



भारतीय वन्यजीव संस्थान  
Wildlife Institute of India

No. Project\_dolphin/WII/qq/2021-2

Date: 7<sup>th</sup> July, 2021

To,

Shri Rakesh Jagenia  
Deputy Inspector General of Forests (Wildlife)  
Ministry of Environment Forests and Climate Change  
Indira Paryavaran Bhawan  
Delhi  
Email: digwl-mefcc@gov.in

Sub.: Proposal for range wide monitoring of dolphin – reg.  
Ref.: Letter No. 34-3/2020 WL (Part-4) dated 30<sup>th</sup> June, 2021

Sir,

This is with regard to range-wide population estimation of Ganges river dolphins in the country. A proposal with state-wise activities and budget for undertaking the abundance estimation is attached herewith (**Annexure 1**) for seeking budget under CAMPA.

Thanking you

Yours faithfully,

  
(Dr. Dhananjai Mohan)  
Director, WII

Encl:- Annexure 1: Proposal for state wise monitoring of dolphin

Copy to:

- 1) Addl. DGF (WL), MoEFCC, New Delhi
- 2) IGF (WL), MoEFCC, New Delhi
- 3) AIGF (WL), MoEFCC, New Delhi

# Proposal for range-wide enumeration of River Dolphin populations in India

Dolphins are charismatic species that have always evoked human curiosity, along with being an integral part of our cultural milieu. However, they are in need of immediate conservation effort to safeguard their future, and the future of human society. Hon'ble Prime Minister Shri Narendra Modi has initiated a very timely and important step towards ensuring a future for dolphins in the country, by announcing the idea of 'Project Dolphin' on 15th August, 2020. The Project Dolphin is envisaged to bring both river dolphins and marine dolphins under its conservation program. This project aims to address existing conservation concerns and to empower the stakeholders to participate in conservation of dolphins.

As part of the Project Dolphin initiative, a range-wide population monitoring of dolphins and other associated biodiversity is to be undertaken every three years. Along with this, an annual intensive site monitoring at critical dolphin hotspots is to be undertaken. A robust scientific monitoring of any population is the single most crucial aspect that is needed for any effective conservation action, and to ensure the long-term survival of a species. The river and marine ecosystem is the lifeline for the most marginal people in the country, apart from several threatened and endangered fauna. Dolphin acts as an umbrella species, whose conservation will result in the wellbeing of associated habitat and biodiversity, including humans. This effort is truly in line with our conservation philosophy of 'Vasudhaiva Kutumbikam'.

The recent most estimation of the Ganges river dolphins in the Ganga river basin along with its tributaries stand at 2644 and in Brahmaputra along with its tributaries stand at 987 (survey in 2017-2018 by Qureshi et al., 2018) indicating at least a 50-65% loss since the 19th century. The Indus river dolphin meanwhile has a population of 6-8 dolphins in India (Kanwar et al., 2019), with majority of the population, of ~1816 individuals, residing in Pakistan (WWF-Pakistan). Dolphins (both Ganges river dolphin and Indus river dolphin) are impacted by anthropogenic and natural threats, which includes habitat loss, habitat degradation, reduction in flow, pollution, poaching, net entanglement, river navigation, unsustainable fishery practices and sand mining, to name some. Due to the decrease in flow and increased deaths of dolphins due to entanglement and poaching for oil, we have seen the species go locally extinct in parts of Yamuna, and rivers of Ken, Betwa, and more recently in Barak River. With less than 10% of the entire river dolphin range lying within protected areas, and threats mounting in terms of poaching, death due to entanglement, developmental challenges (river navigation, dams etc.), lack of infrastructure and trained manpower for rescue and rehabilitation, there is a need for long-term monitoring.

