



# GEO CLUB

Department of Geography  
St. Xavier's College, Ranchi



## Annual Report 2024

### Village Outreach Programme: TURUP (February 09<sup>th</sup> 2024)

On 9th February 2024, the Geoclub embarked on Village Outreach Programme to village Turup, Ranchi - 835103 after a prior survey done by the club members itself. This initiative aimed to address educational awareness and social issues prevalent in the village through active community engagement.

Thirty-one volunteers from the GeoClub, participated in the programme. They began by conducting thorough surveys to understand the village demographics, educational status, and social challenges such as drug and alcohol addiction. This initial phase was crucial in preparing them to tailor their outreach efforts effectively. Divided into groups, the volunteers visited key institutions within the village: an Aanganwadi and a local middle school. At the Aanganwadi, they interacted with young children, teaching them basic education elements like alphabets, numbers, and engaging them in playful activities to foster learning in a comfortable environment. They also emphasized hygiene practices and cleanliness, actively participating in daily routines like the mid-day meal distribution.



At the middle school, the focus shifted to older students from classes 3 to 9. Here, the volunteers discussed various career options and important social issues such as drug abuse, menstrual hygiene, and sanitation. They utilized interactive sessions and activities to make the learning experience engaging and impactful. Apart from educational outreach, the GeoClub also conducted environmental research by collecting samples near Rukka Dam, contributing to their academic pursuits in geography.



The programme was well-received by both the village community and the college administration, appreciating the efforts made by the volunteers in addressing local issues and enhancing educational awareness. Prof. Dr. Sandeep Chandra played a pivotal role in guiding and supporting the volunteers throughout the programme, ensuring its success and impactful outcomes.

## Earth Day: One Earth, No Plan B (April 22<sup>th</sup>–23<sup>rd</sup> 2024)

One Earth: No Plan B, a two-day event series aiming to promote mindful consumption of resources and sustainable development, was organised on April 22nd and 23rd, 2024, in the Fr. C.D. Brouwer Auditorium by the Geoclub.

Day 1 of the event commenced with a warm welcome to the chief guests, marked by a traditional tribal dance showcasing the rich cultural heritage of Jharkhand. Following the lamp lighting ceremony, Our honorable Principal, Fr. Nabor Lakra, extended a warm welcome to our guests, IFoS Smita Pankaj and Dayamani Barla, an environmental activist, journalist, and writer, by presenting them with saplings. A warm welcome song was performed to convey a sense of warmth and hospitality. Following the Welcome song, a documentary was showcased depicting the state of nature and the need for its preservation. As the event commenced, the Secretary of the Geoclub shared the club's vision, setting the tone for the proceedings. Further, enlightening thoughts were presented by the guest of honour and the dignitaries of the event.

Prof. Dr. Rajeev Ranjan Shrivastava concluded the inaugural session by extending a heartfelt vote of thanks to the guest of honor and dignitaries. Progressing towards the competitive segment of the event, the first session of the Youth Parliament led the way, focusing on sustainable development and climate change. This was further followed by a quiz competition focused on environmental conservation (Save energy, Save water, Save the planet, and Planet vs. Plastics), a photography reels contest, and a documentary-making competition, all centered around significant themes." The inaugural day wrapped up with resounding success and mementos captured.





The second day of the event began with immense excitement among the audience and Geoclub members as we honored our distinguished guest of honor, Mr. Ankush Kasera, a renowned photographer, traveler, and National Geographic's Director of Photography. The guest and the dignitaries were welcomed by a traditional tribal dance, a lamp-lighting ceremony, and a presentation of a sapling and memento as a symbol of respect. Additionally, the club presented a special dance performance in honor and respect of the guest. Later in the event, Father Principal shared his words of wisdom, and the vote of thanks was delivered by Professor Dr. Rajeev Ranjan Shrivastava. An interactive session with Mr. Ankush Kasera followed, enlightening the interested audience about photography. After the interactive session, we proceeded to the competitive segment of the event.

First, a TED Talk cum speech competition was held, judged by Madhumita Ma'am and Utkarsha Ma'am. The final sitting of the Youth Parliament concluded with the drafting of its bill, focusing on core agendas: introducing electronic vehicles, promoting the use of solar panels, and reducing ocean pollution.

Following the completion of the competition, the results were declared and the deserving winners were felicitated by the dignitaries and the guest of honour. As the event drew to a close, we took a moment to express our heartfelt thanks to all the dignitaries in attendance, with special appreciation to our professors, Dr. Sandeep Chandra, Head of Geoclub, and Prof. Dr. Shiv Kumar, IQAC Coordinator. The event was wrapped up with great resounding success, followed by a memorable memento capture session.



