

## THE CHALLENGE OF IUU FISHING: A FIRST LOOK AT INDIAN RESPONSES

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“IUU Fishing”, as a well-known abbreviation for “Illegal, Unreported, and Unregulated Fishing”, is a collective term for a broad range of fishing activities considered illegal, unreported, or unregulated in law.<sup>1</sup> In August 2021, India’s Union Minister of Fisheries, Animal Husbandry, and Dairying (“Union Fisheries Minister”) was asked in the Lok Sabha if IUU fishing posed a threat to India, and he responded as follows:

*“Illegal, unreported and unregulated (IUU) fishing remains one of the threats to marine ecosystems due to its potential to undermine national and regional efforts to manage fisheries sustainably as well as endeavours to conserve marine biodiversity. Presence of unregistered boats in Indian waters can be a potential threat to national maritime security.”<sup>2</sup>*

This is, of course, true. IUU fishing is a genuine public policy issue for India, and one that deserves attention from policymakers and the general public alike. While the internet is full of studies and articles on IUU fishing, India-centric examinations of IUU fishing as a domestic policy issue in India remain few.<sup>3</sup> Furthermore, despite its connections-to and implications-for matters of ‘hard security’ (which this article will subsequently discuss), IUU fishing takes a back seat to other issues that might appear more obviously related to matters of maritime security.

Accordingly, this article seeks to add to analyses of IUU fishing in the *Indian* context. It will lay down baseline facts and figures pertaining to IUU fishing and demonstrate the inadequacy of

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<sup>1</sup> “Illegal, Unreported and Unregulated (IUU) Fishing,” *Food and Agriculture Organisation of The United Nations (FAO)*, <https://www.fao.org/iuu-fishing/background/what-is-iuu-fishing/en/>

**See also:** “Illegal, Unreported, and Unregulated (IUU) Fishing,” *International Maritime Organisation (IMO)*, <https://www.imo.org/en/OurWork/IIS/Pages/IUU-FISHING.aspx>

<sup>2</sup> Ministry of Fisheries, Animal Husbandry and Dairying (Govt of India), *Statement referred-to in reply to the Lok Sabha Starred Question No 217 put in by Shri Brijendra Singh, Member of Parliament for answer on 3rd August, 2021 regarding IUU Fishing*, 03 August 2021, <https://eparlib.nic.in/bitstream/123456789/939444/1/AS217.pdf>

<sup>3</sup> Captain Himadri Das, “Maritime Safety and Security in India: Fisheries “MCS” a Key Enabler,” 21 November 2021, *National Maritime Foundation*, <https://maritimeindia.org/maritime-safety-and-security-in-india-fisheries-mcs-a-key-enabler/>

**See also:** Capt Himadri Das, “Maritime Dimensions of Smuggling in India: An Assessment,” 09 March 2022, *National Maritime Foundation*, <https://maritimeindia.org/maritime-dimensions-of-smuggling-in-india-an-assessment/>

**See also:** John J Vachaparambil, “The International Day for the Fight against Illegal, Unreported and Unregulated Fishing,” 05 June 2022, *National Maritime Foundation*, <https://maritimeindia.org/14941-2/>

available data. It will also undertake a broad examination of India's responses to IUU fishing in her maritime zones and highlight the significance of fish landing centres/points along India's coastline. In collating official data on IUU fishing, the article will also attempt to address the impact of IUU fishing upon the Indian economy and its fisherfolk. It is hoped that this article will inform and mould public opinion in India on an important issue that touches multiple policy areas, including but not limited to food security, unorganised employment and, of course, national security. The article ends by recommending the reform of complex domestic administrative structures and the commission of further research on the continuing impact of IUU fishing on India.

## The Challenges

The importance of India's marine resources is borne out *inter alia* by the facts recorded in the National Policy on Marine Fisheries, 2017 (reproduced below)<sup>4</sup>:

- Marine fisheries wealth was estimated (in 2017) at an annual harvestable potential of 4.412 million metric tonnes.<sup>5</sup>
- An estimated 4.0 million people depend for their livelihoods on marine fisheries resources.<sup>6</sup> When one considers the provision of livelihood *and* nutritional security to citizens in longer fisheries value chain(s), this number goes up to “over 28 million stakeholders.”<sup>7</sup>
- The contribution of marine fisheries to economic wealth is valued at about ₹65,000 crores (US\$ 7.78 billion).<sup>8</sup>
- Marine fisheries are an important source of food, nutrition, employment and income generation.<sup>9</sup> Food harvested from the sea (such as fish, but not limited to fish alone) also forms a fundamental part of diet and culture in many parts of India.
- Marine fisheries wealth contributes significantly to India's export earnings and balance of trade.<sup>10</sup> The value of marine fisheries products exported in 2022-23 alone was

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<sup>4</sup> Department of Animal Husbandry, Dairying and Fisheries (Ministry of Agriculture and Farmers Welfare, Government of India), *National Policy on Marine Fisheries (2017)*, <https://dahd.nic.in/news/notification-national-policy-marine-fisheries-2017>

<sup>5</sup> *Ibid*, 13.

<sup>6</sup> *Ibid*.