Population monitoring of these species is challenging, due to logistic difficulties, as well as nonavailability of standard methods. This problem is further exacerbated for Ganges and Indus river dolphins due to their very short surfacing time, making visual observations exceedingly challenging. However, to secure the future of dolphins in our country, it is of utmost importance to regularly monitor their population trends. Given that dolphins have very slow growth rate, with one calf being born every 2-3 years, any threats to the population will result in rapid decline, beyond a point of no-return, before recovery measures can be put into place. Therefore, it is of utmost importance to have a pulse on the dolphin numbers in the country, and regularly monitor critical dolphin hotspots, with a trained cadre of manpower, to ensure the well-being of not only dolphins, but also the rivers in our country and the associated livelihoods of people

### **Monitoring plan:**

Abundance of target species is one of the most fundamental information required for successful monitoring of its status and for intervention, if needed for its revival. However, population estimation methods for aquatic mammals largely suffer from the aquatic system's complex topography, currents, rippled water surface, reduced visibility of species and a non-uniform distribution of the species (Dawson et al. 2008, Richman et al. 2014). These render population estimation methods commonly adopted for terrestrial mammals unsuitable for aquatic mammals (Dawson et al., 2008). For cetaceans which are surface breathing aquatic mammals relying largely on echolocation for its movement, both visual and acoustic surveys have been commonly employed (Richman et al 2014). With visual surveys, though the number of animals missed can be modelled, the number unavailable for detections despite present is unknown. Acoustic surveys have a small range and the issues are vice-versa of the visual surveys. Estimation methods for both river and marine dolphins involve visual as well as acoustic surveys or combination of both (Dawson et al, 2008; Richman et al 2014). Double observer based markrecapture method corrects for observer bias and has been used for river dolphins and marine mammal surveys (Smith and Reeves, 2000, Qureshi et al 2018). There is substantial bias due to observer error and it is an absolute must to use double observer based surveys involving either double platform or boat in tandem method (Braulik et al 2012, Deori et al 2019), depending upon the navigability of medium or small size boats. While the visual-acoustic combination method is the most robust, it can only work in areas with good water depth, where medium size boats can navigate, and the technical know-how of analyzing acoustic data is developed. However, the correction factor developed for unavailability (by subject-experts) can be used to correct the visual survey and it is not necessary to do acoustics with all surveys. In absence of acoustic survey, the counts will be negatively biased but have persistent error and thus will not have effect on temporal trend of dolphin monitoring.

Overall, the survey method is divided into two monitoring schemes, range wide survey every three years i.e., tri-annual and annual surveys of critical hotspots. The activities for tri-annual survey are covered in 3 forms (Form 1, 2 & 3) with annexures. The annual monitoring of hotspots will have form 1, 2, 4, 5 and 6 with annexures (Please see the attached field guide for details on forms). Data analysis will be done at Wildlife Institute of India in collaboration with State Forest Departments and partner institutions.

1. **Form 1: Visual monitoring of Dolphin populations:** Depending on the width and depth of the river, one of the following boat based methods will be used for dolphin visual monitoring:
  - a. Form 1A: Double observer survey: This survey method will be used in large rivers, e.g. Brahmaputra and parts of Ganga where depth is adequate, and will involve a boat with two decks
  - b. Form 1B: Boat in tandem survey: This protocol will be followed for wide rivers, with larger dolphin population. For example, parts of Ganga, and rivers like Kosi, Gandak, Subansiri, Kulsi, Chambal, amongst others.
  - c. Form 1C: Single boat survey: This protocol will be followed in very narrow rivers, with low amount of water. For example, majority of the tributaries of Ganga
2. **Form 2: Habitat and anthropogenic activity assessment**
3. **Form 3: Monitoring of associated biodiversity**
4. **Form 4: Monitoring of associated biodiversity at hotspots**

5. **Form 5: Fish abundance monitoring**
6. **Form 6: Water quality monitoring**
7. **Form 7: Carcass measurement and sample collection protocol**

For tri-annual range wide survey, each state will undertake the survey independently. This will be done in two parts running parallel: (1) Main stream Ganga or Brahmaputra and (2) Tributaries. The survey in the mainstream part of river should be carried out by a single team or by two teams at the most, to reduce bias and noise in data. Given the existing length of the rivers, the mainstream survey will take maximum of one month in each state. Tributaries will be surveyed by two to three teams depending on number of tributaries having dolphins (Table 1). The tributary team may have to do two to three tributaries per team Table 1 gives broad details of survey plan and methods to be used in mainstream and tributaries of Ganga and Brahmaputra. On an average team will do 40 to 60 km of survey per day.

