

**Name of Project: Floristic studies in selected High Altitude Wetlands (HAWs)
and its environs representing 5 districts of Arunachal Pradesh.
(August 2020 to March 2023)**

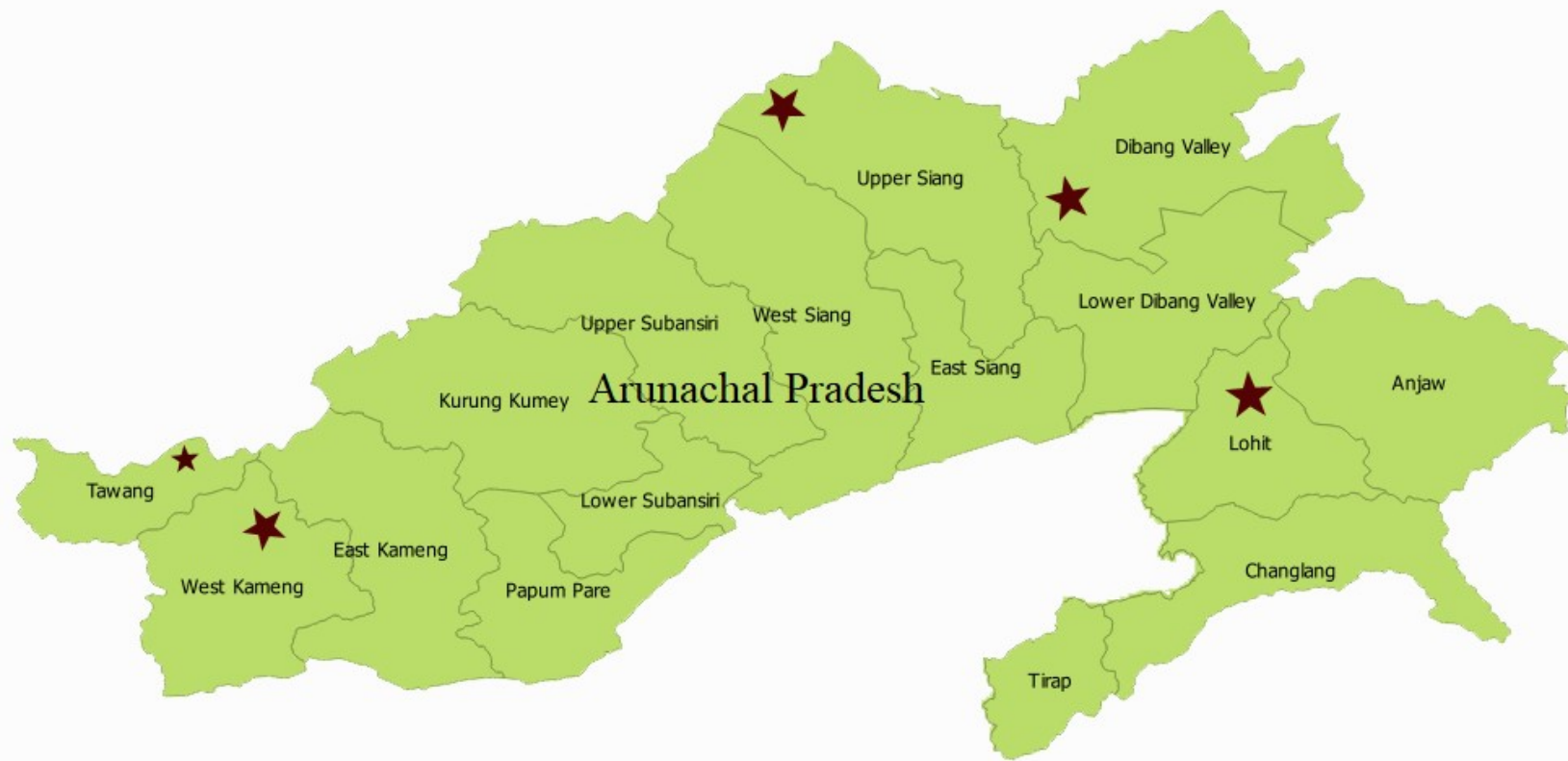
Executing Scientists – Dr Manas R. Debta



