GLOBAL EVALUATION OF FISHERIES MONITORING CONTROL AND SURVEILLANCE IN 84 COUNTRIES

BRAZIL - COUNTRY REPORT

GANAPATHIRAJU PRAMOD & JUAREZ COELHO BARROSO

IUU RISK INTELLIGENCE

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SUMMARY

This evaluation of Fisheries Monitoring Control and Surveillance report for Brazil is one of 84 such country evaluations that covers nations landing 92% of world’s fish catch. Using a wide range of interviews and in-country consultations with both military and civilian agencies, the report exemplifies the best attempt by the author(s) at evaluation of MCS compliance using 12 questions derived from international fisheries laws. The twelve questions are divided into two evaluation fields, (MCS Infrastructure and Inspections). Complete details of the methods and results of this global evaluation would be published shortly through IUU Risk Intelligence website.

Over a five-year period, this global assessment has been subjected to several cross-checks from both regional and global MCS experts familiar with compliance aspects in the country concerned. Uncertainty in assigning each score is depicted explicitly through score range. However, the author(s) are aware that gaps may remain for some aspects. The lead author remains open at any time to comments, and revisions will be made upon submission of evidence where necessary. Throughout the report, extreme precaution has been taken to maintain confidentiality of individuals who were willing to share information but expressed an inclination to remain anonymous out of concern for their job security, and information from such sources was cited as ‘anonymous’ throughout the report.

Suggested citation:


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https://iuuriskintelligence.com/
**FAO landings (2013):** 526,732 tonnes

**Fisheries contribution to GDP (2004):** 0.4%

**Law of the Sea (Ratification / Accession):** 22nd December 1988

**Coastline:** 7491 km

**RFMO Membership:** CCAMLR, ICCAT

**Patrolling Agencies:** IBAMA, Federal Police, Brazil Navy

<table>
<thead>
<tr>
<th>Rank</th>
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<td>2.</td>
<td>Narcotics Trafficking</td>
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SECTION 1: MCS INFRASTRUCTURE

1. Does the country have adequate surveillance infrastructure (patrol aircraft, sea based patrol vessels and coastal patrols) to effectively patrol fisheries resources within its EEZ?

Score: 7.5
Score Range: 7-8

Brazil has moderate surveillance infrastructure to monitor fishing operations within its EEZ (Jane 2012). Brazil Navy has 7 offshore patrol vessels, 2 coastal patrol craft, 28 patrol boats and 4 maritime patrol aircraft (IISS 2013). Of the 29 patrol vessels 12 are 200-ton class, 6 are 100-ton class, 4 patrol vessels are in the 700-ton class, and 2 vessels fall under 500-ton class; there are also 15 coastal patrol craft for inshore operations. The Ministry of Agriculture is gearing up to invest US$ 17 million to improve fisheries patrolling. As part of these efforts four new vessels were introduced in the states of Santa Catarina, Rio Grande del Sur, Ceara and Para in 2009; with plans to introduce an additional 23 units over the coming decade (Anon 2010a).

IBAMA has only 3 patrols boats to monitor 7300 km coastline and inspectors often rely on Federal Police, Navy and the ICMBio (Chico Mendes Institute) to conduct inspections at sea (Marques (2015). The same source quotes IBAMA’s Director of Inspections Luciano Menezes Evaristo stating, “the budget for fisheries is small and insufficient to fund the maintenance of boats all along the coast”.

The big problem today is that the infrastructure set up is still not enough for more patrolling due to the large extent of the Brazilian coastline. Further, the shared responsibilities for maritime patrol are performed inefficiently among the different agencies, which allows illegal fishing to persist in many jurisdictions. The Brazilian government, through the Ministério da Pesca e Aquicultura (MPA), has invested in the acquisition of new environmental patrol vessels to reduce illegal fishing practices, to achieve maritime control of the EEZ (Figure 1). Maritime patrols can also be performed by Marinha do Brasil and Grupamento Marítimo da Polícia Federal (Fig. 2 and 3).
Photo: Juarez C. Barroso, 2012.
Figure 1: Environmental Patrol vessel of Ministério da Pesca e Aquicultura in Brazil.

