Caribbean Challenge is an unprecedented commitment by Caribbean governments to build political support and financial sustainability for protected areas in the Caribbean. Establish a network of marine reserves that is fully implemented by the end of 2014.</i>
	<i>Strat. Action #1. Consult with the public and evaluate areas for designation as a marine reserve. This could include new areas and expansion of existing areas.</i>	<i>The DMR and BNT will continue to meet with the public and conduct scientific evaluations of proposed marine reserves. This should be completed by the end of 2010.</i>
	<i>Strat. Action #2. Identify funding, monitoring, and regulatory changes necessary to implement the network of marine reserves.</i>	<i>The DMR and BNT will draft funding and monitoring plans for each marine reserve. The College of the Bahamas should be able to provide assistance in this process and in conducting the monitoring. Complete by the end of 2010.</i>

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Table 7 continued: Strategic Direction and Action Plan

Priority Area	Goal & Strategic Action	Brief Description
9: Marine Reserve Network/National Marine Parks continued	Strat. Action # 3. Draft proposed Legislation.	Committee/work group or DMR (see Section 11) and consultant will draft the necessary Legislation to address the network of marine reserves. Complete by the end of 2011.
	Strat. Action # 4. DMR and BNT, working with The Nature Conservancy, will propose marine reserves/national parks equal to 10% of the marine area.	The UN Convention on Biological Diversity established a target of 10% of the area protected by 2010 (land-based) and 2012 (marine-based) for all state parties to protect marine and land ecosystems. The Government of the Bahamas is committed to the orderly expansion of the national park system and is committed to meeting the 2010 and 2012 targets. Complete protection of 10% of the marine area through marine reserves/national parks by the end of 2012.
	Strat. Action # 5. Fisheries Advisory Committee and public review.	The Fisheries Advisory Committee will provide input during the drafting. Public stakeholders will then have an opportunity to comment. Complete by the end of 2012.
	Strat. Action # 6. Revise as necessary and provide Draft Fisheries Legislation to Minister.	Committee/work group or DMR and consultant will revise the draft legislation based on public input and provide a final opportunity for review by the Fisheries Advisory Committee. The Committee/work group or DMR and consultant will finalize the draft legislation for presentation to the Minister. Complete by the end of 2013.

Note: Priority Areas 2-9 have similar Strategic Actions for drafting legislation that show a more formalized role for the Fisheries Advisory Committee and public stakeholders. This process is considered for adoption into legislation under Priority Area 8.

Stakeholder input on Marine Reserve Network/National Marine Parks

Stakeholders stated that more information must be provided to the public on the benefits of marine reserves/parks. Questions were raised about whether the 10% would be applied to the total area of the Bahamas and when in 2010 was the target. It was clarified that the 10% is being applied to the shelf-edge area of the Bahamas and that the Bahamas is targeting to meet the goals by the end of 2010 and 2012. Stakeholders asked about progress towards meeting these goals and it was noted that with the recent announcement of new parks at the annual Bahamas National Trust meeting in 2009, The Bahamas is on track to meet the land-based goal of 10% by 2010 but the marine-based goal of 10% by 2012 will be hard to meet.

9. Non-Strategic Areas

Table 8: Non-Strategic Industries

Non-Strategic Areas	Nature of Routine Support
1. Fisheries Research	The Department of Marine Resources (DMR), in an effort to ensure the sustainable harvesting of Bahamian marine resources, will continue its research on the queen conch, spiny lobster (crawfish), and the Nassau Grouper. The research initiative will involve the continued monitoring of the various fisheries, the conducting of resource population studies, and the collection of biological data. To accomplish this, the DMR will undertake a number of field visits including sea travel to sampling sites and the monitoring of landing sites. The DMR will identify a prioritized list of research projects by mid-2010 and contract with local and foreign consultants and/or researchers to conduct the research.
2. Sportsfishing	New regulations for sportsfishermen came into effect on October 19, 2007. These significantly altered the catch limits and introduced a new management regime for sportsfishing tournaments in The Bahamas. This is now being fully implemented. Attention will be directed towards better management of the sportsfishing sector through stakeholder consultations and the development of comprehensive regulations that address all relevant areas of sportsfishing. It is proposed that a consultant be utilized for a part of this work. The DMR will identify a prioritized list of research projects targeted to maximize the potential of the sportfishing industry by mid-2010 and contract with local and foreign consultants and/or researchers to conduct the research.
3. Liaison with other government agencies	The DMR will continue to work with other government agencies as is necessary.
4. Food Safety and Technology Laboratories (FSTL)	The various units at the FSTL have ongoing work programs related primarily to assuring the safety and quality of the seafood exports from The Bahamas and of training persons (students, teachers, and interested persons) in food safety principles, sanitation, and the processing and preservation of food products. The Food Safety and Technology Laboratory has been working closely with the Bahamas Agricultural and Industrial Corporation and the Department of Agriculture.
5. Respond to work load necessary to meet treaty and other international obligations.	As issues arrive, DMR staff must prepare briefing documents and/or analyses to evaluate the issue. If modifications to existing regulations or new regulations are necessary, these must be drafted. Public input must be obtained.

