

Indian Antarctic Programme
Activities at Bharati Station Larsemann Hills/ East Antarctica
Season 2019-20

1. Scientific Studies

Apart from usual atmospheric observations and geological field works in and around Larsemann Hills, in view of the multi-national Geological Exploration of Amery Ice-Shelf (GeoEAIS) planned for the next three seasons, multiple reconnoitre field surveys in and around Amery Ice-shelf covering an approximate area of 450 km x 150 km were conducted. Basic infrastructure including a shelter and helipad were created and mid-way fuel dump at S69° 44' 29.4" E074° 30' 54.133" have been identified to support the GeoEAIS project.

Multi-instrument atmospheric laboratory hosting aerosol experiments, ozone analyser and space weather experiments is now fully functional at Bharati. The establishment at a location 69° 24' 26.5" S & 76° 12' 07.0" E is in upwind direction of Bharati station and mostly away from the station exhaust, which is most suited for several atmospheric studies.

2. Logistical activity

MV Vasilij Golovnin arrived at Bharati on 13 January and after completing cargo operation and scientific projects at Bharati, sailed for Maitri on 19 February 2020.

After 8-years into service, engines of all 3 combined heat and power (CHP) generators were overhauled, successfully tested and put into operation.

For providing access to the Lab, wooden stepped walkway at steep slopes and a steel catenary bridge having a span of about 50 meter has been constructed with the available resources. The approach to Atmospheric Lab from Bharati station has been made easy and shortened by about half a kilometre.

3. Environmental protection

Routine waste management including collection/ segregation of plastic, wood, glass and tin and also solid waste bio waste packed and sent to Cape Town for disposal.

4. Meetings of Station Personnel

International Conference on Antarctic Research (ICAR-2020) with participants from India, China, Russia and Australia was organized at Bharati station on 17 January 2020. A total of 14 oral presentations and 25 poster presentations were made by the delegates. It was a grand success and perhaps the first of its kind amongst Antarctic community with about 90 participants out of which 30 foreign scientists from Australia, China and Russia.

Indian Antarctic Programme
Planned activities at Bharati Station Larsemann Hills/ East Antarctica
Season 2020-21

1. Scientific Studies

Due to Corona Virus pandemic the scientific activities have been scaled down to minimum and shall be limited to routine metrological observations, aerosol measurements and glaciological observations.

2. Logistical activity

MV Vasiliy Golovnin is expected to arrive at Bharati by 08 Feb and after resupply and changeover of winter crew expected to sail for Maitri by 28 February 2021.

3. Environmental protection

Routine waste management including collection/ segregation of plastic, wood, glass and tin and also solid waste bio waste packed and to be sent to Cape Town for disposal.

4. Meetings of Station Personnel

No meetings or station visits intended except for emergencies if any.