# Wanderlust Trails: A Trekking Odyssey

## Trek to Huringdag Hills

(August 15<sup>th</sup> 2024)

On India's Independence Day, 15th August 2024, the Geoclub, under the Department of Geography of St. Xavier's College Ranchi, organized a trek to the Huringdag Hills in Garsul, Jharkhand (834004), under the banner of Wanderlust Trails: A Trekking Odyssey. This initiative focused on health and wellness, promoting physical well-being and fitness among the students.

We left the campus at approximately 10:00 a.m. by bus and arrived at our destination in about thirty minutes.

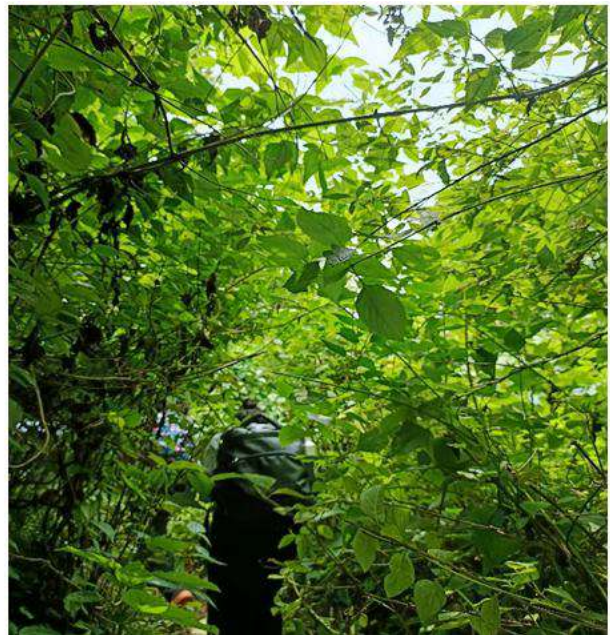
A total of 36 students participated in the trek, accompanied by two faculty members of our department, Prof. Dr. Sandeep Chandra and Ms. Utkarsha Yadav, along with the Pradhan, Mr. Remish Tirkey of Garsul village, who was our guide for the entire trek. We travelled to the location by bus, where we received our trekking supplies, including food and energy drinks to keep us energized throughout the trek. We also brought 2 Litres of water each to stay hydrated. Additionally, we carried a first aid kit to treat any injuries that might occur while walking in the forest or hiking the hills. After ensuring every requirement and receiving necessary instructions from our faculty heads we embarked on our trek.



The trek officially began around 11:30 a.m., we were to cover a distance of 6–8 kilometres.

We started walking towards the hill, navigating through the forests and exploring the flora and fauna of the region more closely. Along the way, we had to cross several pits, which we accomplished through teamwork. However, we had to

change our pathways multiple times due to blockages and dead ends. Fortunately, finding alternative routes was easier with the help of the village pradhan, who provided us with much-needed navigation and accurate directions. As a local, he was more familiar with the region than we were. The village pradhan showed us different pathways leading into the forests and to the hills, and we explored the beautiful paths of the Huringdag hills more closely. He also provided us with insights into the vegetation and region. Moreover, he emphasized that with appropriate support and preservation efforts, the region's beauty could be significantly enhanced, making it a more attractive tourist destination. Our faculty members also enlightened us about the diverse natural vegetation, flora, and fauna that we encountered on our way to the hills.



The pathways between the forests were very narrow, and as we ventured deeper, we moved in a line towards our destination. We spotted many thorny plants, weeds, and various trees surrounding us. There were also small pits between the pathways that we crossed with caution. We crossed an area where a cave-like structure had formed due to the dense growth of leaves. We saw areas where crops were sown in the soil, filled with water, and another area filled with mud due to the rainy season, making it slippery and muddy all around. We also crossed a narrow path where the river flowed heavily on our left and crops were sown on our right, making it a challenging stretch with nothing to hold onto. We spotted a guava tree and enjoyed its sweet taste by plucking it ourselves, feeling a sense of authenticity and connection with nature.





We trekked uphill and downhill, reaching an open area where cattle roamed and grazed, creating a serene atmosphere. After further walking, we saw the hill we were to hike, and our actual trek began with an elevation of around 700-800 meters.



The steep slope made it a difficult task, but teamwork helped us navigate the slippery terrain due to rain and algae. We took a break halfway, admiring the mesmerizing view of cropping areas and road networks. We ensured staying hydrated, and energy drinks helped us relax and endure longer.