#### **Steps involved in pre-planning:**

- States need to apriori identify the staff who are to take part in the survey so that appropriate training is imparted, with researchers from Wildlife Institute of India, other Institutions and NGOs.
- State Forest Department should identify nodal officer for each state.
- Training workshop will be conducted during October of the year when range wide monitoring is to take place.
- The arrangements for survey will require hiring/procurement of boats and procurement of equipment, which should happen by October. See Appendix 2 and 4 of field guide for equipment list.
- Large size boat with double decks will be needed for double observer method, boat in tandem method needs two motor boats or motorized rafts and for single boat survey a motorized raft will be needed.
- The survey in Ganga and its tributaries, including Sundarbans, will takes place during Late October to Mid-December and whatever could not be surveyed during this time can be surveyed during February. Fog in December and January months will make survey difficult and after February, the water level will be too low in not only many tributaries, but also parts of main stream Ganga. In Brahmaputra survey will be done during will be conducted from mid-January to end of February to avoid windy season in March.
- For all survey teams there will be one support vehicle for supply of essentials, dealing with medical emergencies and setting up of camps for overnight stay along the survey route. Each Participant will have to fill a form given in Appendix 5 of field guide.
- Double observer method will need 10 people, boat in tandem 8 people and single boat 4 people other than boat staff. It is advisable that 2 extra people are trained per team, in case any replacement is needed during survey.
- All the intended participants of the survey will be trained for a 3 to 4 days in data collection, as per the protocols defined in data collection forms. It is essential that people get well versed with identifying dolphin surfacing, visual distance and angle estimation, identification of other aquatic fauna of conservation concern which can be seen from boat.

*Table 1: Dolphin survey in Ganga, Brahmaputra and Beas, with details of method of survey and number of teams needed for survey*

River	Stretch	Method	Number of Teams
<b>Ganga-Uttar Pradesh</b>	Bijnor to Sangam Prayagraj	1B-Boat in Tandem	UP1
<b>Ganga-Uttar Pradesh</b>	Sangam Prayagraj to Chausa	1A-Double Observer	UP2
<b>Ganga-Bihar</b>	Chausa to Farakka	1A-Double Observer	B1
<b>Hooghly-West Bengal</b>	Farakka to Ganga Sagar	1A-Double Observer	WB1
<b>Sundarbans-West Bengal</b>	Sundarbans	1A-Double Observer	WB2
<b>Brahmaputra-Assam</b>	Assam-Arunachal Pradesh border to India-Bangladesh border	1A-Double Observer	A1
<b>Beas - Punjab</b>	Beas Conservation Reserve	1B-Boat in Tandem	PB1
<b>Tributaries</b>			
<b>Chambal - Madhya Pradesh</b>	Batesura to Pachhnada	1B-Boat in Tandem	MP1
<b>Yamuna-Uttar Pradesh</b>	Gauhani Kachar to Sangam Prayagraj	1C-Single Boat	UP3
<b>Sharda-Uttar Pradesh</b>	Pilibhit to Sharda-Ghagra confluence	1C-Single Boat	UP4
<b>Girwa-Uttar Pradesh</b>	Nepal border to Girija barrage	1B-Boat in Tandem	UP4
<b>Ghagra-Uttar Pradesh</b>	Girija barrage to Tola Bala Rai	1C-Single Boat	UP4 & B2
<b>Gandak-Bihar</b>	Valmiki nagar to Sadikpur-Patna	1B-Boat in Tandem	B2
<b>Kosi-Bihar</b>	Bahadurganj to Kursera	1B-Boat in Tandem	B3
<b>Son-Bihar</b>		1C-Single Boat	B3
<b>Roopnarayan-West Bengal</b>		1A-Double Observer	WB1
<b>Subansiri-Assam</b>	Chawoldhuwa to Jamugurighat	1A-Double Observer	A2
<b>Kulsi-Assam</b>	Kukurmara to Nagarbera	1B-Boat in Tandem	A2

### **Budget & Rationale:**

The range wide monitoring of Ganges river dolphin is an intensive exercise that is logistically tough and requires a well-planned and prepared work plan for the exercise to be a success. The survey entails spending long hours on the river, and facing weather conditions that could turn adverse at short notice. The proposed budget is planned to equip the team to face these harsh conditions.