<sup>7</sup> “Marine Fish Stock Status of India 2022,” The Indian Council for Agricultural Research - Central Marine Fisheries Research Institute (ICAR-CMFRI), CMFRI Booklet Series No 32/2023 (Reprint 2023), 1, [http://eprints.cmfri.org.in/17789/1/MFSS2022\\_2023\\_Reprint-CMFRI.pdf](http://eprints.cmfri.org.in/17789/1/MFSS2022_2023_Reprint-CMFRI.pdf)

<sup>8</sup> National Policy on Marine Fisheries (2017), 13.

**See also:** “Fisheries sector plays a significant role in Indian economy,” 16 May 2023, *Press Information Bureau*, <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1924524>

<sup>9</sup> National Policy on Marine Fisheries (2017), 14.

**See also:** “Year End Review 2023: Department of Fisheries (Ministry of Fisheries, Animal Husbandry and Dairying),” 14 December 2023, *Press Information Bureau*, <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1986155>

**See also:** ‘Marine Fisheries Census 2016,’ Central Marine Fisheries Institute (India), *IndiaSpend*, 33-34, [https://www.indiaspend.com/uploads/2021/10/14/Marine\\_Fisheries\\_Census\\_INDIA\\_2016.pdf](https://www.indiaspend.com/uploads/2021/10/14/Marine_Fisheries_Census_INDIA_2016.pdf)

<sup>10</sup> National Policy on Marine Fisheries (2017), 14.

₹63,969.14 crores (US\$ 7.6 billion), which constituted an increase of over INR 6000 crores (US\$ 718.6 million) compared to the corresponding figure for the previous year.<sup>11</sup>

- Marine fisheries of the country are highly diverse but predominantly comprising small-scale and artisanal fishers.<sup>12</sup>

IUU fishing poses a threat to these marine resources, livelihoods, and ecosystems, at the national as well as regional levels. The range and dynamics of this threat can be understood by looking at the acts and/or activities that are understood as constituting IUU fishing. Under the “International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing” (IPOA-IUU), a voluntary instrument that applies to all States, entities, and fisherfolk, IUU fishing has been defined thus:

*“3. In this document:*

*3.1 Illegal fishing refers to activities:*

*3.1.1 conducted by national or foreign vessels in waters under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations;*

*3.1.2 conducted by vessels flying the flag of States that are parties to a relevant regional fisheries management organization but operate in contravention of the conservation and management measures adopted by that organisation and by which the States are bound, or relevant provisions of the applicable international law; or*

*3.1.3 in violation of national laws or international obligations, including those undertaken by cooperating States to a relevant regional fisheries management organization.*

*3.2 Unreported fishing refers to fishing activities:*

*3.2.1 which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations; or*

*3.2.2 undertaken in the area of competence of a relevant regional fisheries management organisation which have not been reported or have been misreported, in contravention of the reporting procedures of that organization.*

*3.3 Unregulated fishing refers to fishing activities:*

*3.3.1 in the area of application of a relevant regional fisheries management organization that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organization, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organization; or 3.3.2 in areas or for fish stocks in relation to which there are no applicable conservation or management measures and where such fishing*

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<sup>11</sup> Department of Fisheries (Ministry of Fisheries, Animal Husbandry, and Dairying, Government of India), *Handbook on Fisheries Statistics 2023*, November 2023, 59-62, [https://dof.gov.in/sites/default/files/2024-03/handbook\\_sp.pdf](https://dof.gov.in/sites/default/files/2024-03/handbook_sp.pdf)

<sup>12</sup> National Policy on Marine Fisheries (2017), 14.

*activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law.*<sup>13</sup>

It is obvious that the term “IUU Fishing” covers a wide range of acts/activities by a multitude of actors, domestic as well as foreign. The challenge it poses is thus multi-faceted and complex. The Food and Agriculture Organisation of the United Nations (FAO) observed:

*“Illegal, unreported, and unregulated (IUU) fishing remains one of the greatest threats to marine ecosystems due to its potent ability to undermine national and regional efforts to manage fisheries sustainably as well as endeavours to conserve marine biodiversity....IUU fishing is found in all types and dimensions of fisheries; it occurs both on the high seas and in areas within national jurisdiction, it concerns all aspects and stages of the capture and utilisation of fish, and it may sometimes be associated with organised crime. Fisheries resources available to bona fide fishers are removed by IUU fishing, which can lead to the collapse of local fisheries, with small-scale fisheries in developing countries proving particularly vulnerable. Products derived from IUU fishing can find their way into overseas trade markets thus throttling local food supply. IUU fishing therefore threatens livelihoods, exacerbates poverty, and augments food insecurity.”*<sup>14</sup>

As a developing country, India must ensure the judicious use — and the prevention of pilferage — of her resources. IUU fishing is a threat to these resources and, accordingly, must be countered and addressed.<sup>15</sup>

Given that IUU fishing is an acronym for a wide range of acts/activities, framing the response is part of the problem. However, like all other States, India has its own laws, regulations, and reporting requirements. Thus, the ‘definition’ by the IPOA-IUU notwithstanding, act(s) that constitute IUU fishing in the jurisdiction of a given State may well be considered lawful in another. The absence of a common understanding hinders regional collaboration against IUU fishing. Secondly, while the term IUU ‘fishing’ indicates that the resource in question is fish alone, this is not so in actuality. In addition to many kinds of fish, India’s marine living resources include crustaceans, molluscs, sponges, squids, jellyfish, etc.<sup>16</sup> Further, in the larger scheme of the marine food web, all living resources — not just fish — play their own ecological roles and are thus additionally worthy of conservation.