Photo: Juarez C. Barroso, 2012
Figure 2: Maritime patrol vessel of the Brazil Navy.
2. Does the country have adequate trained officers to conduct MCS operations?
Score: 5
Score Range: 3-5

Available information suggests that there is shortage of manpower within IBAMA, Policia Militar Ambiental Do Brasil (Environmental Police) and Marinha do Brasil (Brazil Navy) leading to high incidence of IUU fishing. No information is available on compliance or enforcement competence of these authorities in the marine fisheries sector.

In all environmental agencies responsible for maritime patrols, there is shortage of manpower required to cover the vast areas of fisheries exploitation in Brazil (Anon, pers.comm., 2017).

IBAMA has only 30 inspectors to protect lobster-fishing areas, which cover vast sections of the coastline (Anon 2008). IBAMA has 176 employees to monitor the entire Amazon coast with the assistance of Environmental Police (IBAMA 2007; Policia Militar Ambiental Do Brasil 2008).
3. Does the country have adequate management plans to monitor their fishing vessels on the high seas?
   Score: 5
   Score Range: 3-5

Brazilian flagged fishing vessels are not reported to fish on the high seas. However, existing national legislations do require vessels flying the Brazilian flag to use Vessel Monitoring System (VMS) while fishing on the high seas (FAO 2003). Brazil signed the FAO Compliance Agreement recently.

Currently, the country has a very small longline fleet engaged in seasonal offshore fishing for tuna and large pelagics along the edge of the continental shelf. Bulk of the offshore tuna fishing is conducted by foreign fishing vessels (longliners of Japanese origin) leased by Brazilian companies.

4. What proportion of fishing vessels is equipped with vessel monitoring system (VMS) to monitor their movements on a continuous basis?
   Score: 4
   Score Range: 2-4

Vessel monitoring system is in place since October 2000 for all foreign-chartered vessels operating in the deep-sea fishery within the Brazilian EEZ (trawling, longlining, gillnetting and potting operations) (Perez et al., 2003). Brazil is also planning to introduce VMS for 800 lobster vessels (10-15 m in length) in the domestic fisheries (Anon 2010b). Foreign longliners chartered by Brazil have 100% VMS coverage but the extent of monitoring remains unknown (ICCAT 2014a).

The Programa Nacional de Rastreamento de Embarcações Pesqueiras por Satélite (PREPS) was established and regulated by Normativa Interministerial N.º2, de 04 de setembro de 2006 - Secretaria Especial de Aquicultura e Pesca da Presidência da República (SEAP/PR), Ministério da Pesca e Aquicultura (MPA), and Ministério do Meio Ambiente (MMA) e Marinha do Brasil. This program aims at fisheries management, monitoring and control of the fleet operations authorized by the MPA, with the potential to improve safety of the fishermen onboard. See Porto de Souza (2010) and Programa Nacional de Rastreamento de Embarcações Pesqueiras por Satélite (PREPS) website for more information. However, “Operação Enredados” a joint investigation by PF and MPA uncovered repeated disregard of VMS data from vessels fishing illegally in prohibited areas (IBAMA 2015).
5. **What percentage of fishing vessels (>20 m OAL) is monitored through onboard observers at sea (for major commercial fish stocks)?**

   **Score: 1**
   **Score Range: 1-2**

Since 2000, limited observer coverage exists for deep-sea fishery within the Brazilian EEZ (Perez et al., 2003). In Brazil, there is a training program for observers on board, but most of the main fishing activity is conducted without an onboard observer. The lack of biological and fishery data in the fisheries sector has generated great difficulties for fisheries management.

10% observer coverage is reported for some Japanese longliners operating as chartering party for Brazil (ICCAT 2014a).