10. The Drivers of Fisheries & Aquaculture Development – Capacity Building

Table 9: Drivers of Development

Drivers of Development	Strategies to Enhance Capacity
1. Efficiency & Effectiveness of Institutional Support	Pursue Governmental and Non-Governmental funding to provide additional financial and human resources.
2. Quality / Efficiency of Services to Stakeholders:	
(i) SPSS & food safety	Conduct training to improve food safety. Work closely with the processors to support their development of training for the fishermen they purchase product from; conduct training.
(ii) Technology Support	To make better use of existing and future computer resources, the DMR needs to have technical support closer at hand rather than relying on centralized support which takes longer to resolve issues.
(iii) Stock assessments	Pursue staff, funding, and training to develop the ability for conducting stock assessments internally.
(iv) Web site	Get the DMR web site up and running; provide ongoing maintenance and updating.
3. Human Resource Development (education & training in strategic areas)	Pursue Governmental and Non-Governmental funding to provide additional financial and human resources. Once additional staff are hired, make it a priority to get the necessary training so that data analyses and stock assessments can be conducted internally.
4. Stakeholder Organization / Collaboration	Formalize the Fisheries Advisory Committee and consider developing an Aquaculture Advisory Committee. Pursue Governmental, Industry, and Non-Governmental funding to conduct more frequent meetings and improve communications through phone/electronic means.

11. Implementation Responsibility / Management

Table 10: Plan Implementation

Management Areas	Prime Responsibility & Management Systems
1. Institutional Head Responsible for Plan implementation	Ministry of Agriculture and Marine Resources through the Department of Marine Resources
2. Coordination Mechanism	See below.
3. Project Monitoring & Implementation Mechanism	See below.

Two alternative approaches are offered:

1. The first approach is to form a **Coordinating Council** to facilitate achievement of plan objectives and to develop Draft Fisheries Legislation and an **Operations Committee** to conduct the work necessary to achieve plan objectives. The Coordinating Council would serve as the governing body and the Operations Committee would serve as its steering committee.

The Coordinating Council would consist of policy-level signatories of the MOU [Note: It is suggested a Memorandum of Understanding (MOU) be drafted to guide the work.] or their designees. The Council provides top-level leadership and direction, establishes policy to guide development of the 5-year program and needed Partner's participation, oversees the design and implementation of the 5-year program, and is the decision-making authority based on guidance from their relevant Ministries/organizations.

The Coordinating Council has one voting representative of each signatory Partner. The Coordinating Council members make all appointments to the Operations Committee based on guidance from their relevant Ministries/organizations. The DMR Director manages the program based on guidance from the Coordinating Council.

The Operations Committee is composed of an experienced staff person from each Partner. The Committee serves as the steering committee to direct development of program standards and assimilate recommendations from the various technical and advisory committees into cohesive recommendations to the Coordinating Council.

