## Ansupa Lake Brief document

State / Union Territory: Odisha

Name and address of person(s) compiling this information : Mr. Susanta Nanda, IFS, Chief Executive & Dr. R.N.Samal, Scientific Officer, Chilika Development Authority

**Section 1: Identification, Location and Jurisdiction**

* 1. Name of the Wetland (Alternative names, including in local language should be given in parenthesis after official name)

Ansupa Lake

* 1. Name of the Village(s) , Tehsil(s), Municipal area (s)

Subranapur, Kadalibadi & Bishnupur Mouza of Athagarh Sub-division

* 1. Name of the District(s) in which wetland complex is located: Cuttack
  2. Geographical coordinates (Latitude and Longitude, to degree, minutes and second)

Latitude: From 20 26’28.43” to 20 28’ 34.44”

Longitude: From 85 35 56.74” to 85 36’ 30.01”

* 1. Name of the Department / Agency which has jurisdiction over the wetland / wetlands complex

O/O Chief Executive, Chilika Development Authority, Department of Forest & Environment, Government Of Odisha, Plot No. 493(P), Pallasapalli, Pokhariput Road, Bhubaneswar-751020, Odisha, India

**Section 2: Site Characteristics**

* 1. Area of wetland / wetlands category (ha) 382 Acres
  2. Wetland type (Please tick appropriate categories and sub-categories)

| **Category** | **Subcategory** |
| --- | --- |
| **❒** Natural (Inland) | **❒** Permanent lakes  **❒** Seasonal/ intermittent lakes  **❒** Permanent streams/ creeks  **❒** Seasonal/ intermittent streams/ creeks  **✓** Oxbow  **❒** River floodplain  **❒** Permanent freshwater marshes  **❒** Seasonal/ intermittent freshwater marshes  **❒** Shrub-dominated wetlands  **❒** Tree-dominated wetlands  **❒** Geothermal wetlands  **❒** Karst and other subterranean hydrological systems |
| **❒** Natural (Coastal) | **❒** Coastal lagoon  **❒** Estuary  **❒** Intertidal mud, sand or salt flats  **❒** Mangroves  **❒** Coral reefs |
| **❒** Human-made | **❒** Aquaculture pond  **❒** Tank  **❒** Saltpan  **❒** Dam / Reservoir |

* 1. Depth (m) Average 234.00 cm. Maximum 282.00 cm.
  2. Elevation (m above mean sea level): 5 m
  3. Water regimes

1. Main source of water (tick all applicable)

**✓**Rainfall **❒** Groundwater **✓** Catchment runoff **✓** Direct / indirect inflow from river

**❒** Others, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Water permanence

**❒** Mostly permanent **✓** Mostly intermittent

1. Destination of water from wetland

**❒** Feeds groundwater **✓** To downstream catchment **❒** To river **❒** To sea

1. Water pH

**❒** Acid (< 5.5) **❒** Circumneutral (5.5 – 7.4) **✓** Alkaline (> 7.4) **❒** Not known

1. Water salinity

✓ Fresh (< 0.5 g/l) **❒** Brackish (0.5 – 30 g/l)) **❒** Euhaline (30- 40 g/l) **❒** Hypersaline (>40g/l)

**❒** Not known (Fresh water Lake)

1. Nutrient in water : 11.90µmol/l

**❒** Eutrophic **✓** Mesotrophic **❒** Oligotrophic **❒** Not known

* 1. Climatic setting

1. Annual Rainfall /Snowfall(mm) 1270 mm.
2. Temperature (oC) Minimum 25.52 0c Maximum 26.37 0c
3. Humidity (%) Minimum 55.00 % Maximum 94.00 %
   1. Area of zone of influence (in ha) 3814.00 ha.
   2. Major land use within zone of influence (provide as approximate % of catchment area)

Forests 20.1 %

Plantation 3.0 %

Agriculture 77.9 %

Settlements (Rural) 5.0 %

Settlements (Urban) %

Industrial %

* 1. Map of wetland complex and zone of influence

(To be enclosed as Annex I and II to this proposal)

**Section 3: Biodiversity**

3.1 Notable plant species present in wetland

Annexure -I

3.2 Notable animal species present in wetland

#### List of wild animals recorded at Ansupa Area

#### Scientific Name Local Name

1. *Funambulus palmarum* Gundcvhi musa

2. *Mus booduga* Musa

3. *M. musculus* Musa

4. *Bandicota indica* Jangali Musa

5. *B. bengalensis*  Chuchundra

6. *Pteropus giganteus*  Badudi

7. Felis viverrina Machharanka Biradi

8. *F. chaus*  BanaBhua

9. *Canis aureus* Bilua

10. Vulpes bengalensis Kokisiali

11. *Herpestes edwardsi*  Neula

12. Lutra perspicillata Pani Odha

3.3 Species of conservation significance (rare, endangered, threatened, endemic species)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.4 Major plant invasive alien species