6. **How often fishing vessels are inspected at sea (Identification by sight and boarding for inspections)?**

   **Score: 5**
   **Score Range: 3-5**

Military assets seldom used effectively for fisheries surveillance. IBAMA in coordination with Brazilian Navy undertakes occasional inspections at sea during closed seasons within the 4-mile inshore zone. Brazilian military undertakes inspections at sea during “Operation Agata”, IBAMA conducts patrols through “Operation Deep Impact” during lobster, and shrimp closure periods every year. Total number of inspections at sea within EEZ, esp., in offshore waters for monitoring foreign longliners remains unknown. The Brazilian coastline needs an integrated monitoring program through partnership between IBAMA, Ministry of Agriculture and Navy to achieve any viable results. See Marques (2015) for more information.

IBAMA does not conduct regular patrols along the entire coast. Shortage of patrol boats for enforcement restricts activities to some sections closer to the shore. Majority of the patrolling is concentrated in the northern section and southern coastal states (Estado) receive very little surveillance. Sea based patrols are also aimed for closed seasons with very limited deterrence on illegal fishing activities during rest of the year. In 2014, very few operations were reported due to availability of only three patrol boats. There is heavy reliance on patrol boats from Federal Police and Navy whose resources are already
over-stretched for other maritime operations (illegal logging) besides controlling fish poaching (Anon, pers. comm., 2017).

7. **How often fishing vessels are scrutinized through aerial patrols?**
   
   **Score:** 4  
   **Score Range:** 3-5  

Occasionally, more so during closed seasons. Data on frequency of fisheries inspections is not available to arrive at any concrete conclusions. Brazil Navy has four maritime patrol aircraft for EEZ patrols (ISS 2012). Brazilian Air Force has eight EMBRAER P-95 Bandeirulha maritime patrol aircraft (*these aircraft received significant upgrades in 2015*) equipped with enhanced surveillance radar equipment (Guevara 2015). The Brazilian Air Force also received nine P-3AM Orion long-range maritime patrol aircraft which received upgrades in the last four years (Jennings 2014).

Surveillance data indicates shortage of aerial patrols in the fisheries sector even during peak closed seasons. IBAMA surveillance reports suggest that aerial inspections are conducted during fishing closure periods for shrimp, lobster and croakers using short-range helicopters in coastal waters (Anon, pers.comm., 2017).

The national fishing fleet is occasionally monitored by air during fishing season and closed periods of the species. This action is not performed on a regular basis. Thus, it is unclear how often these inspections are conducted within this sector. This type of information is not made available/disclosed openly.

8. **How often are fishing vessels inspected at landing centers and docks for foreign and domestic vessels (Dockside monitoring)?**
   
   **Score:** 5  
   **Score Range:** 3-5  

Vessel arrests data from IBAMA suggests that sporadic catch inspections are undertaken for industrial vessels at landing ports, but small-scale vessels are inspected more frequently. IBAMA is moderately effective in inspections at ports, fish markets, airports and checkpoints to prevent sale of illegally caught fish in local markets.

Industrial vessels are monitored occasionally, because of the commercial value of fishery resources caught and production volume in this sector. In the small-scale fisheries, inspections of IBAMA are not efficient and there are several gaps. Currently, IBAMA has no structure to monitor all landings of fish in
Brazil. Throughout the Brazilian coast there many remote fish landing points where IBAMA does not quite work. This facilitates the action of illegal fishing, which damages fish stocks and the entire supply chain. IBAMA is very less effective for inspections in the ports of landings of fish. As an example, during the closed season and lobster fishing (*Panulirus* spp.) it is common to find people selling illegal size lobsters with little supervision or intervention for these actions from IBAMA.

Lack of oversight for foreign tuna longliners from China, Russia and Japan pose a difficulty as vessels from these countries do not land tuna caught within Brazil waters at national ports. Although a canned tuna processing plant is available in Pecém Port Complex, tuna is not landed, and it relies on imported tuna for production supplies (Anon, *pers.comm.*, 2016).

