## COMISION INTERAMERICANA DEL ATUN TROPICAL INTER-AMERICAN TROPICAL TUNA COMMISSION

8901 La Jolla Shores Drive, La Jolla CA 92037-1508, USA – www.iattc.org Tel: (858) 546-7100 – Fax: (858) 546-7133 – Director: Guillermo Compeán

## 2<sup>ND</sup> TECHNICAL MEETING ON DORADO

## Defining stock structure assumptions and identifying potential stock status indicators for dorado in the eastern Pacific Ocean

27-29 October 2015; Lima, Peru

## Scope and objectives of meeting

A large and diverse amount of fishery and biological data for dorado available from IATTC member countries was identified at the <u>first IATTC technical meeting</u> on this species. This first meeting was very successful, with a large number of attendees from various government research institutions, management agencies, universities, the industry and NGOs. The collaborative research forum that is necessary to work on dorado at the large regional scale of the EPO seems to be well established.

At this 2<sup>nd</sup> technical meeting on dorado, the IATTC staff will facilitate sessions of collaborative work aiming to analyze available data, discuss, and provide answers to two important questions that need to addressed in order for regional management to be possible: 1) what are reasonable stock structure assumptions to consider for regional management of dorado in the EPO? 2) which indicators of stock status should be monitored to provide scientific advice for regional management?

An extensive amount of <u>biological and composition data (length and sex)</u> is available for dorado throughout coastal nations in the EPO. A significant contribution from genetic studies is also available. A working session on stock structure will be organized to review, analyze and establish stock structure assumptions (even if preliminary) for management of the dorado resource in the EPO.

Conventional stock assessment modeling methods could potentially be used for dorado in the EPO with the fishery data available. However, lessons learned by the IATTC staff with similar species (*e.g.*, skipjack) indicate that the high productivity of these species (*i.e.* high fecundity, and fast growth rates over a short lifespan) is a handicap for conventional stock assessment analysis. Recruitment seems to be highly variable and strongly influenced by environmental conditions, and it is difficult to separate the exploitation and environmental effects with conventional stock assessment models. Relying on the existing <u>data</u> available across the region, the IATTC staff proposes that stock status (or stability) indicators (SSIs) are produced for dorado. The reliability of these indicators to achieve management and conservation goals for dorado in the EPO should be investigated within a Management Strategy Evaluation (MSE) framework. A working session on SSIs will be organized to review, analyze data (if available in time) and discuss which SSIs could be used for dorado.