Potential composition could include:

1. *Director, Department of Marine Resources - Lead*
2. *Director, BEST*
3. *Ambassador for the Environment*
4. *Ministry of Tourism Representative with responsibility for fishing activities*
5. *Director, Bahamas National Trust*

*Each of the Coordination Council members would appoint a representative to serve on an **Operations Committee**. These are the individuals that would do the day-to-day work to achieve plan objectives and to actually draft legislation. Their work products would be presented to the Coordination Council for modification/approval.*

***Staff support** would be provided by a Fisheries Legal Expert contracted/assigned to this task and DMR staff with assistance from staff in the Ministry of the Environment. Input on law enforcement would be obtained from representatives of the Royal Bahamas Police & Defense Forces. The Fisheries Advisory Committee would provide public input during the developmental phase. The potential for establishing an Aquaculture Advisory Committee would be explored.*

Funding

It is important to understand that this coordination mechanism and project monitoring/implementation mechanism will require new funding and new staff to serve on the Operations Committee. Current staff are challenged to meet existing and growing requirements and simply cannot serve in this new, demanding capacity. Estimated funding requirements are shown in Section 13. Summary Investment Matrix.

2. A second approach would be to have the Department of Marine Resources (DMR) take the lead in ensuring the 5-Year Plan is accomplished. A Coordinating Committee could be formed to provide guidance and comments on concrete proposals drafted by the DMR.

Potential composition of the Coordinating Committee could include:

1. *Ministry of the Environment Representative*
2. *Ministry of Tourism Representative with responsibility for fishing activities*
3. *Bahamas National Trust Representative*
4. *Chair(s) of the Fisheries Advisory Committee*
5. *College of The Bahamas Representative*

***Staff support** would be provided by a Fisheries Legal Expert contracted/assigned to this task and DMR staff. Input on law enforcement would be obtained from representatives of the Royal Bahamas Police & Defense Forces. The Fisheries Advisory Committee would provide public input during the developmental phase. The potential for establishing an Aquaculture Advisory Committee would be explored.*

Stakeholder input on Implementation

Stakeholders were supportive of persons/organizations outside of fisheries being involved. They felt that involving NGOs, the Advisory Group, etc. may help move things along towards implementation. Having a more diverse group would be beneficial.

In terms of membership on the coordinating groups, Stakeholders suggested having a balance of input from all areas of the Bahamas and not just Nassau would be a necessity. “Don’t make the group so top heavy with agency people. Have more involvement of the Advisory Committee and the private sector.”

Involving the law enforcement agencies would be very beneficial.

Stakeholders did not express a preference for either of the two alternative approaches but did express a desire to see both approaches included.

Stakeholders were supportive of meeting again within 3 months to help work on implementing the items in this Strategic Plan. Some suggested meeting in six weeks and again in another six weeks to monitor progress. This way when they meet again in 3 months something may have been accomplished.

FAO Review Comments on Implementation

During their review of the draft report, FAO reviewers suggested the following three areas be discussed to clarify how the Five Year (2010-2014) Sector Strategic Plan’s actions/recommendations address these important areas.

1. Ecosystem Approach to Fisheries (EAF). An Ecosystem Approach to Fisheries has become a standard that has been adopted by many nations and regional fishery management organizations. FAO has developed a large number of tools and methods for applying an Ecosystem Approach to Fisheries, many of which can be applied in data poor situations similar to the level of data available in The Bahamas. An overview and links to important documents may be found at: <http://www.fao.org/fishery/topic/2880/en>. The following information is taken from the FAO website and presents an overview of EAF:

“Aquatic ecosystems, inland, coastal and marine, provide humans with resources for recreation, food and livelihood. They also perform many other important environmental functions, e.g. in relation to meteorological events, pollution etc., contributing to general human well-being. They are used by both capture fisheries and aquaculture as well as other competing sectors. Achieving sustainable use of aquatic ecosystems has been the main and largely failed objective of fisheries management for decades. The formally adopted **Ecosystem Approach to Fisheries (EAF)** imposes further efforts in that direction, implying better understanding and better governance.

Conceptually, ecosystems can be described at various sizes and with different degrees of resolution, from the Earth or a whole ocean with their large scale relations and processes, to a microscopic grain of sand and its immediate surroundings. The choice is based on pragmatic considerations. Fisheries usually

better relate to the intermediate ecosystem size range, corresponding to the size of the resources sought and of social structures in charge of their stewardship. In each case, adjustments will be needed to account for the possible mismatch between the limits of the human jurisdictions and those of the species distributions and ecological processes.

