



North Brazilian Caribbean Red Snapper Sustainable Source Commitment

Netuno USA is committed to the sustainability of the Caribbean Red Snapper trap fisheries along the northern Brazilian coast.

Netuno USA entered the Marine Stewardship Council (MSC) program in June 2013 through a MSC pre-assessment of the status of the Caribbean Red Snapper trap fisheries and Netuno's sustainability program for the species. The pre-assessment results were clear that the main issues derived from Stock Status and Harvest Strategy (Principle 1) and Management System (Principle 3). More specifically, the pre-assessment found (1) lack of knowledge regarding the stock status; (2) absence of an adequate Harvest Strategy in place for the fishery and (3) lack of Harvest Control Rules.

In order to obtain the necessary knowledge and quantifiable scientific data to implement a Harvest Strategy and Harvest Rules, a Fishery Improvement Plan (FIP) was designed in 2014. The FIP program seeks to unite fisheries with governmental and non-governmental agencies (collectively referred to as the "stakeholders") in order to implement actions plans and raise an operating budget for the purposes of guiding participants' harvesting practices through science-based conservation methods.

In the first version of the FIP Action Plan six actions were principally proposed to take place to change the actual fisheries. They were:

1. *Launch FIP and Engage an Steering Committee with major stakeholders;*
2. *Start a continuous fisheries data collection Program (catch, effort, fishing areas, by-catch, ghost fisheries);*
3. *Develop and implement a management plan for the fishery/stock based on defining clear objectives for management, defining a stock assessment method and verifying the current status of the stock in relation to reference points, designing a strategy to monitor the stock and a mechanism of feed-back that allows decision-makers to rapidly change fishing intensity when adverse situations are identified.*

4. *Implement escape panels on traps to minimize ghost fishing;*
5. *Develop a study to identify the existence of one or more snapper stocks on the North and Northeast coasts;*
6. *Develop and implement a clear strategy to force the actual government management and monitoring system so that it adopt measures, set procedures and modify those approaches that do not currently represent the best practices, as also to ensure that management plan designed by the FIP stakeholders will be discussed and adopted by the management fisheries management committee (CPG).*

With an initial budget of USD 25,000, FIP was launched and the Steering Management Committee began to work and plan activities together, that initially were concentrated in fundraising for the major activities of the Action Plan.

All financial and technical information about the FIP was uploaded to Sustainable Fisheries Partnership (SFP) FIP Directory website¹.

In late 2015, **Netuno USA** developed a tool for determining its financial contribution for FIPs wherein the company is directly engaged in funding based on factors uniquely related to its impact on the fisheries². The Annual FIP Contribution (AFC) was developed as a formula that takes into consideration the company's market share and three sustainability indicators: (1) the distance between the current catches and the Maximum Sustainable Yield (MSY); (2) the distance between the current fishing mortality from the fishing mortality that produces the MSY; and (3) the distance of the current mean score of the fishery in relation to the MSC PI's that would allow the fishery to get certified (≥ 80).

The more distant a fishery is from the sustainability target points, the more resources are allocated for the FIP. This concept is based on the idea of an internal penalty for the company to be engaged in a value chain based on fish resource that are being harvested at unsustainable levels.

In the case of the Caribbean Red Snapper, as **Netuno USA** has a share of 61% of the value chain, the company should contribute with USD 35,904.73.

			Source
Year Budget	\$290.000,00	USD	FIP
Donations	\$25.000,00	USD	FIP fund
Balance	\$11.998,00	USD	FIP fund
Total landings	6199	Ton	Fisheries and Aquaculture Ministry, 2012
MSY	4443	Ton	Fonteles Filho, 2007
F/Z	0,66		Fonteles Filho, 2007

¹ - <http://fisheryimprovementprojects.org/fip/north-brazilian-caribbean-red-snapper-fip/>

² - Company is also engaged on *WWF Honduras Lobster FIP* and *SFP Chinese Squid FIP*.

F/Z Ref	0,5		Steering Committe FIP
Time	5	Years	FIP
MSC average	66,77		PA / MSC
Total quantity Tq	3608,57	Ton	NOAA, 2015
Cia quantity Cq	2200	Ton	Netuno USA
Cq/Tq	61%		
O*(Qe/Qt)	\$176.801,34		
In 5 yrs	\$35.360,27		
Balance	\$11.998,00		
Reference value	\$23.362,27		
α MSY	-1756	24%	\$5.629,25
σ F/Z	-0,16	20%	\$4.557,77
σ MSCavg	-13,23	10%	\$2.355,44
Penalty			\$12.542,47
CFA	\$35.904,73		

Source: Netuno USA, AFC North Brazilian Caribbean Red Snapper FIP.

Consequently, the Company decided to support the research of the Federal University of Pará (UFPA) regarding the stock assessment and environmental impact of the fisheries. This research will aid the FIP in achieving its sustainability goals by supplementing the information available to the FIP stakeholders. The research Project will:

- *Characterize the southern snapper Lutjanus purpureus fisheries using existing data and data derived from the national Vessel Tracking Program Satellite "PREPS" (Report 1);*
- *Investigate the trends in the CPUE (catch per unit of effort) through the standardization and characterization of the CPUE of the lines and trap commercial (Report 2).*
- *Estimate growth rates, age structure of the stock and current natural mortality rates through direct and indirect methods (Report 2);*
- *Determine the current level of exploitation of the stock based on age-structured models and to estimate MSY-derived reference points for the stock (Report 2);*
- *Estimate the levels of risk imposed by the fishery to the habitats and ecosystems considering the spatial and seasonal trends/intensity of the fishing activity, the spatial and seasonal distribution of the stock and the characteristics of the fishing grounds (Report 3);*
- *Create ecological sensitivity maps and analyze it in relation to the yields (CPUE) estimated along the fishing grounds in order to propose a management strategy for the fishery that takes into consideration the ecological vulnerability of the ecosystems (Report 3);*
- *Develop a management plan that adds strategies to ensure the sustainability of*

the resource and optimize the capture and aspects that drive the certification of the products generated (Report 3);

Since **March 2016**, a PhD student, a Master's Degree student and a Bachelor-level student have received scholarships from **Netuno USA** to run the research and the field studies, under the coordination of Dr. Bianca Bentes, a UFPA Fisheries Professor and Researcher.

Two investigative cruises have already taken place and there are going to be two more by the end of the Project. A partnership with the local fisheries has allowed the introduction of observers on their fleets and for the collection of data in the landing harbors.

The local branch of the Brazilian Institute of Development and Sustainability (IABS) quickly recruited and hired Dr. Jose Augusto Aragão (former collaborator on Ministry of Environment, Brazilian Environmental Agency - IBAMA and Fisheries and Aquaculture Ministry) who has already made significant contributions regarding the technical issues of the FIP.

The completion of the research Project is anticipated for late 2017, and the expectation of the FIP Steering Management Committee is that the Caribbean Red Snapper trap fisheries in northern Brazil will be ready for a full MSC assessment in late 2018.

Netuno USA embraces the goals and principles of the FIP as a member of the Steering Management Committee, through continuous funding and by committing other resources until the fisheries along the northern Brazilian coast are deemed sustainable and a long-term Harvest Strategy is implemented.

Best regards,

Miami, August 2016.



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President



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