<sup>13</sup> Food and Agriculture Organisation of The United Nations, *The International Plan of Action to deter, prevent, and eliminate Illegal, Unreported, and Unregulated fishing* (2001), 2-3,

<https://openknowledge.fao.org/server/api/core/bitstreams/a80c3bfb-1d5b-4ee6-9c85-54b7e83986a2/content>

<sup>14</sup> “Illegal, Unreported and Unregulated (IUU) fishing,” *Food and Agriculture Organisation of The United Nations*, <https://www.fao.org/iuu-fishing/en/>

<sup>15</sup> Dinakar Peri, “Extra-regional Fishing Fleets Present in Indian Ocean: Navy,” 13 November 2022, *The Hindu*, <https://www.thehindu.com/news/national/extra-regional-fishing-fleets-present-in-indian-ocean-navy/article66131872.ece>

**See also:** “Combating IUU Fishing in the Indian Ocean Region: Summary and Recommendations,” *Crawford School of Public Policy (ANU College of Asia & The Pacific)*, [https://nsc.crawford.anu.edu.au/departments-news/20982/combating-iuu-fishing-indian-ocean](https://nsc.crawford.anu.edu.au/departments/news/20982/combating-iuu-fishing-indian-ocean)

<sup>16</sup> Department of Fisheries (Ministry of Fisheries, Animal Husbandry, and Dairying, Government of India), *Handbook on Fisheries Statistics 2022*, November 2022, 67.

**See also:** “A Code List of Common Marine Living Resources of the Indian Seas,” Central Marine Fisheries Research Institute, CMFRI Special Publication No 12 (Revised), December 2000, <http://eprints.cmfri.org.in/id/eprint/3132>

Lack of data is an additional issue. In July 2022, India's Union Fisheries Minister was questioned in the *Rajya Sabha* (India's Upper House of Parliament) about the impact of IUU fishing upon the Indian economy, and whether the Government of India was aware of “any parameter to assess the Illegal, Unreported and Unregulated (IUU) fishing in India.”<sup>17</sup> He responded:

*“Illegal, Unreported and Unregulated Fishing (IUU Fishing) ‘inter alia’ means fishing activities undertaken by fishing vessels or operators without permission or in contravention of the laws and regulations of the country or in contravention of the conservation and management measures of the relevant regional fisheries management organization to which a country is a party, or fishing activities not reported or fishing activities in unregulated areas of high seas. Countries determine IUU fishing as per their national framework of laws, regulations and/or administrative procedures. While there is no specific report available on the impact of IUU fishing on Indian economy, the overall economic loss resulting from illegal catches is estimated at USD 26 billion to USD 50 billion globally, as per independent researchers.”*<sup>18</sup>

Two things may be concluded from this response: (1) That at least as of July 2022, the Government of India had not formulated its own definition(s) or assessment parameters for IUU fishing; and (2) That at least as of July 2022, the Government of India was not in possession of accurate data on the impact of IUU fishing on the *Indian* economy. Both these issues certainly need to be addressed.

Next, consider the issue of India's fish landing centres/points, and the need for effective governance and regulation thereof. The significance of these points for a country like India is noted, for instance, by the FAO:

*“Fish landing centres or sites are associated with small-scale marine and inland fisheries. They provide a location for first point of sale for products and provide a place where fishers can leave their boats and obtain supplies such as food, fuel, and ice. Many landing centres have developed in association with local communities. The facilities, services and access to market vary. It is these characteristics, as well as the capacity of the users, which influences how fish and fish products are handled and traded.... It is important to note that the way in which fish is treated at landing centres will have implications [for food loss and waste] at downstream stages of the value chain. In the artisanal fisheries sector, limitations or deficiencies in infrastructure at landing sites mean that individual productivity is low and levels of spoilage and waste are high.”*<sup>19</sup>

The data collected at fish landing centres/points is important not just for marine spatial planning and fisheries management, but also for national and coastal security.<sup>20</sup> Thus, while handing over

<sup>17</sup> “Reply of The Hon’ble Mr Parshottam Rupala (Union Minister of Fisheries, Animal Husbandry and Dairying, Govt. of India) to Unstarred Question No. 1534 in *Rajya Sabha*”, 29 July 2022, *Parliament of India: Official Debates of Rajya Sabha*, [https://rsdebate.nic.in/bitstream/123456789/731175/1/PQ\\_257\\_29072022\\_U1534\\_p176\\_p177.pdf](https://rsdebate.nic.in/bitstream/123456789/731175/1/PQ_257_29072022_U1534_p176_p177.pdf)