The exploited ecosystem is unavoidably affected by fishery activities. Wild or ranched stocks and other organisms affect each other e.g. through predator-prey relationships or transfer of diseases. The impact of capture or culture on the resource, the associated and dependent species, the habitat, the bottom and the benthic flora and fauna can be particularly severe and longlasting. It is also vulnerable to degradation and pollution imposed by other industries, with long-lasting or irreversible effects, including on the production of fisheries, seafood quality and fishers' livelihood.

Natural variability and climate change have significant implications for productivity and management. Catastrophic natural events (e.g. typhoons, tsunamis) have significant impact on resources, infrastructures and people. Understanding, predicting and accounting for them is a significant challenge of the next decade."

The proposed vision statement (page 21) takes an ecosystem approach to fisheries: *"A vibrant fishing sector based on a healthy ecosystem developed for the benefit of current and future generations of Bahamians through ecologically sustainable practices, adequate data collection, research, management, and enforcement. Fishing sector includes commercial fishing, recreational fishing, subsistence fishing, tourism, and aquaculture."* This makes it clear that fisheries must be viewed within the context of the entire ecosystem, including the human population.

An Ecosystem Approach to Fisheries is further emphasized in the proposed mission statement (page 21): *"Our mission for the fisheries and aquaculture sectors is development through sustainable use and integrated management of the fishery resources, coastal zone, and marine/freshwater environment for the well-being of current and future generations of all Bahamians."*

The Goals and Objectives (page 22) go on to present fisheries in an ecosystem view. The net result of the Strategic Direction and Action Plan (Table 7) will be to put in place the items required to implement an Ecosystem Approach to Fisheries. Once fully implemented, the Five Year (2010 - 2014) Sector Strategic Plan will allow the Bahamas Ministry of Agriculture and Marine Resources to manage fisheries within an ecosystem context. However, full achievement of the Ecosystem Approach to Fisheries will require cooperation and action by other parts of the Government of The Bahamas.

2. Scientific Advisory Process to Fisheries Management. Successful implementation of The Strategic Plan requires a continuous scientific advisory process to fisheries management which should take into account resources users' knowledge. This is acknowledged in the list of objectives on page 22:

- Ensure that the fishing industry is integrated into the policy and decision-making process concerning fisheries and coastal zone management.

- Take into account traditional knowledge and interests of local communities, small-scale artisanal fisheries and indigenous people in development and management programs.

The importance of an ongoing scientific advisory process is emphasized in the Strategic Direction and Action Plan (Table 7). Priority Areas #2 - #9 include a step where the Fisheries Advisory Committee provides input during drafting/development, and both the Fisheries Advisory Committee and Public provide review comments prior to each item being revised for presentation to the Minister. It is beyond the scope of The Strategic Plan to develop the specific structure of the ongoing scientific advisory process. However, Priority Area #8: Public Education, Consultation & Outreach: Strategic Action #3 (page 35) recommends that *“A formal process for the public to comment and for the Government to respond should be developed. This can be similar to the U.S. National Environmental Policy Act or similar legislation. The College of the Bahamas should be able to provide assistance in drafting this process. Complete by the end of 2010.”* It is envisioned that this activity would develop specific steps that ensure the public has an opportunity to provide scientific input into the decision process and that the Government would develop specific steps to explain how those comments were addressed in reaching a final decision.

A key part of the formal process for public comment should include an examination of the current Fisheries Advisory Committee (FAC). Adequate funding should be provided to ensure the Fisheries Advisory Committee is balanced with representation from major fisheries and islands and that scientific expertise is added from organizations like the College of the Bahamas, the Bahamas National Trust, Non-Governmental Organizations, and the public. The Terms of Reference and operational procedures (e.g., number of seats from various islands, balance by major fisheries, number of meetings per year, etc.) of the Fisheries Advisory Committee should be fully developed and made available to the public via the Department of Marine Resources' web site.

The importance of obtaining scientific input is also emphasized in Section 11. Implementation Responsibility/Management. Two alternative approaches are offered with each approach including committee compositions that draw across various Ministries/groups including the Department of Marine Resources, Ministry of the Environment (including BEST), Ministry of Tourism, the Bahamas National Trust, and the College of the Bahamas. This committee approach to achieve plan objectives and to develop Draft Fisheries Legislation will ensure full use of all available scientific information.