**PSMA Status:** FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (Signed on November 22, 2009; Not ratified yet). See Rodrigues and Lemos (2012) for more information.

9. **Are there adequate plans to monitor catches in coastal areas through coastal patrols (beach patrols, small-scale fishing gear and catch inspections) on a regular basis?**

   **Score:** 5
   **Score Range:** 3-5

According to Cardoso and Nordi (2006) fisheries laws are more rigorously enforced in small-scale fisheries than industrial fisheries. However, other studies suggest that existing infrastructure is not effective in controlling both coastal and offshore fisheries violations (Kalikoski and Vasconcellos 2006; Floeter *et al.*, 2006; Domansk 1997; De Moura *et al.*, 2009). There has been considerable increase in inshore coastal patrols in recent years, but large gaps persist along many sections of the Brazilian coastline. IBAMA and Policia Militar Ambiental Do Brasil (Environmental Police) have eight fast patrol boats to patrol coastal lagoons and estuarine systems along the Brazilian coastline (IBAMA 2008). IBAMA in coordination with Environmental Police and Navy also conduct regular inspections in lagoons and coastal waters to prevent poaching of fish and other seafood products. Santos and Schiavetti (2014); Marques (2015); Trible *et al.*, (2014) and Escobar (2015) reports suggest weak enforcement with lack of regulatory implementation leading to poor compliance in many coastal multi-gear fisheries.
Fisheries patrolling is very reduced and ineffective as reflected in the recent comment by Fisheries Minister Gregolin “He also stressed that good results are often obtained from simple measures, citing the example of the sardine. In the 70s, annual sardine catches in Brazil totalled 220,000 tons but they dropped dramatically to 17,000 tonnes because of poor patrolling. But in 2003, the Fisheries Secretariat, the Environment Ministry and the Brazilian Environment and Renewable Natural Resources Institute joined forces, extending the ban period from four to six months, which led to quick signs of recovery. Last year, sardine catches in Brazil totalled 100,000 tons” (Anon 2010a).

Although IBAMA, MPA, Environmental Police and Naval vessels are trying their level best to monitor a vastly spread-out coastline throughout Brazil lobster fishing with gillnets (caçoeiras) diving aided by air compressor in artificial attractors (marambaias), use of fishing gear prohibited by legislation, are responsible for much of the national production. When fishing for shrimp, not all the boats respect the period of closure. In addition, too many other finfish and shellfish are trapped below the minimum landing size. Even with all the diverse structures of vessels that these national patrol vessels operate, the actions are not effective because there are not enough resources to adequately monitor catches.

10. Are all the catches that are caught in this jurisdiction at sea accounted for (i.e., unreported Trans-shipments at sea)?
   Score: 4
   Score Range: 2-4

Brazil is a signatory to the UN Fish Stocks Agreement (Ratified on March 8, 2000). Existing regulations require foreign fishing vessels operating in Brazilian EEZ to have prior authorization before transshipment of catch between vessels in territorial seas (Magantalle 1996). However, effectiveness of existing laws is difficult to predict as Brazil lacks manpower and logistics to monitor offshore transshipments for vessels operating within its EEZ. See Fiedler et al., (2017); Barreto et al., (2017) reports for enforcement challenges in the longline fisheries.

Limited control is exercised on foreign longliners operating in the Brazilian EEZ, especially for vessels targeting tuna and large pelagics, but monitoring is not fully effective yet. The conflict between national and foreign fleets targeting tuna can be cited as one such example. Currently Brazil does not have an effective plan of action to account for everything that is captured within its EEZ. This problem is even worse if we look at the small-scale fisheries, because since 2006, Brazil does not have a mechanism to collect fisheries data to account for all catches produced within its EEZ. There is fisheries data collection in some
regions, but they fall short of reporting total catches caught within these jurisdictions. These problems hinder the management of national fishery resources (Anon, pers. comm., 2017).