Water Hyacinths

3.5 Major animal invasive alien species

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**Section 4: Ecosystem services**

| **Importance** | **Relevant for the site (please tick yes or no)** | **If Yes, Details (upto 50 words for each category)** |
| --- | --- | --- |
| Source of drinking water for people living and around | **❒**Yes **❒**No |  |
| Source of water for agriculture | **✓**Yes **❒**No | Department Water Resources, Government of Odisha have been using the Ansupa lake water for agriculture purpose |
| Fisheries | **✓**Yes **❒**No | Ansupa is the main livelihood source for fishermen families of nearby villages, over 65 families’ are depending on fishing activities. The fishery right is annually being settled with Ansupa Primary Fishermen Co-operative Society which includes two fishing villages namely, Subranapur and Malabiharipur. |
| Cultivation of aquatic food plants | **❒**Yes **❒**No |  |
| For buffalo wallowing and use of domesticated animals | **❒**Yes **❒**No |  |
| Medicinal plants | **❒**Yes **❒**No |  |
| Is a recreational site | **❒**Yes **❒**No |  |
| Buffering communities from extreme events as floods and storms | **❒**Yes **❒**No |  |
| Groundwater recharge | **❒**Yes **❒**No |  |
| Water purification | **❒**Yes **❒**No |  |
| Acts as a sink for sediments | **✓**Yes **❒**No | The sediment brought from the Catchments during the Monsoon season and deposited in the Lake, causes depletion in water holding capacity of the lake |
| Has significant cultural and religious values | **✓**Yes **❒**No | Ansupa lake has its fame since time immemorial among the beautiful tourist spots in the state of Odisha. The natural scenery and the environmental situation have attracted many the poets and writers in the past. Due to the presence of a very old historical fort it is considered as a natural heritage site of Odisha |
| Is a site for recreation and tourism | **✓**Yes **❒**No | Ansupa in the Odisha state is the largest fresh water lake and also during winter Birds both migratory and also Residence visit lake. To have the boat ride and also to see the eco-garden, tourist visit Ansupa lake in large numbers. |
| Supports noteworthy plants species | **❒**Yes **❒**No |  |
| Supports noteworthy animal species | **❒**Yes **❒**No |  |
| Site of high congregation of migratory water birds | **✓**Yes **❒**No | During winter season a large nos of Birds both Migratory and also residence visit Ansupa lake as it falls along the Central Asian Flyway |
| Supports life cycle of fish or amphibians | **✓**Yes **❒**No | Ansupa is famous for its fresh water fish. There are 24 nos, of fishes available in Ansupa |
| Mining | **❒**Yes **❒**No |  |
| Any other, please list |  |  |

**Section 5: Pre-Existing Rights and Privileges**

| **Nature of right and privilege** | **Relevant for the site (please tick yes or no)** | **Does this negatively impact the wetland’s ecological health?** | **Brief description (upto 50 words for each category)** |
| --- | --- | --- | --- |
| Community Fishing (without any lease or permission from government department) | **❒**Yes **✓**No | **❒**Yes **❒**No  **❒**Not assessed |  |
| Fishing under lease from government department | **✓**Yes **❒**No | **❒**Yes **✓**No  **❒**Not assessed |  |
| Harvest of plants (without any lease or permission from government department) | **❒**Yes **❒**No | **❒**Yes **❒**No  **❒**Not assessed |  |
| Harvest of plants under lease from government department | **❒**Yes **❒**No | **❒**Yes **❒**No  **❒**Not assessed |  |
| Agriculture or horticulture within wetland | **❒**Yes **✓**No | **❒**Yes **❒**No  **❒**Not assessed |  |
| Grazing | **❒**Yes **❒**No | **❒**Yes **❒**No  **❒**Not assessed |  |
| Religious practices | **✓**Yes **❒**No | **❒**Yes **❒**No  **✓**Not assessed |  |
| Withdrawal of water for domestic use | **✓**Yes **❒**No | **❒**Yes **✓**No  **❒**Not assessed |  |
| Withdrawal of water for agriculture or fisheries | **✓**Yes **❒**No | **✓**Yes **❒**No  **❒**Not assessed |  |
| Bathing or wallowing of domestic animals | **✓**Yes **❒**No | **❒**Yes **✓**No  **❒**Not assessed |  |
| Plying of boats | **❒**Yes **❒**No | **❒**Yes **❒**No  **❒**Not assessed |  |
| Any other, please list here | **❒**Yes **❒**No | **❒**Yes **❒**No  **❒**Not assessed |  |

