COUNTRY PAPER 6.

A REVIEW OF MONITORING, CONTROL AND SURVEILLANCE (MCS) ISSUES IN THE MANAGEMENT OF BAHRAIN'S MARINE RESOURCES

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OVERALL AIM

The overall aim of the Directorate of Fisheries is to manage the Marine Resources of Bahrain at sustainable levels in a cost-effective manner.

The four Sections in the Directorate and their responsibilities are:

- (i) *Extension and Marine Control* To conserve marine resources through management, enforcement and education.
- (ii) **Biological Studies and Environment** To manage the fishing resources of Bahrain within sustainable harvest levels.
- (iii) *Mariculture* To establish and support a profitable private sector aquaculture industry.
- (iv) Statistics To provide relevant fisheries statistics for fisheries management decisions.

FISHERIES MANAGEMENT

Goals:

- (i) Compliance with marine resource and fisheries regulations
- (ii) Formulation of appropriate marine resource and fisheries regulations.
- (iii) Public awareness and appreciation of the value of marine resources.
- (iv) Education of policy-makers and user groups regarding marine conservation issues.
- (v) The applied use of extension services to the fishing community.
- (vi) Maximum sustainable fisheries harvest.
- (vii) Development and implementation of appropriate management strategies based on the best available scientific evidence.

Activities:

- (i) Liase with relevant agencies on marine management and regulation issues.
- (ii) Formulate cost-effective strategies to achieve compliance with regulations.
- (iii) Conduct surveillance to enforce marine resource and fisheries regulations.
- (iv) Liase with Education and Extension Unit on public enforcement policy.
- (v) Prepare and publish marine education materials.

- (vi) Formulate fisheries management strategies based on applied research and statistics.
- (vii) Review and issue fishing licences as appropriate.
- (viii) Establish and maintain a database on all fishing vessels.
- (ix) Implement strategies in a cost-effective manner.
- (x) Coordinate and prepare press notices and respond to public complaints and enquiries.
- (xi) Provide reference materials on marine resource to schools and other organizations.
- (xii) Carry out applied extension programmes in the fishing community.

FISHERIES MANAGEMENT

There are several aspects included in fisheries management. These deal with control and regulating fishing activities. The Extension and Marine Control Section has primary responsibility here.

Licensing

The Extension and Marine Control Section is responsible for issuing licences to fishermen. In 1998, 402 shrimp licences, 502 fishing licences, and 73 barrier trap (*haddrah*) licences were issued. With the extremely high summer water temperatures and poor fish catches during the summer of 1998, 60 fishermen were given temporary shrimp licences.

Surveillance and enforcement

In 1997, the Cabinet established a special Fisheries Enforcement Committee. Under the guidance of this new committee, great advances continue to be made to address the problems of illegal fishing in Bahrain. The Fisheries Enforcement Committee meets monthly to discuss fisheries and marine resources issues. In 1998, there was strong and close cooperation between the Coastguard, Municipality and the Directorate of Fisheries.

Shrimp closed season

The 1998 shrimp closed season was effectively enforced. This was primarily due to the efforts of the Fisheries Enforcement Committee. There was good cooperation between the Fisheries Directorate, Coastguard, and Municipality to enforce this closed season. The Directorate of Fisheries did not have to conduct any surveillance during this period.

During this closed season, the Coastguard confiscated 45 shrimp nets and 8 push nets. Owners were taken to court and had to pay a court fine of about BD 25 to 250. In addition, 1 109 kg of shrimp were confiscated. The Directorate of Fisheries sold them to local processors and the money was held by the court as evidence.

The Directorate of Fisheries made arrangements with barrier trap (haddrah) fishermen for their shrimp catches. Closed season barrier trap shrimp catches were sold to large middlemen for freezing. There were no local sales of such shrimp during the 1998 closed season.

Illegal gillnets

In 1998, the Coastguard confiscated 130 illegal multi-mesh gillnets. These were burned by the Directorate of Fisheries.

Illegal driftnets (hayali)

In 1998, the Coastguard captured three Qatar *banoush* fishing with driftnets (*hayali*). Owners were taken to court. The 66 hayali nets from these 3 banoush were confiscated. These boats had to pay a court fine.

In addition, the Coastguard confiscated 144 drift nets (*hayali*) from local fishermen. There were court cases and owners were fined. The nets were burned by the Directorate of Fisheries.

Regulations

Shrimp closed season

In 1998, there were ministerial decrees to close and open the shrimp trawl season in early 1998, with the closed season running from 1 March to 31 July 1998.

Fish trawling ban

A total ban on fish trawling in Bahrain waters went into effect on 1 June 1998.

1995 decree regarding Bahraini captains

The 1995 decree regarding Baharaini captains on local fishing boats was discussed by local fishermen and the Prime Minster. This decree was suspended pending more studies.

Proposed new law on marine resources

A draft of the proposed law on fishing and marine resources was completed. An additional draft proposed law on fisheries and marine resources issues was later completed.

Other management issues

Fishermen's Committee

A special Fishermen's Committee was formed in 1998 to represent fishermen, and the Directorate of Fisheries staff held various discussions with this new committee.

Artificial reef and anti-driftnet activities in 1997

In 1997, there were a variety of artificial reef and anti-driftnet activities. These included several artificial reef deployment trips and diver follow-up checks of existing artificial reefs. In addition, the anti-driftnet programme continued in 1997.

Artificial reef and anti-driftnet activities in 1998

In 1998, there were no artificial reef deployment trips. However, there were several artificial reef follow-up checks by volunteer divers. In addition, volunteer divers continued to deploy anti-driftnet floats to deter illegal driftnetting.