After immense hiking, we finally reached the top, feeling accomplished, and took good rest and pictures for memories. Our banner of Wanderlust Trails was displayed, and an interview with the village pradhan discussed geographical, cultural, religious, and social aspects, highlighting areas of improvement. Then, we descended, which was more challenging than climbing due to slippery rocks, but teamwork helped us reach the bottom safely, where we rested near the river.





A tributary of the Ranchi River flowed through the region, posing a challenge for the group to cross due to the absence of river bridges. Some of us directly crossed the river, relying on teamwork and coordination to help each other reach the other side safely. Meanwhile, others took a longer route around, finding a less challenging and safer crossing point. There, the tributary's bed was lined with sand, tiny, medium, and large stones, and a type of grass that served as stepping stones, allowing us to cross safely without losing balance or getting swept away by the river's flow and we managed to cross the area successfully without any issues.



The region is rich in greenery but has problems because of poor road networks, which make it hard for tourists to get around. A river tributary from the Ranchi River runs through the area, and without proper bridges, travel becomes difficult. This lack of infrastructure causes delays and problems for locals and visitors, making it take longer to move around and see different parts of the area. Building better roads and bridges is important and should be handled by the appropriate authorities to make travel easier.



We covered a total distance of 6-8 kilometres and hiked one of the hills, reaching an elevation of around 700-800 meters. Each participant successfully reached the peak, and it was a moment of appreciation for all of us who made it to the top safely and without any major incidents. We achieved a milestone by reaching both the summit and the base of the hill safely.

The trek presented its share of challenges, including steep inclines and uneven paths, but the group showcased remarkable teamwork, making it the highlight of the trek. Without this crucial cooperation, we wouldn't have been able to complete the trek on our own. We supported each other like links in a chain, helping one another through every segment of the journey.

We concluded the trek at around 3 p.m. and took some time to rest at a nearby spot. The professor expressed heartfelt gratitude for everyone's participation and encouraged each of us to share our experiences. Hence, we wrapped up the day with an interactive feedback and experience-sharing session among the professors and students.



# Flora and fauna

We encountered many fascinating flora and fauna on our journey. The notable species and features include:

## \*Trees and Shrubs\*

**Clustered figs tree (Ficus glomerata)**: The cluster fig tree, also known as Ficus racemosa or Ficus glomerata, is a fast-growing tree with a unique growth pattern that produces fig clusters directly from its trunk and branches. The cluster fig tree is a large, deciduous tree with large, rough leaves and heart-shaped leaves. It's commonly found in forests, woodlands, and along riverbanks. The cluster fig tree is also known as the Indian fig tree, red river fig, or gular.



**West Indian Lantana (Lantana camara)**: Lantana camara, also known as West Indian Lantana or wild sage, is a shrub or bush. Lantana camara is a perennial shrub that can grow up to 15 ft tall. It has square stems with opposite, ovate leaves, and colorful, tubular flowers that bloom almost all year. The flowers can be orange, pink, white, red, or violet, and they can occur in different colors in the same cluster.



***Stachytarpheta indica* (Indian snakeweed) – Yercaud, Salem, India**

Also known as Indian snakeweed: *Stachytarpheta indica* is an upright plant with a quadrangular stem, simple leaves, and a toothed margin. It grows in thickets, near cultivated areas, and along roadsides.



***Stachytarpheta jamaicensis* (Jamaican snakeweed) – purple variety**



*Stachytarpheta jamaicensis*, also known as Jamaican snakeweed, is a perennial or annual woody herb that can grow up to 2 meters tall. It has lilac, lavender, blue, or purple flowers that bloom in rotation from the base of the spike upwards. The flowers are tubular in shape with five broad petal lobes and are about 0.5 cm wide.



***Stachytarpheta mutabilis* (Changeable snakeweed) – red variety**

*Stachytarpheta mutabilis*, also known as changeable snakeweed, is a flowering plant with many varieties, including red, pink, and crimson. It is a perennial herb or shrub that can grow to be 1–2 meters tall. It has stout, branched stems that are covered in velvet-like hairs or bristles. The leaves are thick and leathery, with toothed margins. The flowers are borne on stout, erect spikes that can be 10–60 cm tall

**\*Plants and Vines\***

***The Shame Plant (Mimosa pudica), also known as the Touch-me-not plant***

The shame plant, also known as the touch-me-not plant (*Mimosa pudica*), is a flowering plant with sensitive leaves that fold inward when touched or shaken. The plant's leaves fold inward and droop when touched or shaken, and reopen a few minutes later. This is due to rapid water release from specialized cells at the base of the leaves. The plant also closes its leaves at night and reopens during the day



### **Native wild cucumber tendrils**

Wild cucumber tendrils are branching tendrils that wrap around other vegetation for support, allowing the plant to climb shrubs and trees.