<sup>18</sup> *Ibid.*

<sup>19</sup> “Landing Sites in Small-Scale Fisheries,” *Food and Agriculture Organisation of the United Nations*, <https://www.fao.org/flw-in-fish-value-chains/value-chain/flw-in-fish-value-chainsvalue-chainwholesale/landing-sites-in-small-scale-fisheries/fr/>

<sup>20</sup> Captain Himadri Das, “Maritime Safety and Security in India: Fisheries “MCS” a Key Enabler.”



to the Indian Navy a Geographic Information System (GIS)-based database of 1,278 fish landing points along the Indian coast, Dr A Gopalakrishnan (then Director of Central Marine Fisheries Research Institute (CMFRI) noted, in 2017, that “GIS based documentation of the marine fish landing centres [is important] since they are the reference points for mapping marine fisheries resources along the coast and such mapping will serve as the basic data for the fisheries conservation and management.”<sup>21</sup> The importance of this data in matters of national security, disaster management, and maritime crime, was also - correctly - highlighted.<sup>22</sup> Since the Indian Coast Guard is now responsible to transform data obtained from (inter alia) fish landing stations/points into actionable- as well as trend-based intelligence, this is an important issue for both these maritime-security agencies of India.<sup>23</sup>

Indeed, the nexus between IUU fishing and local crime/criminals is a particularly vexed issue. Recent events in Sandeshkhali (West Bengal, India) demonstrate the complexity of this nexus. In Sandeshkhali, vested interests at the local level allegedly grabbed viable agricultural land and converted it into fishing ponds. This was done by contaminating coastal farm fields with salt water from the sea, and thereafter forcing the landowners to flee under threat of violence.<sup>24</sup>

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**See also:** Captain Himadri Das, “Maritime Dimensions of Smuggling in India: An Assessment.”

**See also:** Captain Himadri Das, “Coastal security in India: Twelve Years after 26/11,” 01 December 2020, *National Maritime Foundation*, <https://maritimeindia.org/coastal-security-in-india-twelve-years-after-26-11/>

**See also:** Gregory B Poling and Conor Cronin, “Illegal, Unregulated and Unreported Fishing as a National Security Threat,” November 2017, *Center for Strategic & International Studies*, 8-12, [https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/171102\\_Poling\\_IUU\\_Fishing\\_Web.pdf](https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/171102_Poling_IUU_Fishing_Web.pdf)

**See also:** Dineshbabu A P et al, “Handbook on Application of GIS as a decision-support tool in Marine Fisheries”, 2016, *CMFRI Special Publication No 121*, 10, 19, 44, 50, 55, 77, [http://eprints.cmfri.org.in/11268/1/CMFRI%20SP%20121\\_Handbook%20on%20Application%20of%20GIS%20as%20a%20Decision%20Support%20Tool%20in%20Marine%20Fisheries.pdf](http://eprints.cmfri.org.in/11268/1/CMFRI%20SP%20121_Handbook%20on%20Application%20of%20GIS%20as%20a%20Decision%20Support%20Tool%20in%20Marine%20Fisheries.pdf)

**See also:** Dr TV Sathianandan, “CMFRI Data Collection System for Marine Fish Landings Estimation,” *Department of Fisheries (Government of India)*, 10-11, [https://dof.gov.in/sites/default/files/2020-01/CMFRI%20Data%20Collection%20System%20for%20Marine%20Fish%20Landings\\_0.pdf](https://dof.gov.in/sites/default/files/2020-01/CMFRI%20Data%20Collection%20System%20for%20Marine%20Fish%20Landings_0.pdf)

**See also:** Pooja Bhatt, “IUU Fishing as a National Security Threat: Revisiting India’s Domestic Framework and Compliance with International Regimes,” *International Law Studies* 96 (2020): 443-449, <https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=2928&context=ils>

<sup>21</sup> “Indian Navy Equipped with ICAR-CMFRI-developed GIS-based Database Ensures Security of Fishermen at Sea,” 04 April 2017, *Indian Council of Agricultural Research*, <https://icar.org.in/node/4177>

**See also:** Dineshbabu AP et al, “GIS-based Inventory of Marine Fish Landing Centres and Fishing Operations along the Indian Coast as a Baseline Information for Marine Spatial Planning,” 2017, Technical Report (ICAR-CMFRI), <http://eprints.cmfri.org.in/id/eprint/13606>

<sup>22</sup> “Indian Navy equipped with ICAR-CMFRI developed GIS-based-database Ensures Security of Fishermen at Sea.”

<sup>23</sup> “Performance of Coast Guard Organisation” Thirteenth Report of the Standing Committee on Defence (2011-2012) (Fifteenth Lok Sabha), Ministry of Defence, *Lok Sabha Secretariat, Government of India* [https://eparlib.nic.in/bitstream/123456789/63936/1/15\\_Defence\\_13.pdf](https://eparlib.nic.in/bitstream/123456789/63936/1/15_Defence_13.pdf)

<sup>24</sup> Atri Mitra, “ED Details how TMC’s Shahjahan Sheikh ‘used fishery firm to launder crores’,” 04 April 2024, *Indian Express*, <https://indianexpress.com/article/cities/kolkata/ed-details-how-tmc-shahjahan-sheikh-used-fishery-firm-to-launder-crores-9250065/>