3. Regular Decision-Making Process and Procedures for Management Actions. The importance of a regular decision-making process and procedures for management actions is emphasized in the Strategic Direction and Action Plan (Table 7). Priority Areas #2 - #9 include steps where consultations/data gathering occur and then a draft policy statement or draft legislation is produced with ongoing input from the Fisheries Advisory Committee. Then both the Fisheries Advisory Committee and the Public provide review comments prior to each item being revised for presentation to the Minister.

While it is beyond the scope of The Strategic Plan to develop the specific structure of the regular decision-making process and procedures for management actions, it is envisioned that the process of implementing The Strategic Plan from 2010 through 2014 will lay the groundwork for development of what should be an annual review and implementation of needed modifications to existing rules and regulations. This should take the form of an annual scoping process where the Fisheries Advisory Committee and the Public have the opportunity to provide input on needed revisions. Open meetings should be held on the major islands, and the opportunity to receive written and email comments should be provided through the Department of Marine Resources' web site. The Department of Marine Resources would then coordinate development of draft management changes with ongoing input from the Fisheries Advisory Committee. Public meetings/hearings would be held to give the public an opportunity to comment, and written/email comments would be accepted through the Department of Marine Resources web site. The completed document or a public notice should indicate how the Fisheries Advisory Committee's and public's recommendations were addressed in reaching the final decisions.

Successful implementation of a formal process for the public to comment and for the Government to respond should include specifying the details of a regular decision-making process and procedures for management actions (see Priority Area #8, Strategic Action #3).

12. Critical Legislative and Regulatory Framework in Support of Strategic Plan

A. Domestic Legislation Related To The Department of Marine Resources

- i) Chapter 244 (Statute Legislation of The Bahamas – 2000) - the Fisheries Resources (Jurisdiction and Conservation) Act, 1977

An Act to make provision for the conservation and management of the fisheries resources of The Bahamas and to extend the limits of the jurisdiction of The Bahamas over such fishery resources and for matter connected therewith or incidental thereto.

- ii) Chapter 244 (Subsidiary Legislation of The Bahamas – 2000) - The Fisheries Resources (Jurisdiction and Conservation) Regulations 1986

These are the principal regulations governing the fishing industry. A summary is provided at Appendix VII.

- iii) Chapter 236 (Subsidiary Legislation of The Bahamas – 2000) – The Food (Seafood Processing and Inspection) (Amendment) Regulations, 2004

- iv) The Fisheries Resources (Jurisdiction and Conservation) (Amendment) (No. 2) Act, 1993

An amendment to regulate long line fishing within the exclusive fisheries zone.

- v) The Marine Mammal Protection Act, 2005 (SI No. 12 of 2005)

An Act to make provision for the protection of Marine Mammals.

- vi) The Marine Mammal Protection (General) Regulations, 2005 (SI No. 81 of 2005)

- vii) The Marine Mammal (Captive Dolphin Facility) Regulations, 2005 (SI No. 80 of 2005)

Regulations made to regulate the establishment of captive dolphin facilities and to ensure the health and welfare of captive dolphins.

- viii) The Marine Mammal (Captive Dolphin Facility) (Amendment) Regulations, 2006 (SI No. 41 of 2006)

- ix) The Wildlife Conservation and Trade Act, 2004 (SI No. 26 of 2004)

An Act to implement the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES), with a view to the protection of wild species from harm through unsustainable exploitation.

- x) Chapter 295 - the Tariff Act 1975

An Act to make provisions for the imposition and collection of Customs Duties, and for other matters connected therewith. The Fourth Schedule was amended in July, 1999 limiting the level of customs duty exemptions previously granted to those in the commercial fishing industry. Commercial fishermen, bonefishermen, and fish farmers, once registered by the Minister responsible for Fisheries are able to import any of the items listed in the amendment free of customs duty. Their applications to do so are no longer processed by this Department. A limited selection of items is available to registered persons at a 10% duty rate. These applications require the recommendation of the Minister responsible for Fisheries.

- xi) Chapter 282 – the Archipelagic Waters and Maritime Jurisdiction Act, 1993

An Act delineating the territorial sea, archipelagic waters, internal waters and the exclusive economic zone of The Bahamas.