**Dioscorea bulbifera (Air potato)** *Dioscorea bulbifera*, also known as air potato or air yam, It's an invasive species that can spread quickly and harm the environment. The vine has heart-shaped leaves with prominent veins, and rounded stems that are thin and wiry. It can grow to over 60 ft (18 m) long.





\*Other Features\*

**Algae growing on tree bark**

Algae are a diverse group of organisms that have many interesting characteristics. Algae can be microscopic or multicellular, and can be found in many forms, including strands and colonies. Some types of algae are single-celled and can only be seen under a microscope. Others, like giant kelp, can grow to be over 60 meters long. Algae can be found in many different environments, including oceans, lakes, rivers, ponds, moist soil, desert sands, hot springs, snow, and ice.

**Big roots**



**Foliar cave.**

A cave-like structure formed by the dense growth of leaves and foliage.



## \*Insects\*

*Woolly bear caterpillar* is the larva of a moth called *Macrobrochis gigas* which is a fascinating and visually striking moth species, known for its large size and distinctive appearance. It belongs to the Erebidae family, which also includes tiger moths and tussock moths.



## Village Outreach & Plantation Awareness Drive (August 15<sup>th</sup> 2024)

On 15<sup>th</sup> of August 2024, the Geoclub under the Department of Geography organized a Village Outreach Program in togetherness with Sapling Distribution Drive to enhance the idea of plantation awareness. The outreach program was carried out to Huringdag Hill, near Garsul village, Tupudana, Jharkhand-834004 under the banner “**Wanderlust Trails : A Trekking Odyssey**” with the initiative of *trekking for health and learning*. The expedition was taken under the stewardship of Prof. Dr. Sandeep Chandra. A total of 36 participants enjoined the program.

### ***SAPLINGS DISTRIBUTION DRIVE:-***



The sapling distribution drive was initiated with the objective of promoting and emphasizing the need for plantation awareness. The drive started at the St. Xavier's College campus right after the flag hoisting ceremony graced by the presence of principal Rev. Fr. Nabor Lakra, vice-principal Fr. Robert Pradeep Kujur and Shri Animesh Roy, HOD, Department of Geography. The saplings of Blue Jacaranda, Gulmohar, Neem, Custard Apple, Indian Laburnum, Acacia, Mango, Guava etc. were distributed among the professors, guests, college staff etc.



The distribution of saplings at the campus was followed by a student march to Albert Ekka Chowk guided by Sanjay Sir, Dean of Student Welfare, Prof, Utkarsha and Prof. Dr. Sandeep Chandra. The march started at around 9:30am. All the participants enjoyed the march with slogans of plantation awareness. We distributed saplings to traffic police and some locals. Some locals received the saplings with great responsibility and enthusiasm. The march concluded back at college campus at 9:45am.



## VILLAGE OUTREACH PROGRAMME:-

In the village outreach programme the participants distributed saplings among various village locals and discussed the need for plantation awareness at the Garsul village. This village lies at 23.214400 latitude and 85.240810 longitude. The village comes in proximity with Huringdag Hills. We were guided by village Pradhan Remish Tirkey. The locals welcomed us with great hospitality and warm nature. Some of our volunteers had a good talk with the locals about their plantation practices and perspective towards it. Following are few glimpses of village outreach programme.