**See also:** Madhuparna Das, “Fishing Ponds, Slavery and Missing Bodies: Shahjahan Sheikh 'Trinamool Version' of CPM's Dreaded Majid Master?,” 16 February 2024, *News18*, <https://www.news18.com/politics/fishing-ponds-slavery-and-missing-bodies-shahjahan-sheikh-trinamool-version-of-cpms-dreaded-majid-master-8780928.html>

**See also:** India News Desk, “‘Fishery firms to mask crores’: ED unmasks Sandeshkhali accused Shahjahan’s web of land seizure and money laundering,” 04 April 2024, *Financial Express*, <https://www.financialexpress.com/india-news/fishery-firms-to-mask-crores-ed-unmasks-sandeskhali-accused-shahjahans-web-of-land-seizure-and-money-laundering/3445815/>

**See also:** Arushi Jaiswal, “Enforcement Directorate arrests three associates of suspended TMC leader Shahjahan Sheikh,” 15 April 2024, *India TV News*, <https://www.indiatvnews.com/west-bengal/news-enforcement-directorate-arrests-associates-of-suspended-tmc-leader-shahjahan-sheikh-money-laundering-case-sandeskhali-latest-updates-2024-04-15-926407>

The collection of identificatory and regulatory data on India's fish landing points — such as GIS location, type(s) of fishing activity, seasonality of fishing, extent of fishing operations, etc., is important because it informs, complements, and supplements law enforcement efforts against IUU fishing. Separately, the geo-tagging of fish landing centres/points that have *not* thus far been geo-tagged/identified (pointed-to with concern by security practitioners) is doubly important from a law enforcement and national security perspective.

In the present day however, an updated inventory/database of India's fish landing centres/points appears unavailable. This may be because fish landing centres are inherently nebulous and change in accordance with local conditions. Many landing centres are temporary, and are used and then abandoned by small-scale and artisanal fisherfolk in accordance with local tidal/weather conditions. Thus, an October 2023 assessment provided by FAO stated that India has “1,914 traditional fish landing centres”.<sup>25</sup> However, India's official statistics for 2023 recorded a figure of 1,457<sup>26</sup>:

State/Union Territory	Number of Fish Landing Centres
Andaman and Nicobar	51
Andhra Pradesh	350
Dadra and Nagar Haveli, and Daman and Diu	8
Goa	32
Gujarat	107
Karnataka	115
Kerala	174
Lakshadweep	20
Maharashtra	173
Odisha	55
Puducherry	22
Tamil Nadu	301
West Bengal	49
<b>Total</b>	<b>1457</b>
<b>Table 1: Numbers of Fish Landing Centres along India's Coastline</b>	

Incidentally, the numbers in the 2023 edition of India's official statistics (above) are a reproduction of the numbers in the 2022 edition.<sup>27</sup> This suggests that in the intervening period of 2022-23, little or no work was done on identifying and/or geo-tagging fish landing centres/points.

<sup>25</sup> “Fishery and Aquaculture Country Profiles: India,” *Food and Agriculture Organisation of The United Nations*, <https://www.fao.org/fishery/en/facp/ind?lang=es>

<sup>26</sup> Handbook on Fisheries Statistics 2023, 85.

<sup>27</sup> Handbook on Fisheries Statistics 2022, 65.

Amidst this lack of data, the economic activity — lawful or otherwise — at these landing centres continues unabated and at a frenetic pace. The estimated value of marine fish landings during 2022 at the landing centre level was ₹58,247 crores (US\$ 6.9 billion) — an increase of 8.57% over 2021, — and at the retail centre level was ₹79,865 crores (US\$ 9.56 billion) — an increase of 4.21% over 2021.<sup>28</sup>

**The evident absence of reliable data on and at fish landing centres/points in India clearly needs to be addressed. In particular, efforts need to be made to geo-tag those fish landing points that are not presently geo-tagged.**

Having discussed in this section the challenge of IUU fishing (particularly at the local and state levels), the next section will take a brief, *prima facie* look at India's responses to IUU fishing.

### India's Responses: A First Look

In July 2023, the Union Fisheries Minister outlined the following in Parliament as India's response(s) to the challenge of IUU Fishing in India's Exclusive Economic Zone (EEZ)<sup>29</sup>:

- Authorisation to the Indian Coast Guard under the Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act, 1981 to prevent illegal fishing by foreign fishing vessels in Indian waters. (There is also another statutory provision enabling action against IUU fishing in India's EEZ, namely, Section 7(5) of The Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act, 1976.)<sup>30</sup>
- Regulation, monitoring, control, and surveillance, by enforcement agencies of maritime states/Union Territories (UTs), under their respective Marine Fishing Regulation Acts (MFRAs), to prevent IUU fishing.
- Implementation of ReALCraft, a web based online portal for mandatory registration of fishing vessels under the Merchant Shipping Act 1958, and licensing of fishing vessels under respective MFRAs by the coastal States/UTs.<sup>31</sup>
- Issuance of Biometric Identity cards, for identification purpose(s), to marine fisherfolk.
- Sanction and release by the Government of India (to the state government of Tamil Nadu) of funds amounting ₹18.01 crores (US\$ 2.16 million), to be used, under the 'Blue Revolution' scheme, to fit transponders on mechanised fishing vessels of Tamil Nadu.
- Support provided under *Pradhan Mantri Matsya Sampada Yojana* (PMMSY) for the firmment of communication and tracking devices on fishing vessels.