There is a short window of time, during November – March, where the estimation is possible, given the conditions of the weather on the river. Therefore, several parallel teams need to function in different stretches of the river to complete the estimation in time. For this exercise, there will be trained researchers and forest department staff to conduct double observer surveys in the main stream of Ganga and Brahmaputra, and boat in tandem surveys or single boat surveys in stretches of the river where the water depth is low, or tributaries where density of dolphin population is low. The boarding and lodging during the survey, as well as hiring of research staff is covered under the head “**staff**”. For these surveys, boat hiring for the duration of the survey (which includes the time taken to take the boat to the start point of the survey), is covered under the head “**boat hire/purchase**”. Small boats will be used for the survey in low depth stretches as well as tributaries, and the larger boat will be used in the main stream. It is prudent to purchase small boats, given that this will enable regular monitoring at local level, and the larger boat will be only hired for survey period. The head also includes the wages for the staff of the boat. The fuel for the survey duration is approximated under “**boat fuel**”. Given the harsh conditions of the survey, and that during the survey the boat will be passing through remote areas, a support vehicle will be required to accompany the boat during the survey, to handle any medical emergency, carry support equipment, and be used by the enumerators to be transported and to and from the boat on a daily basis. The fund requirement for this support vehicle is given under the head “**support vehicle**”.

To robustly estimate the population of dolphins, several instruments are required. Given the habitat of the dolphins, low surfacing time, poor visibility and the non-applicability of traditional methodology, the use of technology and instruments is indispensable. Acoustic instruments are required to correct the estimates for dolphins that are non-surfacing during the survey time. These instruments will also be useful to understand and identify important dolphin use habitats. A computer is required for the assimilation, analysis and visualisation of data, at the forest department level, during and after the survey. Along with the instruments, safety gear for the survey team is also accounted for in the budget under the head “**instruments**”. Workshops are needed to train respective forest department staff and survey participants on the methodology and estimation process. This is budgeted under the head “**workshops**”. Travel and stay for the participants during survey is covered under “**boarding/lodging and ration**”. “**Publication**” is the budget for printing field guides, datasheets, and reports at a later stage, along with any information material that is needed for publicising and information dissemination.

The budget is prepared, keeping in mind the resource required for each range state, as well as Wildlife Institute of India. The state budgets may require validation from respective states.

Consolidated Budget (in crores INR)

Head	Assam	West Bengal	Bihar	Uttar Pradesh	Madhya Pradesh	Punjab	Wildlife Institute of India	Total
Staff/Volunteers	0.05	0.03	0.04	0.05	0.01	0.01	1.26	1.45
Boat hire/Purchase	0.12	0.12	0.26	0.26	0.08	0.08	0.25	1.16
Boat fuel	0.18	0.18	0.26	0.31	0.03	0.01	0.00	0.97
Support Vehicles	0.03	0.03	0.04	0.04	0.01	0.00	0.05	0.19
Instruments	0.48	0.50	0.55	0.98	0.28	0.22	1.25	4.25
Workshops	0.03	0.03	0.04	0.05	0.01	0.01	0.20	0.37
Publication	0.01	0.01	0.01	0.01	0.01	0.01	0.10	0.13
Travel/Food	0.03	0.02	0.03	0.04	0.01	0.01	0.56	0.70
Contingency	0.09	0.09	0.12	0.17	0.04	0.03	0.37	0.92
<b>Grand total</b>	<b>1.00</b>	<b>1.00</b>	<b>1.34</b>	<b>1.90</b>	<b>0.48</b>	<b>0.38</b>	<b>4.04</b>	<b>10.15</b>