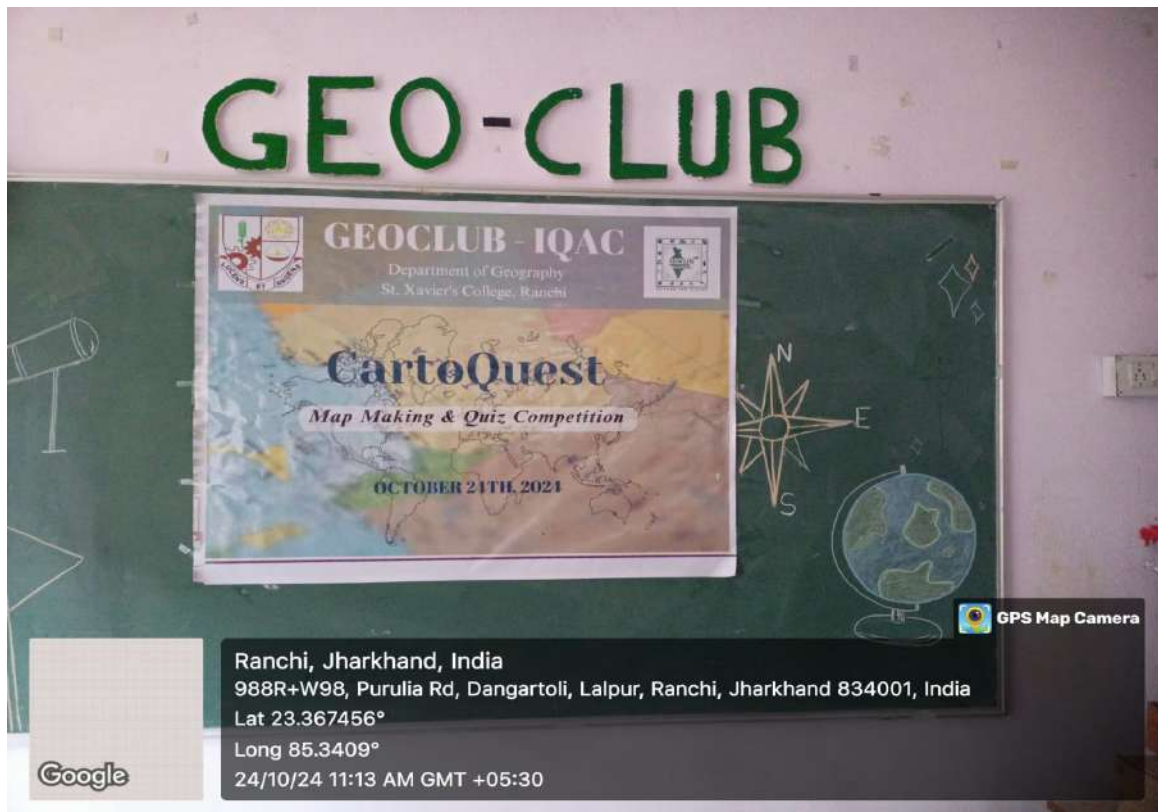


With that the Village Outreach Program came to an end and we were back to the college campus by 5:30pm.

Though each member was exhausted but that didn't overshadow the sense of accomplishment we achieved with group work and mutual cooperation. It proved to be a wonderful experience.

## Carto Quest: Map Making & Quiz Competition (October 24<sup>th</sup> 2024)

On October 24th, the GeoClub under the Department of Geography at St. Xavier's College, Ranchi, successfully organized a CartoQuest event at the Geoclub. The event consisted of two competitions: Map Making and Quiz. The event was open to students from all department. There were a total of 7 participants who showcased their cartographic skills in the Map Making Competition, while a total of 10 contestants tested their geographical knowledge in the quiz competition.



### Map Making Competition: -

The Map Making Competition was held in two convenient sessions on the respective day. There were a total of 4 topics: World Map, Map of India, Map of Jharkhand and Map of Ranchi. These topics seemed tough, but the competition took an exciting turn with a unique twist. Participants were given only five minutes to construct their maps, which was given to be World Map, this added a fun element into the competition. The five-minute challenge tested contestant's creativity, speed, cartographic skills, as well as their attention to detail, revealing their understanding of geographical features.



## Quiz Competition: -

The Quiz Competition, brought together 10 enthusiastic contestants. The event consisted of two exciting rounds: Qualifying and Finals covering five topics – World Geography, National Geography, Jharkhand Geography, India Geography and Topographical Maps.



In the qualifying round, participants had to answer four questions, including map-based visual questions, testing their geographical recognition and knowledge. The top 6 scorers advanced to the finals.

The final round featured five rounds of questions, with a challenging twist – negative marking for incorrect answers, further intensifying the competition. Out of



which, the top 3 participants with the most scores at the end emerged victorious, showcasing exceptional geographical knowledge.



### Note of Appreciation: -



The GeoClub Team expresses a heartfelt gratitude to Professor Dr. Sandeep Chandra for presenting participants with certificates and gifts, acknowledging their geographical knowledge and hard work. He even encouraged the team to host more such successful events, and that such events will foster a deeper appreciation for geography's practical applications, making it accessible and engaging for all. He emphasized that geography is a vast, dynamic subject extending beyond theoretical knowledge to the science surrounding us. Dr. Chandra's guidance has been instrumental in the club's success, steering us in the right direction. We appreciate his continuous support, encouragement, and valuable insights, which have fostered a spirit of learning and growth.