<sup>28</sup> "Marine Fish Landings in India-2022 (Technical Report)," ICAR-Central Marine Fisheries Research Institute (Kochi), *CMFRI Booklet Series No. 31/2023*, 14, [http://eprints.cmfri.org.in/16883/1/Marine%20Fish%20Landings%20in%20India\\_2022.pdf](http://eprints.cmfri.org.in/16883/1/Marine%20Fish%20Landings%20in%20India_2022.pdf)

<sup>29</sup> "Reply of the Hon'ble Mr Parshottam Rupala (Union Minister of Fisheries, Animal Husbandry and Dairying, Govt. of India) to Unstarred Question No. 260 in *Rajya Sabha*," 21 July 2023, *Parliament of India: Official Debates of Rajya Sabha*, [https://rsdebate.nic.in/bitstream/123456789/741226/1/PQ\\_260\\_21072023\\_U260\\_p287\\_p288.pdf](https://rsdebate.nic.in/bitstream/123456789/741226/1/PQ_260_21072023_U260_p287_p288.pdf)

<sup>30</sup> The Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act, 1976, *Indiacode*, <https://www.indiacode.nic.in/bitstream/123456789/1484/2/A1976-80.pdf>

<sup>31</sup> "ReALCraft," *Department of Fisheries (Government of India)*, <https://fishcraft.nic.in/web/new/index/>



However, India can and should do more. Yet, to be fair, matters of policy formulation and enforcement in India are complicated by the country's federal structure, and the consequent overlaps of both, jurisdictional and functional matters. “*Fishing and fisheries beyond territorial waters*” is a matter for the Union of India as per Entry 57 of the Union List in the Seventh Schedule of the Constitution of India, while “*Fisheries*” (presumably within territorial waters, although the Constitution does not explicitly state this) is a matter for the concerned state government (as per Entry 21 of the State List).

The Indian Coast Guard (ICG) in its capacity as an organ of the Central Government, handles law enforcement action(s) against IUU fishing in India's EEZ (and frequently, in the territorial sea as well). In addition to constitutional provisions, the legal basis for the ICG's actions against IUU fishing is provided by Extraordinary Gazette Notification S.R.O. 16(E) dated 05 December 2019 (reproduced below):

*“S.R.O. 16(E). - In exercise of powers conferred by sub-section (3) of section 121 of the Coast Guard Act, 1978 (30 of 1978), the Central Government hereby authorize every member of the Coast Guard, constituted under section 4 of the said Act, to visit, board, search and seize vessel, or arrest any person, or seize any artificial island or any floating or moored object or any under water object including any maritime property involved or suspected to be used or likely to be used in the commission of any offence punishable under any of the Central Acts including the Acts specified in clause (i) of sub-section (1) of section 121 of the said Act, within the area of maritime zone of India extending up to exclusive economic zone, as defined in clause (m) of section 2 of the said Act.”<sup>32</sup>*

Police forces and fisheries departments of respective state governments handle enforcement (under their respective Marine Fishing Regulation Acts as has already been earlier mentioned) in the territorial sea adjoining the concerned state. Thus, security and law enforcement aspects relating to IUU fishing are handled primarily by the police forces and the ICG, while aspects like such as those related to the welfare of fisherfolk, etc., are handled by the fisheries departments of states. Border Management Division-II (or BM-II Division) under the Ministry of Home Affairs' Department of Border Management coordinates action(s) between various state and central agencies and departments, particularly for matters of coastal security. As per the Ministry of Home Affairs:

*“BM-II Division deals with matters relating to Border Area Development Programme (BADP), Coastal Security Schemes(CSS) and Land Ports Authority of India (LPAI). The BADP is a Core Centrally Sponsored Scheme being implemented through the State Governments as a part of comprehensive approach to the border management. The Coastal Security Scheme is implemented in Phases for providing financial assistance for creation of infrastructure relating to costal security in the Coastal States/UTs. BM-II Division is also responsible for establishment matters of LPAI, which is entrusted with construction, development and maintenance of Integrated Check Post (ICPs) on the land borders of the country and coordination with various stakeholders for development of ICPs.”<sup>33</sup>*

<sup>32</sup> Ministry of Defence (Government of India), Extraordinary Gazette Notification S.R.O. 16(E), 05 December 2019, <https://drive.google.com/file/d/17CGVzHUjTERSwApzOjJcKLctI4Rww6E/view?usp=sharing>

<sup>33</sup> “Mandate and Organisational Structure of the Ministry of Home Affairs,” Ministry of Home Affairs (Government of India), [https://www.mha.gov.in/sites/default/files/2022-08/AdminDiv\\_WorkAllocation\\_20012020%5B1%5D.pdf](https://www.mha.gov.in/sites/default/files/2022-08/AdminDiv_WorkAllocation_20012020%5B1%5D.pdf)

Separate, however, from matters of law enforcement and border management, IUU fishing also demands administrative and regulatory controls in matters of fishing and fisheries. Under the Indian governance framework, the nodal Central department for matters concerning fishing and fisheries in India's EEZ is the Department of Animal Husbandry, Dairying & Fisheries (DADF) under the Ministry of Fisheries, Animal Husbandry and Dairying.<sup>34</sup>

It is evident that India's responses cover a range of statutory, administrative, and other measures. While this is not a bad thing *per se*, it does make coordination difficult to achieve in practice and with consistency. As mentioned earlier, this problem is magnified in a federal system such as that which prevails in India, where overlaps in authority, function, and jurisdiction (of the kind outlined above) complicate matters further.