11. Are vessels required to undergo inspection of equipment and fishing gear for every fishing trip?
Score: 4.5
Score Range: 3-5

No, existing laws do not require boats to be checked for every trip, with inspections restricted to a few landing docks aimed at lobster, shrimp and tuna fisheries. Several seizures of illegal gear are reported in inland and estuarine waters, but this does not extend to other commercial fisheries. However, significant improvements have been made in recent years with IBAMA officers conducting surprise checks at several minor fishing harbors. Illegal fishing gear is also confiscated during such actions and burnt in front of offenders. IBAMA personnel also conduct inspections at sea to remove and confiscate illegal gear in coastal lagoons and estuaries during closed seasons. See de Azevedo Chagas et al., (2015) report for more information.

IBAMA occasionally performs landings inspections in some ports, but they are still not enough to deter most of the illegal fishing practices. When IBAMA seize illegal fishing gear, they destroy them and do fine the owner of the vessel and may even cancel the fishing license that was granted. IBAMA also conducts an inspection throughout the maritime coast, coastal lagoons, estuaries and territorial waters, but their actions are not sufficient to eliminate widespread practices of illegal fishing. All agencies require more manpower and a better distribution of patrolling vessels per unit area.

12. Has the country taken adequate measures to revise and implement national fisheries laws to curtail illegal fishing practices; and does it comply with national and international laws signed?
Score: 5
Score Range: 4-5

The Law no 11.959 of 29 June 2009 is the main national legislation for fisheries management in Brazilian waters. The above law replaced Decree Law 221 of 1967. Although, Brazil signed FAO Compliance Agreement in March 2009, it has not reported to FAO on any vessels that are authorized to operate on the high seas (FAO 2013). The country does not report any NPOA on IUU Fishing to fight and eliminate illegal fishing. Brazil ratified the UN Fish Stocks Agreement on 8 March 2000 and FAO Compliance Agreement on 2 March 2009.
Brazil has signed the UN Port State Measures Agreement on 22 November 2009 but not ratified it yet.

A one-year joint investigation (Operação Enredados) by Policia Federal (PF) and IBAMA recently uncovered massive fraud in issuance of false licenses, fishing without Certificate of Registration & Fishing Vessel authorization. 19 arrests (most of them fisheries officers in MPA, 2 officials from IBAMA) and 61 search warrants were issued in Brasília (DF), São Paulo (SP), Angra dos Reis (RJ), Rio Grande (RS), Florianópolis, Laguna, Itajaí, Camboriú, Bombinhas (SC), Natal (RN), Belém e São Félix do Xingu (PA). The investigation found that illegal fishing permits were issued to vessels for catching endangered species, fishing in prohibited areas or closed periods, and marketing of fish sourced from prohibited zones or from illegal fishing. The main arrested suspects were connected to the Ministério da Pesca e Aquicultura (MPA), IBAMA, union representatives and vessel owners. The investigation found that public servants, fishing vessel owners, union representatives and intermediaries, through acts of corruption, using official influence granted illegal permits for industrial fishing issued by the MPA. In other cases, hurdles were created for licensed vessels to force boat owners to pay bribes. The criminal organization came to charge R$ 100,000 per vessel to allow fishing without compliance with legal requirements (IBAMA 2015).

See Duarte (2015); Vasconcellos et al., (2011); Kalikoski and Vasconcellos (2006); Escobar (2015); Cruz et al., (2013); Karper and Lopes (2014); IBAMA (2015); FAO (2015); de Azevedo Chagas et al., (2015); de Freitas (2016); de Lima Figueiredo and Monteiro (2016); Barreto et al., (2017) documents for more information.

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Flag of Convenience: No
Vessels on the RFMO – IUU vessel list: No

Last Updated: 09 March 2018
Note:

Bibliography and other notes relevant to this country report including methods, results and discussion for the global evaluation of 84 countries would be released shortly through IUU Risk Intelligence website (http://iuuriskintelligence.com/). (The author can be contacted at prammod.raju@gmail.com to provide any feedback).

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