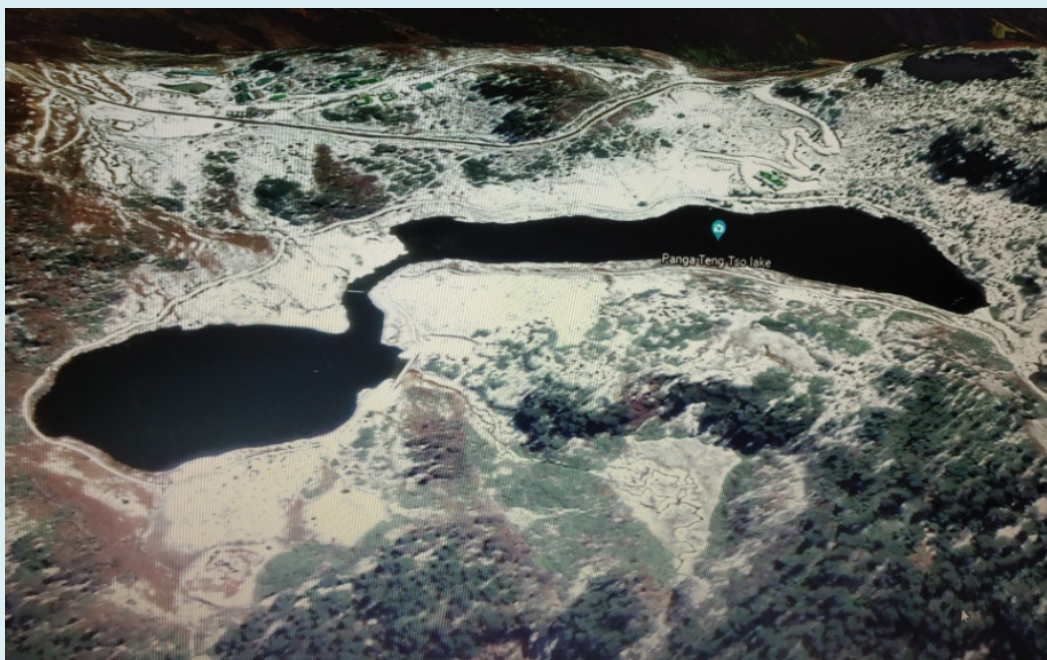
Wetlands selected: Five

- The study sites are selected from western, central and eastern region of Arunachal Pradesh.
- The wetlands are selected keeping in mind that a comparative assessment can be elucidated on plant resources across varying altitude, topographic terrain and climatic regime.

1. Pankeng Teng Pso or PT Tso lake, Tawang district
2. *Sela lake, West Kameng district
3. Titapuri lake, Upper Siang district
4. Kamo Uyea lake, Upper Dibang Valley district
5. Glow lake, Lohit district



Location of selected wetland in Arunachal Pradesh



Pakeng Teng Tso lake, Tawang district

Altitude- 4500 m

Geo-coordinates: 27°38'19"N
91°51'06"E

Sela lake, West Kameng district

Altitude- 4350 m

Geo-coordinates: 27°30'N
92°06'16"E

*Initially selected but now **Thang-Chu wetland** is proposed, which is at 4550 m altitude. It is not visited till now by any explorer.





Glow lake, Lohit district

Altitude- ca 2000 m

Geo-coordinates: 27°41'25"N latitude;
96°27'46"E longitude

- Very little information available regarding Titapuri lake, Upper Siang district .
- No information gathered about Kamo Uyea lake (3800 m), Upper Dibang Valley district.

Literature studied:

➤ All published literature are scrutinised; only 3 new records to Arunachal Pradesh are found to be reported from the literature.

1. *Codonopsis foetans* Hook.f. & Thomson

2. *Codonopsis thalictrifolia* Wall.

3. *Gentiana urnula* Harry Sm.

➤ Only a single work on Nagula lake was carried out by GBPNIHE, Itanagar but no specimens traced from their herbarium.

Apart from this, an interaction with the GIS cell of State Forest Department has been undertaken to get relevant data about the selected wetlands. But they were not able to provide any details about Thang-Chu, Titapuri and Kamo-Uyea wetlands.

Herbaria consulted: Three

➤ ARUN, Itanagar (few collections from Glow lake)

➤ GB Pant National Institute of Himalayan Environment, Itanagar

➤ State Forest Research Institute, Itanagar

• Unable to locate even a single collection from the selected HAWs of Arunachal Pradesh.

• One field tour by GBPNIHE, Itanagar has been conducted to Nagula wetland but no specimen is available in their herbarium.



Cremanthodium indicum D.Borah, R.Kr. Singh & Thungon (source: internet)

Checklist prepared: A tentative checklist of 76 taxa is prepared from the collection belonging to high altitudes.

Family/genera expected to occur study site: based on representative herbarium specimens from marshy or wet places of high altitudes from Arunachal Pradesh.

Family	Genera
Asteraceae	<i>Taraxacum, Cremanthodium</i>
Campanulaceae	<i>Campanula</i>
Gentianaceae	<i>Gentiana, Swertia</i>
Polygonaceae	<i>Polygonum, Persicaria, Bistorta</i>
Scrophulariaceae	<i>Pedicularis, Veronica</i>
Crassulaceae	<i>Sedum, Rhodiola</i>
Fumariaceae	<i>Corydalis, Fumaria</i>
Cyperaceae	<i>Carex, Kobresia</i>
Juncaceae	<i>Juncus</i>
Poaceae	<i>Poa, Festuca</i>

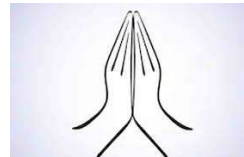
Tours conducted: Nil (Field tours could not be conducted due to Covid-19 induced budget restriction)

Proposal for 2021-22

Field Tours proposed : Two field tours (June and August)

Herbarium tours : One HCT to ASSAM, Shillong and one to RGU, Doimukh

❖ More coordination will be done with GIS cell of State Forest Department to gather as much as information as possible.



THANK YOU