B. International Conventions/Agreements that impact on the fisheries sector to which The Bahamas is a party or in agreement includes:

- i) The United Nations Convention on the Law of The Sea,
- ii) The 1995 Agreement on Straddling and Highly Migratory Fish Stocks,
- iii) Code of Conduct for Responsible Fisheries,
- iv) The Convention on International Trade in Endangered Species of Wild Fauna and Flora, and
- v) Convention on Biological Diversity.

Recommended Supporting Legislation & Regulations

It is recommended that the following pieces of legislation be completed and implemented by the end of the 5-year project period (2014):

- I. Complete re-write of the existing Fisheries Legislation (Draft prepared in 2002 will be used as a basis for moving forward),
- II. New Aquaculture Legislation (Draft prepared in 1988 will be used as a basis for moving forward), and
- III. Modifications to other legislation as necessary.

13. Summary Investment Matrix

Note: These figures were put together by Gregg Waugh, FAO Consultant to be used in developing future budgets.

Department of Marine Resources budget information (Source: Bahamas Handbook 2009):

- (a) Provision Expenditures in 2006/07 = \$2.08 million
- (b) Approved Estimates in 2007/08 = \$2.45 million
- (c) Estimates for 2008/09 = \$2.53 million

Table 11: Summary Fisheries/Aquaculture Budgetary Long-term Needs.

Priority Areas	Strategic Development Action	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
1. Market Access Issues	1.1 Implement projects & activities in Spiny Lobster Fishery Improvement Plan	\$100,000				
	1.2 Complete certification process for spiny lobster fishery		\$80,000			
2. Data	2.1 Prepare for conducting the census (e.g., questions to ask, forms, etc.).	\$5,000				
	2.2 Conduct the actual census of the fisheries sector.		\$50,000			
3. Enforcement	3.1 Draft a National Plan of Action for IUU fishing.	\$10,000				
	3.2 Conduct additional enforcement patrols and investigations in New Providence, Grand Bahama, and throughout the Family Islands (domestic and foreign fishing).	\$500,000	\$1 million	\$1.1 million	\$1.2 million	\$1.3 million

Table 11 continued: Summary Fisheries/Aquaculture Budgetary Long-term Needs.

Priority Areas	Strategic Development Action	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
4. Human & Financial Resources	4.1 Compile a draft budget for fisheries & aquaculture to meet current and projected needs.	\$10,000				
	4.2 Fisheries & aquaculture budget to meet current and projected needs (10% of the value of exports invested in management & enforcement).	\$2.5-\$3.0 million	\$8 million	\$8 million	\$8 million	\$8 million
5. Regulations	5.1 Conduct workshops and meetings to identify appropriate management measures to be included in legislation	\$50,000				
6. Lionfish	6.1 Formally adopt the National Lionfish Response Plan	\$10,000				
	6.2 Provide funding for the National Lionfish Response Plan	\$50,000	\$100,000	\$110,000	\$125,000	\$150,000
7. Aquaculture Policy	7.1 Consult institutions/organizations with experience conducting aquaculture research. A consultant would be used for Actions 7.1 & 7.2.	\$25,000				
	7.2 Develop a draft policy statement for aquaculture. A consultant would be used for Actions 7.1 & 7.2.		\$25,000			

Table 11 continued: Summary Fisheries/Aquaculture Budgetary Long-term Needs.

Priority Areas	Strategic Development Action	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
8. Public Education, Consultation & Outreach	8.1 Establish & maintain a DMR web site.	\$25,000	\$30,000	\$35,000	\$40,000	\$45,000
	8.2 Fisheries Advisory Committee (and possibly Aquaculture Advisory Committee) meetings and communications.	\$10,000	\$40,000	\$45,000	\$15,000	\$17,000
9. Marine Reserve Network/National Marine Parks	9.1 Consult with the public and evaluate areas for designation as marine reserves.	\$50,000				
	9.2 Provide enforcement and monitoring of each marine reserve.		\$100,000	\$150,000	\$200,000	\$500,000
10. Special Projects	9.1 Establish a Coordinating Council; appoint an Operations Committee; appoint the staff support; provide the necessary funding; and charge the Council to provide overall supervision and coordination. It would be the responsibility of the Council to deliver the Draft Legislation by the end of 2013.	\$250,000	\$300,000	\$330,000	\$375,000	\$250,000
	9.2 Recreational fisheries consultant	\$25,000	\$30,000	\$35,000	\$40,000	\$45,000

