

# Investing in Sustainable Fisheries in the Dominican Republic

# **EVALUATION OF A TRUST MECHANISM**

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PREPARED FOR: CONSERVATION INTERNATIONAL (CI)

## IN SUPPORT OF:

THE BUSINESS CASE DEVELOPMENT EFFORTS IN THE CARIBBEAN LED BY THE FOOD AND AGRICULTURE ORGANIZATION (FAO).





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MARKETS

# Evaluation of a Billfish Conservation Trust Mechanism in the Dominican Republic

### AREA

Dominican Republic Exclusive Economic Zone (EEZ) — 269,165 km<sup>2</sup>

### **PROPOSED INVESTMENT**

U.S. \$500,000 loan and \$500,000 grant

### **INVESTMENT TERM**

10 years

### **FISHERY/SPECIES FOCUS**

*Primary*: Billfish recreational sportfishers *Secondary*: Multispecies, commercial FAD fishers

### PROJECTED FINANCIAL RETURNS

6%

### CORE BUSINESS CASE INVESTMENTS

Support the creation of a trust mechanism to secure a marine managed area to protect billfish spawning grounds and improve FAD management in the EEZ of the Dominican Republic

### **INVESTMENT OPPORTUNITY**

Investment in a trust mechanism to formalize and professionalize the payments from the recreational sportfishing sector to small-scale commercial fish aggregating device (FAD) fishers.

In collaboration with an appropriately constituted board, the trust would prioritize interventions to support billfish conservation, reduce conflict around FADs and, if possible, support the professional development of the informal charter fleet.

### POTENTIAL GOVERNMENT INVESTMENT TO SUPPORT CASE

*(not required for implementation)* Implement co-management regulations

- Institute and enforce billfish harvest control rules
- Enforce fishing licensing system (a key step toward secure tenure for fishers)
- Collect, record, and analyze key fisheries data digitally, e.g., landings, fishing locations, etc.

# TARGETED ENVIRONMENTAL RETURNS:

# Protecting and Restoring Blue Marlin and White Marlin

- Conserve important spawning grounds of multiple billfish species to support Atlantic-wide stock recovery
- Reduce FAD related targeting of billfish stocks
- Promote the effective use of "catch and release" practices

### TARGETED SOCIAL AND ECONOMIC RETURNS: Supporting Fishing Livelihoods

- Increase fisher incomes in the Dominican Republic through transparent payments from a trust mechanism to compensate and support commercial fishers that implement sustainable fishing practices
- Reduce FAD-related conflict
- Serve as a model for other nations, by improving billfishes' sustainability and increasing incomes in the Dominican Republic.
  500 fishers in multiple sectors are targeted to benefit directly or indirectly

### POTENTIAL IMPACT METRICS

- Marine managed area increase
- Number of FAD-related conflicts decreases
- Number of spawning billfish landed in managed area decreases
- Compensation to commercial FAD fishers increases and is traceable



### **OTHER KEY NUMBERS**

Currently, tournament participants and slip renters at two sportfishing marinas in the Dominican Republic pay a fee to the marinas that is estimated to collect approximately U.S. \$25,000 to \$50,000 annually which is supposed to be paid to the

fishers who set and maintain FADs. Formalizing these payments through the trust mechanism and collecting payment of a user fee of U.S. \$10 to \$30 per visitor trip at a 40% compliance rate, would generate U.S. \$1.3 to \$6 million over 10 years (or approx. U.S \$130,000 to \$600,000 per year on average).

#### TABLE 4: PROJECTED TEN YEAR REVENUE AT VARIOUS ASSUMPTIONS

10 YEAR REVENUE						
COMPLIANCE RATE	USER FEE					
	\$10.00	\$20.00	\$30.00	\$40.00	\$50.00	
40%	\$1,302,188	\$2,604,376	\$3,906,564	\$5,208,752	\$6,510,940	
50%	\$1,627,735	\$3,255,470	\$4,883,205	\$6,510,940	\$8,138,675	
60%	\$1,953,282	\$3,906,564	\$5,859,846	\$7,813,128	\$9,766,410	
70%	\$2,278,829	\$4,557,658	\$6,836,487	\$9,115,316	\$11,394,145	
80%	\$2,604,376	\$5,208,752	\$7,813,128	\$10,417,504	\$13,021,880	

#### **KEY ASSUMPTIONS**

REVENUE						
	ANNUAL		ANNUAL			
Recreational Visitors	28,400	INVESTMENTS				
Boat Trips	7,100	Loan	500,000			
Average Visitors Per Trip	4	Grant and Donations	500,000			
Year-1 Trips	3,550	Patrol Vehicles	300,000			
		Training	100,000			
User-Fee	\$30	Promotion and Marketing				
Growth Rate Visitors	3%	Administration and Office	100,000			
Annual Fund Appreciation	3%					
		TOTAL INVESTMENTS	\$500,000			
Compliance %, Year 1 50%		LEFT OVER FOR FUND	\$500,000			
Compliance %, Year 2	60%					
Compliance %, Year 3	65%					
Compliance %, Year 470%						

### **STRENGTHS**

- Establishment and enforcement of spawning area protections (potentially only in peak season)
- Payment transparency improves
- Precedents for user fee, trust, and conservation areas exist
- · Fisher incomes improve and impacts on billfish decrease
- Recreational fishing experience improved; attract more tourists

#### **WEAKNESSES**

- User fee compliance is not legally mandated
- Limited local partners with existing operations
- Fishery management and enforcement is inadequate

Personnel, Salaries, and Benefits

Enforcement

Maintenance

TOTAL

Marketing and Publicity

Inflation and Increases

Poor records of existing FAD fishers

**EXPENSES** 

### **OPPORTUNITIES**

٠	Economic	incentive for	fishers can
	be tied to	conservation	agreements

- Improvements to fisheries governance and co-management
- Economic incentive to register fishers
- Financial support for management and enforcement
- Tests viability of model for scale

### THREATS

- Management and enforcement may not ensure compliance
- Fishers may decide not to comply
- Success of payment mechanism may result in increased effort
- Strong leadership needed to deliver and implement
- Ongoing threats, i.e., climate change, natural disasters, overfishing in other areas, etc.

	FINANCIN	G
ANNUAL		ANNUAL
200,000	Interest Rate	6%
200,000	Years to Payback	10
40,000	LOAN PAYMENTS	\$67,934
40,000		
\$480,000	Discount Rate	5%
	Royalties	0%
3%		

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