## Detailed Budget (in INR)

Assam :Head	Sub-Head	Rate (Rs.)	Number	Duration (month)	Amount (Rs.)
Staff/ Volunteers	Boarding /Lodging	10,000	15	3	4,50,000
Boat hire	Survey boat hire	1,80,000	1	2	3,60,000
	Small boat Purchase	4,00,000	2	1	8,00,000
					11,60,000
Boat fuel	Fuel for survey boats	110	8,000	2	17,60,000
Support Vehicles	Vehicle including fuel for logistics	22	6,000	2	2,64,000
Instruments	YSI Professional Plus	4,00,000	2	1	8,00,000
	F-pods	3,10,000	5	1	15,50,000
	GPS	25,000	5	1	1,25,000
	Range finder	25,000	5	1	1,25,000
	Sonar for habitat mapping	5,00,000	1	1	5,00,000
	Sonar for depth measurements	1,00,000	5	1	5,00,000
	Computer/computer personnel	1,00,000	1	1	1,00,000
	Equipment and gear for survey team	35,000	15	1	5,25,000
	Cameras	1,00,000			1,00,000
	consumables	2,50,000	2		5,00,000
					48,25,000
Workshops	Travel and stay	20,000	15	1	3,00,000
Publication	Publication	50,000	1	1	50,000
Ration	Foods for project team	6,000	25	2	3,00,000
Contingency					9,10,900
<b>Grand total</b>					<b>1,00,19,900</b>



Uttar Pradesh: Head	Sub-Head	Rate (Rs.)	Number	Duration (month)	Amount (Rs.)
Staff/ Volunteers	Boarding /Lodging	10,000	25	2	5,00,000
Boat hire	Survey boat hire	1,80,000	1	1	1,80,000
	Small boat hire	4,00,000	6	1	24,00,000
					25,80,000
Boat fuel	Fuel for survey boats	110	14,000	2	30,80,000
Support Vehicles	Vehicle including fuel for logistics	22	10,000	2	4,40,000
Instruments	YSI Professional Plus	4,00,000	2	1	8,00,000
	F-pods	3,10,000	18	1	55,80,000
	GPS	25,000	8	1	2,00,000
	Range finder	25,000	8	1	2,00,000
	Sonar for habitat mapping	5,00,000	1	1	5,00,000
	Sonar for depth measurements	1,00,000	6	1	6,00,000
	Computers & workstations	1,00,000	2	1	2,00,000
	Equipment and gear for survey team	35,000	25	1	8,75,000
	Cameras	3,00,000			3,00,000
	Consumables	2,50,000	2		5,00,000
					97,55,000
Workshops	Travel and stay	20,000	25	1	5,00,000
Publication	Publication	50,000			50,000
Ration	Foods for project team	6,000	30	2	3,60,000
Contingency					17,26,500
<b>Grand total</b>					<b>1,89,91,500</b>

Bihar: Head	Sub-Head	Rate (Rs.)	Number	Duration (month)	Amount (Rs.)
Staff/ Volunteers	Boarding /Lodging	10,000	20	2	4,00,000
Boat hire	Survey boat hire	1,80,000	1	1	1,80,000
	Small boat hire	4,00,000	6	1	24,00,000
					25,80,000
Boat fuel	Fuel for survey boats	110	12,000	2	26,40,000
Support Vehicles	Vehicle including fuel for logistics	22	8,000	2	3,52,000
Instruments	YSI Professional Plus	4,00,000	2	1	8,00,000
	F-pods	3,10,000	5	1	15,50,000
	GPS	25,000	8	1	2,00,000
	Range finder	25,000	8	1	2,00,000
	Sonar for habitat mapping	5,00,000	1	1	5,00,000
	Sonar for depth measurements	1,00,000	5	1	5,00,000
	Computers & workstations	1,00,000	2	1	2,00,000
	Equipment and gear for survey team	35,000	20	1	7,00,000
	Cameras	3,00,000			3,00,000
	Consumables	2,50,000	2		5,00,000
					54,50,000
Workshops	Travel and stay	20,000	20	1	4,00,000
Publication	Publication	50,000			50,000
Ration	Food for project team	6,000	25	2	3,00,000
Contingency					12,17,200
<b>Grand total</b>					<b>1,33,89,200</b>