14. Special Projects

Special Projects (Brief Description)

1. Recreational stakeholder consultations and development of comprehensive regulations that address all relevant areas of sportfishing. It is proposed that a consultant be utilized for a part of this work.
2. Form a **Coordinating Council** to facilitate achievement of the 5-year plan objectives and to develop Draft Fisheries Legislation and an **Operations Committee** to conduct the work necessary to achieve the 5-year plan objectives. The Coordinating Council would serve as the governing body and the Operations Committee would serve as its steering committee.
Note: This is one approach being discussed. Another approach would have the Department of Marine Resources coordinate the 5-Year Plan.

15. ANNEXES

(The Annexes to comprise only LOGFRAME Matrices.

For each capital Investment Project ONE Logframe to be Completed.

Each Logframe Matrix should not exceed ONE PAGE.)

(The Project LOGFRAME:

- *a Management tool that aims to promote good project design by clearly stating the defined project logic and components. It is also useful for Project Monitoring and Evaluation)*

Note: This draft for one item was prepared by Gregg Waugh, FAO Consultant for use with specific projects as they are identified by DMR in 2010.

PROGRAMME FOR INDUSTRY: FISHERIES & AQUACULTURE

PROJECT 1: COORDINATION, PROJECT MONITORING & IMPLEMENTATION MECHANISM

LOGFRAME MATRIX: Table 1

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Goal / Development Objective Establish a Coordinating Council to provide overall supervision and coordination over the 5-year plan horizon. It would be the responsibility of the Coordinating Council to deliver Draft Legislation for implementation by the end of 2013.	Information in Table 7 will be used to track progress on identified goals & strategic actions.	Progress will be reported to the relevant Ministries, to the Advisory Committee(s), and to the public via the DMR web site.	The relevant Ministries make the necessary appointments. Adequate funding is provided.
Purpose: To ensure the necessary legislation is drafted to implement the needed changes to the relevant legislation.	Information in Table 7 will be used to track progress on identified goals & strategic actions.	Progress will be reported to the relevant Ministries, to the Advisory Committee(s), and to the public via the DMR web site.	(Purpose to Goal):
Outputs: <ol style="list-style-type: none"> 1. Identify list of capital investment projects. 2. Develop detailed budgets for each project. 3. Spiny Lobster Fishery Improvement Project 4. Fish Census 5. National Plan of Action for IUU Fishing 6. National Lionfish Response Plan 7. Department of Marine Fisheries Web Site 8. Draft Fisheries Legislation 9. Draft Aquaculture Legislation 	Information in Table 7 will be used to track progress on identified goals & strategic actions.	Progress will be reported to the relevant Ministries, to the Advisory Committee(s), and to the public via the DMR web site.	(Output of Purpose):
Activities: <ol style="list-style-type: none"> 1. Establish a Coordinating Council 2. Appoint an Operations Committee 3. Appoint the staff support 	Public notice that the committees have been established and appointed; and that staff support has been identified.	Progress will be reported to the relevant Ministries, to the Advisory Committee(s), and to the public via the DMR web site.	(Activity to Output):

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>Inputs</p> <ol style="list-style-type: none"> 1. Ministry of Agriculture & Marine resources hires one new staff member. 2. Ministry of the Environment hires two new staff members (BEST & Ambassador for the Environment). 3. Ministry of the Tourism appoints staff. 4. Bahamas National Trust appoints staff. 5. Input from the Royal Bahamas Police & Defense Forces. 6. Lawyer to work with Coordination Committee. 7. Funding to hire staff, conduct meetings, and consult with Advisory Committee(s) and the public. 			

16. STAKEHOLDER'S MEETING

A draft report was reviewed at a Fisheries Stakeholders Meeting in Nassau, Bahamas on February 3-4, 2010. Comments have been incorporated into this final report. The agenda and list of attendees are attached.