Once again separate from the issue of enforcement, matters of policy also remain works in progress. The following an operative extract from "The National Policy on Marine Fisheries, 2017" is illustrative of this:

*"India being a party to several International Agreements/ Arrangements to deter, prevent and eliminate Illegal, Unreported and Unregulated (IUU) fishing, the Government will establish a sound mechanism both at the port and at sea to ensure that the Indian fishing fleet does not engage in any IUU fishing within its own EEZ, high seas and EEZs of other nations."*<sup>35</sup>

It may be noted that while this policy addresses IUU fishing by "the Indian fishing fleet", it remains silent on the aspect of IUU fishing by non-Indian fishing fleets and entities, such as those operated by the People's Republic of China (PRC). While Indian law is certainly equipped with provisions that can be invoked against IUU fishing (as seen above), clarity of policy nonetheless requires that the issue of IUU fishing by non-Indian entities be explicitly addressed in the text. Thankfully, the draft revised policy under consideration does cover IUU fishing by foreign vessels, and this is a step in the right direction.<sup>36</sup>

## Conclusion and Recommendations

As a 'non-traditional' maritime security threat, IUU fishing receives far less attention than do issues of 'hard security.' Nevertheless, it is a genuine public policy issue for India, with domestic as well as international facets. As such, it deserves attention and study, and continues to be a subject of research at the National Maritime Foundation. This article has sought to sensitise policymakers and the general public to the economic and security challenges that arise out of

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**See also:** "Departments of MHA," *Ministry of Home Affairs (Government of India)*, <https://www.mha.gov.in/en/departments-of-mha>

**See also:** "Department of Border Management," *Ministry of Home Affairs (Government of India)*, 1-3, <https://www.mha.gov.in/sites/default/files/BMIIntro-1011.pdf>

<sup>34</sup> Department of Fisheries (Ministry of Agriculture and Farmers Welfare, Government of India), *Response to request for information under RTI Act, 2005*, No 21006/243/2018 Fy-(Ind), 09 April 2019, <https://dahd.nic.in/sites/default/files/rti-10.4.2019.pdf>

<sup>35</sup> National Policy on Marine Fisheries, 2017, para 22.0.

<sup>36</sup> Department of Fisheries (Government of India), *Draft National Fisheries Policy 2020 (Sixth Draft for Consideration)*, 30 December 2020, 9, [https://dof.gov.in/sites/default/files/2020-12/Policy\\_0.pdf](https://dof.gov.in/sites/default/files/2020-12/Policy_0.pdf)

IUU fishing and which confront India. Detailed analyses of (present and recommended) Indian responses to IUU fishing — including but not limited to the draft Indian Marine Fisheries Bill, 2021, state legislation, case law, the role of Regional Fishery Advisory Bodies (RFABs) and Regional Fishery Management Organisations (RFMOs), etc., — are intended for subsequent articles.<sup>37</sup>

Finally, in light of the analysis undertaken thus far, this article recommends the following:

1. Given the seeming absence of specific research on the *impact* of IUU fishing upon the Indian economy (as also admitted by the Union Fisheries Minister in Parliament), the Government of India needs to undertake and/or commission a specific report in this regard. Captain Anurag Bisen recently published (at the Vivekananda International Foundation) an extensive analysis of the PRC's IUU fishing activities in the Indian Ocean region.<sup>38</sup> More such research is needed.
2. The geo-tagging of fish landing points in India is a requirement for effective marine spatial planning and fisheries management. More significantly, it is also a national security imperative. Therefore, an updated survey of these points needs to be undertaken by the CMFRI or some other agency with requisite capabilities. The Chief Hydrographer to the Government of India, who is presently mandated to produce official nautical charts and hydrographic surveys for India, may be tasked with overseeing and coordinating this exercise at the national level.<sup>39</sup> The 2017 technical report provided to the Indian Navy by the CMFRI could be good starting point for this survey.<sup>40</sup> Captain Himadri Das of the Indian Navy, a practitioner and noted academic, has opined that the *Pradhan Mantri Matsya Sampada Yojana* (PMMSY) can be a “*key enabler*” for such initiatives at fish landing centres/points.<sup>41</sup>

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<sup>37</sup> “Draft Indian Marine Fisheries Bill 2021,” *Department of Fisheries (Government of India)*, [https://dof.gov.in/sites/default/files/2021-10/Draft\\_Indian\\_Marine\\_Fisheries\\_Bill\\_2021.pdf](https://dof.gov.in/sites/default/files/2021-10/Draft_Indian_Marine_Fisheries_Bill_2021.pdf)