West Bengal: Head	Sub-Head	Rate (Rs.)	Number	Duration (month)	Amount (Rs.)
Staff/ Volunteers	Boarding /Lodging	10,000	15	2	3,00,000
Boat hire	Survey boat hire	1,80,000	2	1	3,60,000
	Small boat purchase	4,00,000	2	1	8,00,000
					11,60,000
Boat fuel	Fuel for survey boats	110	8,000	2	17,60,000
Support Vehicles	Vehicle including fuel for logistics	22	6,000	2	2,64,000
Instruments	YSI Professional Plus	4,00,000	2	1	8,00,000
	F-pods	3,10,000	5	1	15,50,000
	GPS	25,000	5	1	1,25,000
	Range finder	25,000	5	1	1,25,000
	Sonar for habitat mapping	5,00,000	1	1	5,00,000
	Sonar for depth measurements	1,00,000	5	1	5,00,000
	Computer/computer personnel	1,00,000	1	1	1,00,000
	Equipment and gear for survey team	35,000	15	1	5,25,000
	Cameras	3,00,000			3,00,000
	Consumables	2,50,000	2		5,00,000
					50,25,000
Workshops	Travel and stay	20,000	15	1	3,00,000
Publication	Publication	50,000			50,000
Ration	Foods for project team	6,000	20	2	2,40,000
Contingency					9,09,900
<b>Grand total</b>					<b>1,00,08,900</b>

<b>Madhya Pradesh: Head</b>	<b>Sub-Head</b>	<b>Rate (Rs.)</b>	<b>Number</b>	<b>Duration (month)</b>	<b>Amount (Rs.)</b>
Staff/Volunteers	Boarding /Lodging	10,000	6	2	1,20,000
Boat hire	Small boat purchase	4,00,000	2	1	8,00,000
Boat fuel	Fuel for survey boats	110	1,500	2	3,30,000
Support Vehicles	Vehicle including fuel for logistics	22	1,500	2	66,000
Instruments	YSI Professional Plus	4,00,000	1	1	4,00,000
	F-pods	3,10,000	4	1	12,40,000
	GPS	25,000	3	1	75,000
	Range finder	25,000	3	1	75,000
	Sonar for depth measurements	5,00,000	1	1	5,00,000
	Computers & workstations	1,00,000	1	1	1,00,000
	Equipment and gear for survey team	35,000	6	1	2,10,000
	Cameras	1,00,000			1,00,000
	Consumables	1,00,000			1,00,000
					28,00,000
Workshops	Travel and stay	20,000	6	1	1,20,000
Publication	Publication	50,000			50,000
Ration	Foods for project team	6,000	10	2	1,20,000
Contingency					4,40,600
<b>Grand total</b>					<b>48,46,600</b>

Punjab: Head	Sub-Head	Rate (Rs.)	Number	Duration (month)	Amount (Rs.)
Staff/Volunteers	Boarding /Lodging	10,000	6	2	1,20,000
Boat hire	Small boat purchase	4,00,000	2	1	8,00,000
Boat fuel	Fuel for survey boats	110	600	2	1,32,000
Support Vehicles	Vehicle including fuel for logistics	22	600	2	26,400
Instruments	YSI Professional Plus	4,00,000	1	1	4,00,000
	F-pods	3,10,000	2	1	6,20,000
	GPS	25,000	3	1	75,000
	Range finder	25,000	3	1	75,000
	Sonar for depth measurements	5,00,000	1	1	5,00,000
	Computers & workstations	1,00,000	1	1	1,00,000
	Equipment and gear for survey team	35,000	6	1	2,10,000
	Cameras	1,00,000			1,00,000
	Consumables	1,00,000			1,00,000
					21,80,000
Workshops	Travel and stay	20,000	6	1	1,20,000
Publication	Publication	50,000			50,000
Ration	Foods for project team	6,000	10	1	60,000
Contingency					3,48,840
<b>Grand total</b>					<b>38,37,240</b>