FAO/MINISTRY OF AGRICULTURE & MARINE RESOURCES **RAPID ASSESSMENT** **FISHERIES STAKEHOLDERS MEETING**



SUPERCLUBS BREEZES
 Cable Beach, Nassau, The Bahamas
 3 - 4 February 2010

AGENDA

DAY ONE

12:30 pm	Call To Order	Mr. Michael Braynen Director of Marine Resources	5 Mins.
12:35 pm	Invocation	Mr. Bernard Munroe Fisheries Superintendent	2 Mins.
12:37 pm	Welcome & Introduction of Minister	Mr. Creswell Sturup Permanent Secretary Ministry of Agriculture & Marine Resources	8 Mins.
12:45 pm	Remarks by Minister	Hon. Lawrence Cartwright Minister of Agriculture & Marine Resources	15 Mins.
SESSION ONE			
1:00 pm	Introduction of Participants	Mr. Michael Braynen Director of Marine Resources	10 Mins
1:10 pm	Introduction of Fisheries Consultant	Mr. Michael Braynen Director of Marine Resources	5 Mins.
1:15 pm	Presentation of Draft Fisheries Management Plan	Mr. Greg Waugh Fisheries Consultant	1 Hr. 45 Mins.
3:00 pm	COFFEE BREAK		15 Mins.
3:15 pm	Continuation of Presentation: Fisheries Management Plan	Mr. Greg Waugh Fisheries Consultant	1 Hr. 45 Mins.
5:00 pm	END OF DAY ONE		

DAY 2

9:00 am	Call to Order	Mr. Edison Deleveaux Deputy Director of Marine Resources	5 Mins.
9:05 am	Overview/Clarification	Mr. Greg Waugh Fisheries Consultant	25 Mins.
9:30 am	Stakeholders Feedback	Mr. Michael Braynen & Greg Waugh Facilitators	45 Mins.
10:15 am	COFFEE BREAK		15 Mins.
10:30 am	Stakeholders Feedback	Mr. Michael Braynen & Greg Waugh Facilitators	1 Hr. 30 Mins.
12 Noon	Wrap-Up	Mr. Michael Braynen Director of Marine Resources	30 Mins.
12:30 pm	LUNCH		



**RAPID ASSESSMENT
FISHERIES STAKEHOLDERS MEETING
NASSAU, THE BAHAMAS
3 - 4 February 2010**

PARTICIPANTS LIST

No.	NAME	-	ISLAND	STATUS
1	Michael Braynen	-	Nassau	Director of Marine Resources
2	Edison Deleveaux	-	Nassau	Deputy Director of Marine Resources
3	Patricia Bethel	-	Nassau	Assistant Director of Marine Resources
4	Gilford Lloyd	-	Nassau	Senior Fisheries Officer
5	Edward Taylor	-	Nassau	Senior Fisheries Officer
6	Lisa Dean	-	Nassau	Fisheries Officer
7	Lester Gittens	-	Nassau	Assistant Fisheries Officer
8	Bernard Munroe	-	Nassau	Fisheries Superintendent
9	Caswelt Mounts	-	Nassau	Fisheries Superintendent
10	Jeremy Saunders	-	Abaco	Fisheries Superintendent
11	Gregory Bethel	-	Nassau	Senior Economist
12	Carroll Laing	-	Abaco	Assistant Fisheries Superintendent
13	Adrian Laroda	-	Nassau	Bahamas Fishing Alliance
14	Anthony McKinney	-	Nassau	Co-Chairman – Fisheries Advisory Comm.
15	Glen Pritchard	-	Nassau	Co-Chairman – Fisheries Advisory Comm.
16	Percy Roberts	-	Nassau	Processor
17	David Kreiser	-	Nassau	Fisher
18	Keith Carroll	-	Nassau	Fisher
19	Mia Isaacs	-	Nassau	Processor
20	Janel Campbell	-	Nassau	Ministry of Tourism
21	Agatha Russell	-	Abaco	Processor/Buyer
22	Carson Culmer	-	Nassau	Montague Fishers Association
23	Jeffrey Jolly	-	South Andros	Fisher
24	Roosevelt Curry	-	Grand Cay	Fisher
25	Andrew Gibson	-	Crooked Island	Fisher/Sport Fishing Guide
26	Lynden Minnis	-	Long Island	Fisher
27	Phillip Miller	-	Nassau	Undersecretary – Min. of Agric. & Mar. Res
28	Robert Maynard	-	Nassau	Customs Department
29	Gregg Waugh	-	Freeport	FAO Consultant