Summary of the Honduras Caribbean Spiny Lobster Marine Stewardship Council (MSC) Pre-Assessment

Conducted for WWF

By

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Scope of the Pre-assessment: Species, Method of Capture, Geographical Area, Management System and Client Group

WWF-US served as the client for a MSC pre-assessment of the industrial Caribbean spiny lobster trap fishery off the coast of Honduras conducted in 2010-2011. Spiny lobster (*Panulirus argus*) is managed at the national level by the Fisheries and Aquaculture Department (*Dirección General de Pesca y Acuicultura, DIGEPESCA*) of the Secretariat of Agriculture and Livestock (*Secretaría de Agricultura y Ganadería, SAG*). At the regional level the fishery is managed by the Organization for the Fishing and Aquaculture Sector of the Central American Isthmus (*Organización del Sector Pesquero y Acuícola del Istmo Centroamericano, OSPESCA*). In 2009, OSPESCA issued harmonized regional lobster fishery regulations that have been adopted by the Honduran government.

Description of the Fishery

Honduras' and Nicaragua's lobster fisheries are the most productive in the Mesoamerican Reef. For four decades, the industrial (SCUBA and traps) and artisanal fleets of both countries have operated jointly on the (common) shelf and have exerted high fishing pressure upon the shared resource, presumably a single lobster stock. The lobster fishery in Honduras is conducted by industrial and artisanal fleets. The industrial fleet centers its activities around the Bay Islands (Roatan, Guanaja) and La Ceiba. This fleet has two components: a dive fishery that uses SCUBA as the main fishing method, and a trap fishery that deploys wooden traps. In 2005/2006, the number of registered industrial vessels was 170, with 117 trap and 53 dive vessels, respectively. The SCUBA fleet spends approximately 12 days at sea, twice a month, carrying an average of 24 to 60 divers and a corresponding number of dingy boats. The trap fleet consists of large vessels (75-90 ft) that carry an average of 2,500-3,000 traps and haul approximately 1,000 traps per day. In 2008, industrial trap CPUE averaged 48 pounds/day and 10,667 pounds/vessel/year. The trap fishery currently harvests approximately 60% of the total landings.

Fishery statistics are not produced by the Honduran authorities on a regular basis, but given that 99% of the total lobster production is exported to the United States, import statistics from NOAA provide historical trends in lobster landings since the 1970's. There was a sharp increase in landings during the 80's, with a peak of 1,895 tons (tails) in 1988. Since the mid-90's there have been marked fluctuations below an average of 1,500 tons per year.

Evaluation Procedure, Main Issues Identified and Conclusions

This pre-assessment focused on the industrial trap spiny lobster fishery of Honduras. Three main components (principles) were analyzed: Principle 1: health of the lobster stock, Principle 2: impacts of the fishery on the ecosystem, and Principle 3: the governance and management system. All the

information available suggests that the Honduran stock is overfished, based on declining trends in total landings, fluctuating CPUEs, overcapacity of the industrial fleet, and the prevalence of unsustainable and illegal fishing practices, including the capture of undersized lobsters and poaching. The fishery lacks a formal data collection system, and thus there is limited knowledge of catches, biomass levels or true stock status. Currently there are no reference levels that could guide the fishery toward sustainability, but there are precautionary procedures in place in the fisheries laws and regulations, including access controls, seasonal and area closures, effort controls, gear restrictions, and size limits.

Lobster traps in Honduras are reportedly not known to have serious problems with catch of non-target species, bycatch or protected or endangered species. There is, however, limited documentation to support this statement, and given that traps often have finfish bycatch in other areas, this could be a potential problem. Traps may cause additional impacts on the ecosystem from direct contact with coral reefs and other sensitive habitats, and from the ghost fishing effects of lost or discarded traps. Marine protected areas and initiatives to use the ecosystem-based approach to manage the lobster fisheries in the region will contribute to manage ecosystems appropriately. However, more information is needed to assess ecosystem health and the overall effects of the lobster fishery.

The Honduran Fisheries Law and Regulations have provisions to prevent overexploitation, and address the rights of fishermen, fleet composition and vessel and gear characteristics, but do not stipulate mechanisms to avoid fleet overcapacity or establish a true limited entry process. Thus, the legal management framework has not been effective because it does not provide a clear definition of sustainability criteria or a robust fishery management strategy. Central American nations are shifting toward a regional management structure, which will ultimately help to consolidate a stronger management system within Honduras.

The legal and customary framework at the national level within Honduras (1959 Fisheries Act) is obsolete and has not been effective. The fisheries law is, however, being reviewed and updated this year (2011), and will incorporate all the key concepts for sustainable management of fishery resources. Basically, at this time the fisheries laws and regulations do not establish clear objectives; do not define key concepts such as overfishing, critical stock levels or how to calculate them; do not describe a process to recover a fishery from overfishing, and do not stipulate mechanisms to avoid fleet overcapacity or to establish a true limited entry process. In essence, there are regulations in place that could prevent impacts from exploitation, but without a clear definition of sustainability criteria, or a robust fishery management strategy, they will not necessarily lead to the sustainability of the fishery.

Another factor that contributes to overfishing in Honduras is an overall weak monitoring, control, and surveillance system, which is due primarily to limited resources for enforcement of regulations. The main problems include the inability of the government and the industry to control excess capacity and overcapitalization of the fishery, to control fishing and commercialization of undersized lobsters and gravid females, illegal fishing during the closed season, and in general IUU fishing. The use of satellite monitoring systems, implemented in 2010 by the Control and Satellite Monitoring Unit of DIGEPESCA, will strengthen the surveillance and monitoring capacity of the fisheries authority.