483626/2021/WL

WII: Head	Sub-Head	Rate (Rs.)	Number	Duration (month)	Amount (Rs.)
Research Staff	Research Scholar	36,000	50	6	1,08,00,000
	Project Assistant	15,000	20	6	18,00,000
					1,26,00,000
Boat hire/Purchase					25,00,000
Vehicle hire					5,00,000
Instruments & Data management	A-tags	5,00,000	6	1	30,00,000
	F-pods	3,10,000	10	1	31,00,000
	GPS	25,000	13	1	3,25,000
	Range finder	25,000	13	1	3,25,000
	Computer/ computer personnel	1,00,000	9	1	9,00,000
	Equipment and gear for survey team	35,000	70	1	24,50,000
	Cameras				6,00,000
	Consumables	5,00,000			5,00,000
	Server	3,00,000	1		3,00,000
	GIS, Remote Sensing, mapping and data assimilation	10,00,000			10,00,000
					1,25,00,000
Workshops	Experts travel, material and stay	5,00,000	4	1	20,00,000
Publication	Reports, technical manuals, field guides	10,00,000			10,00,000
Researchers stay		40,000	9	6	21,60,000
Researchers Food/travel		6,000	70	4	16,80,000
Travel		25,000	70	1	17,50,000
					55,90,000
Contingency					36,69,000
<b>Grand Total</b>					<b>4,03,59,000</b>

4806Z0/2021/WL

Email

C Sasikumar Wildlife Division

---

**MoEFCC Letter to WII- Population Enumeration of Riverine Dolphins**

---

**From :** C Sasikumar Wildlife Division <sasi.kumar@nic.in> Thu, Jul 01, 2021 11:22 AM  
**Subject :** MoEFCC Letter to WII- Population Enumeration of Riverine Dolphins 1 attachment  
**To :** dwii@wii.gov.in  
**Cc :** Mr Soumitra Dasgupta <adgwl-mef@nic.in>, Rohit Tiwari <igfwl-mef@nic.in>, Rakesh Kumar JAGENIA <digwl-mefcc@gov.in>, Joint Director <jd-wl@nic.in>

Dear Sir,

The undersigned is directed to attach an E-signed letter of the Deputy Inspector General of Forests (WL), MoEFCC regarding population enumeration of Riverine Dolphins.

With regards

C.Sasikumar  
Technical Officer (WL)  
Wildlife Division, MoEFCC

---

 **MoEFCC LETTER-Population Enumeration of Riverine Dolphin-Reg.pdf**  
359 KB

---

480620/2021/WL

**F. No. 34-3/2020 WL (Part-4)**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**Wildlife Division**

**First Floor, Agni Wing,**  
**Indira Paryavaran Bhawan,**  
**Jor Bagh Road, Aliganj,**  
**New Delhi - 110003.**

**Dated: 30<sup>th</sup> June 2021**

**The Director,**  
**Wildlife Institute of India,**  
**Dehradun.**

**Sub: Population enumeration of Riverine Dolphins- submission of proposal - Reg.**

Sir,

Reference is invited to the meeting in connection with Project Dolphin, held on 25<sup>th</sup> June 2021 under the Chairmanship of the Inspector General of Forests (WL), MoEFCC wherein the representatives of Dolphin Range States, relevant Scientific Institutes, including Wildlife Institute of India had participated.

During the said meeting, the matter regarding population assessment of Riverine Dolphins was also discussed. In this context, the undersigned is directed to request the Wildlife Institute of India for submission of proposal for seeking budget under CAMPA and also initiate action for identification of state co-ordinators and forest department team (July-August, 2021) and online orientation (August-September, 2021) for undertaking the population enumeration.

Yours faithfully,

**(Rakesh Kumar Jagenia)**  
**Deputy Inspector General of Forests (WL)**  
**Email: digwl-mefcc@gov.in**

Copy to:

1. PSO to Addl. DGF(WL), MoEFCC, New Delhi.
2. PPS to IGF(WL), MoEFCC, New Delhi
3. PS to AIGF (WL), MoEFCC, New Delhi

Validity unknown

Digitally signed by RAKESH  
KUMAR JAGENIA  
Date: 2021.06.30 16:30:29 IST