**Section 6: Present and Potential Threats**

| **Threat** | **Degree** | **Present or Potential** | **Additional information, if any** |
| --- | --- | --- | --- |
| Changes in water inflow and outflow | **✓**High**❒**Medium **❒**Low | **✓**Present  **❒**Potential |  |
| Pollution | **❒**High **❒**Medium **❒**Low | **❒**Present  **❒**Potential |  |
| Unsustainable harvest of biological resources | **❒**High **❒**Medium **❒**Low | **❒**Present  **❒**Potential |  |
| Mining | **❒**High **❒**Medium **❒**Low | **❒**Present  **❒**Potential |  |
| Siltation | **❒**High **✓**Medium **❒**Low | **✓**Present  **❒**Potential |  |
| Encroachment | **✓**High **❒**Medium **❒**Low | **✓**Present  **❒**Potential |  |
| Spread of invasive species | **✓**High **❒**Medium **❒**Low | **✓**Present  **❒**Potential |  |
| Any other, please list | **❒**High **❒**Medium **❒**Low | **❒**Present  **❒**Potential |  |

**Section 7: Activities Proposed to be prohibited (other than those listed in Rule 4(2) of Wetlands Rules)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | **Prohibited within wetlands or zone of influence** | **Details of specific area wherein activity is prohibited** | **Name of department / agency responsible for regulation** | **Additional information, if any** |
| * + 1. Direct discharges of Sewerage     2. Soil conservation measures | ✓ Wetland / Wetlands complex boundary  ✓ Zone of influence |  |  |  |

**Section 8: Activities Proposed to be regulated**

| **Activity** | **Place a tick mark if relevant** | **Regulation within wetlands or zone of influence** | **Level of regulation (in terms of people, restricted area or any other)** | **Name of department / agency responsible for regulation** | **Additional information, if any** |
| --- | --- | --- | --- | --- | --- |
| Withdrawal of water / impoundment/diversion or any other hydrological intervention | ✓ | ✓ Wetland / Wetlands complex boundary  ❒ Zone of influence |  |  |  |
| Harvesting of resources (living / non-living) | ✓ | ✓ Wetland / Wetlands complex boundary  ❒ Zone of influence |  |  |  |
| Grazing | ❒ | ❒ Wetland / Wetlands complex boundary  ❒ Zone of influence |  |  |  |
| Discharge of treated sewage/ effluent / wastewater | ✓ | ❒ Wetland / Wetlands complex boundary  ✓ Zone of influence |  |  |  |
| Construction of boat jetties, and facilities for temporary use , as pontoon bridges | ❒ | ✓ Wetland / Wetlands complex boundary  ❒ Zone of influence |  |  |  |
| Aquaculture, agriculture and horticulture activities within the wetland boundaries. | ❒ | ❒ Wetland / Wetlands complex boundary  ✓ Zone of influence |  |  |  |
| Any other, please list | ❒ | ❒ Wetland / Wetlands complex boundary  ❒ Zone of influence |  |  |  |

**Section 9: Activities Proposed to be permitted**

| **Activity** | **Place a tick mark if relevant** | **Within wetlands or zone of influence** | **Additional information, if any** |
| --- | --- | --- | --- |
| Watershed Activities | ✓ | ❒ Wetland / Wetlands complex boundary  ✓ Zone of influence |  |
| Weed Control (Manual and Mechanical) | ✓ | ✓ Wetland / Wetlands complex boundary  ❒ Zone of influence |  |
| Eco-tourism | ✓ | ✓ Wetland / Wetlands complex boundary  ✓ Zone of influence |  |
| Fishing Activities | ✓ | ✓Wetland / Wetlands complex boundary  ❒ Zone of influence |  |
| Monitoring, Evaluation | ✓ | ✓ Wetland / Wetlands complex boundary  ✓ Zone of influence |  |
| Renovation of Input (Hulhula Nallah, Kabula Nallah and Mayur dhara Nallah) and Output Inlets and also desiltation of Ansupa Lake | ✓ | ✓Wetland / Wetlands complex boundary  ✓ Zone of influence |  |
|  | ❒ | ❒ Wetland / Wetlands complex boundary  ❒ Zone of influence |  |

**Section 10: Listing of Available Scientific Resources Used:**

Revenue Records, Survey of India Toposheet, ORSAC Survey Report and also NRSC Landuse/ Land Cover Maps

**CHECKLIST**

**❒** Responsible agency has been clearly identified and details of contact person included

**❒** Wetland/ wetlands complex boundary has been delineated using GIS and firmed up by adequate ground truthing

**❒** Wetland/ wetlands complex map has been provided at required scale

**❒** Zone of influence has been delineated and included in wetland map or a separate map

**❒** Wetland zone of influence is sufficient to manage all activities

**❒** Site’s importance have been listed, and for major categories, justification is provided

**❒** Site’s biodiversity values are listed, and for major categories, justification is provided

**❒** List of pre-existing rights and privileges is provided

**❒** Consistency or inconsistency of pre-existing rights and privileges is indicated to be best of available knowledge

**❒** Threats to site are listed, and for major categories details are provided

**❒** Activities prohibited, beyond those already listed in Rule 4(2) have been mentioned

❒ List of activities to be regulated within wetlands and zone of influence is provided

**❒** List of activities to be permitted is provided