Key Factors of Non-Conformance or Controversy and Recommendations

The main elements of the fishery described above indicate that while Honduras is moving toward a more sustainable use of fishery resources including lobster, there are still major issues that should be addressed before the fishery can become a candidate for certification. Under the MSC system, when an

evaluation team finds the fishery does not meet the MSC standard in a given area, the area is identified as non-conformance. There are a few areas where this could occur in the Honduras lobster fishery. In addition, there are issues that can rise to the level of controversy and objection under the MSC system, where stakeholders outside the fishery may object to the fishery being certified. Again, in this fishery there is the potential for this to occur in a few areas. Details of the key factors that could lead to non-conformance or controversy are outlined below:

P1. Stock Health

- **Stock Status, Reference Points, Recovery and Rebuilding.** The stock is fully-exploited and possibly overfished, but precautionary limit and target reference points have not been calculated and if overfished, a rebuilding plan has not been developed.
- **Stock Assessment.** Linked to incomplete or inconsistent fishery data bases, stock assessment efforts have not been able to reach conclusions on stock abundance or status for the Honduran fishery alone. In joint assessments, results have largely been driven by the Nicaragua fishery because they have a more complete database. Better time-series of catch and effort data are needed from Honduras to conduct future assessments.
- **Performance, Harvest control rules and tools, Information/ monitoring.** It is not clear that the harvest strategy is robust and precautionary. While there a number of fishery regulations in place, no harvest control rules exist to describe management action in response to changes in the fishery and/or changes in stock status in relation to reference points. While fishery removals are monitored through landing forms and at processing plants, there is not sufficient information to support the current harvest strategy. In particular, it is important that stock abundance and removals be monitored appropriately and on a regular basis to build a solid fishery database.

P2. Ecosystem Health.

- **Retained species, Bycatch, ETP species.** Although managers, scientists, and NGOs noted that no adverse impacts from the lobster fishery occur for retained species, bycatch, endangered-threatened- protected species, or trophic structure, no documentation or analysis to support this conclusion was presented. The proportion and composition of retained and bycatch species need to be obtained to determine the level of risk. Also, the risk posed to retained, bycatch or ETP species by active and lost traps must be evaluated.
- **Habitat.** Traps are expected to pose some risk to coral reefs habitats from direct contact. Information is needed to determine the level of risk the fishery poses on the nature, distribution and vulnerability of the main lobster habitats. The scale, intensity, and effects of traps on habitat must be evaluated and a management strategy designed to address unknown impacts to habitat.
- **Ecosystem.** The lobster fishery retains only a few species, and discard, bycatch or ETP species are negligible. Thus, the potential impact of the fishery on the trophic structure and function is likely to come directly from changes in the abundance of lobster or from habitat loss or damage. Also lost lobster traps could lead to ghost fishing of adult lobster and bycatch species. Specific management actions are needed to address unknown impacts to the ecosystem from excess gear, gear loss, ghost gear, lobster depletion and habitat damage.

Managers and scientists are encouraged to explore two approaches for documentation of P2 components: 1) begin a program to explicitly collect data for the five components of P2; or 2) evaluate fishery impacts from other, well studied fisheries and draw inferences as appropriate.

P3. Management System.

- **Governance and policy: Legal/ customary framework.** The legal and customary framework in Honduras has some components for sustainable management, particularly since its incorporation (in 2009) into a regional management framework and the adoption of a unified fishery policy. This will balance the inefficiencies of the obsolete (1959) Fisheries Law and will strengthen governance in Honduras.
- **Governance and policy: Consultation, roles and responsibilities.** Multiple agencies (e.g. DIGEPESCA, SERNA, the Navy, the Industry, etc) are involved in fisheries management in Honduras, but their functions, roles and responsibilities need to be defined. Even if the management system includes a consultation process with various stakeholders, no formal procedures are in place.
- **Fishery-specific management system: Fishery-specific objectives.** The fishery-specific management system has a number of issues that need to be addressed. With exception to the general long term objectives of the fishery, and the implicit objectives in the national and regional policy, there are currently no fishery-specific objectives. A Fishery Management Plan for spiny lobster needs to be developed.
- **Fishery-specific management system: Decision-making processes, Monitoring and management performance evaluation.** SAG/DIGEPESCA is the only competent authority to make management decisions for the exploitation and conservation of marine fishery resources. The whole management system needs to be restructured to have an efficient decision-making process that can define and meet management objectives. Effective and timely reviews of the management system are not conducted, but are necessary to evaluate performance based on meeting the management objectives.
- **Fishery-specific management system: Compliance and enforcement.** A number of MCS mechanisms exist and are implemented within the lobster fishery, but there are major problems related to poor compliance and enforcement of regulations. The MCS system needs to be strengthened to ensure compliance with the regulations in force.
- **Fishery-specific management system: Research plan.** Due to a number of financial constraints and limitations in human capacity, a fishery-specific research plan does not exist. There is an urgent need to obtain funding for research and to build capacity at DIGEPESCA to collect and process fishery information. Regional cooperation through OSPESCA will help to enhance fisheries research programs, improve data collection and build regional databases to address the information needs of management.

Based on the information available at this time, the Honduran lobster trap fishery is likely to fail MSC certification, due primarily to concerns with stock status, lack of harvest control rules, and lack of a management system that is capable of delivering a sustainable fishery. We therefore suggest that the clients consider addressing the areas of possible non-conformance and controversy outlined above before moving to full certification. This strategy would increase the probability of passing, and passing with fewer conditions. Perhaps the Honduran lobster fishery meets the MSC standards for some of these topics, but the pre-assessment team did not receive information to demonstrate it.