<sup>38</sup> Captain Anurag Bisen, “China and IUU Fishing in IOR: Need for India to lead mitigation efforts,” 11 April 2024, *Vivekananda International Foundation*, [https://www.vifindia.org/article/2024/april/11/China-and-IUU-Fishing-in-IOR-Need-for-India-to-Lead-Mitigation-Efforts#\\_ednref68](https://www.vifindia.org/article/2024/april/11/China-and-IUU-Fishing-in-IOR-Need-for-India-to-Lead-Mitigation-Efforts#_ednref68)

**See also:** Commander (Dr) Vijay Sakhuja, “China Under Scanner for IUU Fishing Operations,” 07 March 2016, *National Maritime Foundation*, <https://maritimeindia.org/china-under-scanner-for-iuu-fishing-operations/>

<sup>39</sup> “Welcome to Indian Naval Hydrographic Department,” *Indian Naval Hydrographic Department*, <https://hydrobharat.gov.in/home/inhd/>

**See also:** Commander Sudhir K Mittal, “Roles of a Hydrographic Office and GIS/GPS – An Outline Survey,” 09 January 2009, *Geospatial World*, <https://www.geospatialworld.net/article/roles-of-a-hydrographic-office-and-gisgps-an-outline-survey/>

<sup>40</sup> Dineshababu AP et al, “GIS-based Inventory of Marine Fish Landing Centres and Fishing Operations along the Indian Coast as a Baseline Information for Marine Spatial Planning”.

<sup>41</sup> Captain Himadri Das, “Coastal Security in India: Twelve Years after 26/11”.

**See also:** Ministry of Fisheries, Animal Husbandry and Dairying (Government of India), “*Pradhan Mantri Matsya Sampada Yojana* (PMMSY) Aims to Enhance Fish Production to 220 LMT with an Investment of over Rs.20,000 Crores in Next Five Years,” 26 May 2020, *Press Information Bureau*, <https://pib.gov.in/PressReleasePage.aspx?PRID=1626941>

3. In December 2023, the Indian Parliament was informed that “till date, 2,55,348 fishing boats are registered under ReALCraft portal.”<sup>42</sup> Nevertheless, given the vast numbers of Indian fisherfolk, the sufficiency of this registration coverage remains unclear, and is likely to be inadequate. Consequently, registration drives, at the local and state levels, should seek to expand registration coverage on the ReALCraft portal. Furthermore, the underlying infrastructure of this portal needs to be upgraded to enable interfacing and exchange with the sensors of India’s Coastal Security Network (or CSN — a network of radars and sensors along India’s coastline and islands).<sup>43</sup> Such interfacing will allow India’s forces and agencies to distinguish — at sea and on land — between *bona fide* fishing vessels and criminal/terrorist elements. It will also enable faster search and rescue (SAR) of fisherfolk or vessels in distress.
4. It is well known that the ICG as well as state police forces remain inadequately provisioned in their material wherewithal, financial outlay, and training.<sup>44</sup> This needs to be addressed, whether by the Border Management-II Division in its capacity as overall coordinator, or at a higher level.

### **About the Author**

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<sup>42</sup> “Reply of the Hon’ble Mr Parshottam Rupala (Union Minister of Fisheries, Animal Husbandry and Dairying, Govt. of India) to Unstarred Question No. 2652 in Lok Sabha,” 19 December 2023, *Digital Sansad*, <https://sansad.in/getFile/loksabhaquestions/annex/1714/AU2652.pdf?source=pqals>

<sup>43</sup> “Coastal Security,” *Indian Coast Guard*, [https://indiancoastguard.gov.in/content/1727\\_3\\_CosstalSecurity.aspx](https://indiancoastguard.gov.in/content/1727_3_CosstalSecurity.aspx)

See also: “Coastal Security,” 29 July 2022, *Press Information Bureau*,

<https://pib.gov.in/PressReleasePage.aspx?PRID=1846139>

<sup>44</sup> Anviti Chaturvedi, “Police Reforms in India,” June 2017, *PRS Legislative Research*,

[https://prsindia.org/files/policy/policy\\_analytical\\_reports/Police%20Reforms%20in%20India.pdf](https://prsindia.org/files/policy/policy_analytical_reports/Police%20Reforms%20in%20India.pdf)

See also: Vinayak Krishnan, “Modernisation of Police Forces,” 03 October 2017, *PRS Legislative Research*,

<https://prsindia.org/theprsblog/modernisation-of-police-forces?page=49&per-page=1>

See also: “Modernisation of State Police Forces (MPF) Scheme,” *Ministry of Home Affairs (Government of India)*,

<https://www.mha.gov.in/en/divisionofmha/police-modernisation-division/modernisation-of-state-police-forces-mpf-scheme>

See also: “Indian Police under Stress due to Workload, Poor Work-Life Balance, Lack of Resources,” 28 August 2019, *Money Control*, <https://www.moneycontrol.com/news/trends/current-affairs-trends/indian-police-under-stress-due-to-workload-poor-work-life-balance-lack-of-resources-4379031.html>