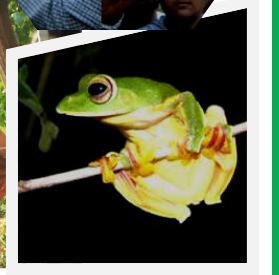


# Anuṃti

Bringing science to life & fostering an attitude of curiosity and inquiry



## Sirsi

**Uttara Kannada district, Karnataka**  
*Biodiversity Hotspot & Ongoing forest research site  
of Indian Institute of Science, Bangalore*

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## General Information

### Departure and Arrival Details

Dates	Time	Place	Notes
Saturday, 26 <sup>th</sup> December 2015	7:30am	Somaiya School Vidyavihar	Parents are requested to ensure their wards carry packed lunch for travel  PS: Evening snack and dinner during travel will be provided
Thursday 31 <sup>st</sup> December 2015	7:30am	Somaiya School Vidyavihar	Please arrange for your ward to be picked up from school premises

## General conditions of the site

Participants should expect hot and dry conditions during the day and windy and cold during the night; maximum temperature is around 33°C

However, cooler weather around 18°C can occur, especially at night.

The weather is expected to vary within these ranges:

**Average Humidity**      40 per cent

**Temperature range**    18°C to 33°C

**Altitude**                      average elevation - 590 meters

**Rainfall**                        10 mm average during November (negligible)

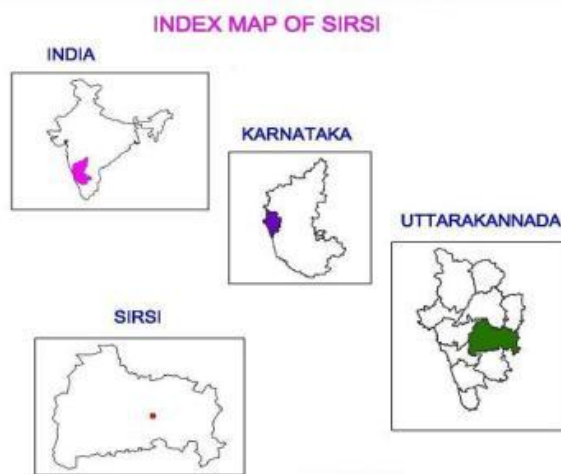
## Programme Purpose :

To prepare future leaders to build a sustainable world and deal with the challenges of the future in a responsible and sensitive manner

## Programme Objectives:

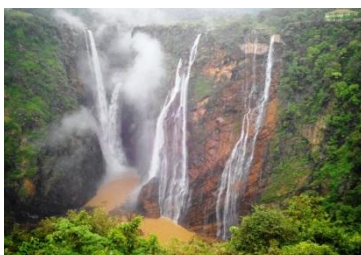
- To connect students to science, scientists and science education through hands-on participation in ongoing crucial forest research work
- Positively influence students attitude towards science by igniting their curiosity & scientific analysis through questioning, probing and observations.
- Strengthen their environmental understanding and ethics exploring the connection between environmental challenges and practical solutions
- Empowering students to take sustainability actions within and outside school

## Programme Venue:



The Western Ghats is a biodiversity hotspot. There are a minimum of 6,000 vascular plant species in the Western Ghats, of which more than 3,000 (52 percent) are endemic.

The programme is implemented at Sirsi forest division in the Uttara Kannada District of India's Karnataka state. These forests, particularly in the districts of Karnataka, have unique forest management and tenure systems; including reserve forests, protected areas, community forests and private or privilege forests that are separate from private plantations.





# Bringing Science to Life!

## Vegetation Mapping with Scientists from Indian Institute of Science

Students will work with a leading scientist from the Indian Institute of Science (IISc) Bangalore in the forests of Western Ghats of Sirsi.

The Indian Institute of Science is currently studying the 'Effects of Climate Change on Forest Ecosystems'

Students will get the opportunity to work alongside scientists and contribute to real scientific data collection. They will learn about our forests, research methodology & the need for such scientific data collection and analysis.



## Finding Frogs

Students will help a scientist study frog and frog habitat & behavior in the Sirsi region.

There are currently 345 different species of frogs, toads, salamanders and caecilians (together called as amphibians) in India. Some of these are found exclusively in the Western Ghats habitat & more species are being discovered every year.

Donning head torch and with recording sheets in hand, students will go on a frog trail with our scientist and learn how to identify frog species based on their body patterns; how to record data scientifically. They will discuss the need for amphibian research and related conservation issues



## Humans & forest resources

### Forests, Freshwater and Hydropower

Students will study the process of hydropower generation through a guided tour of the Sharavathy Generating Station.

They will also visit Jog falls - the second highest plunge waterfalls in India. They will understand the role of forests as a freshwater catchment, learn about freshwater ecosystem & freshwater challenges.



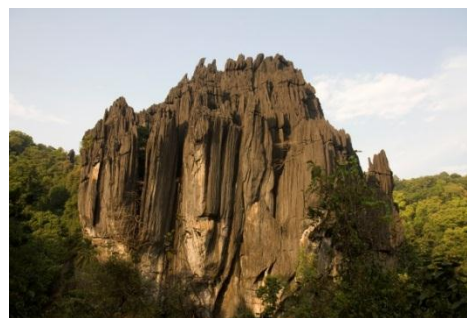
# Traditions and Culture

## Sacred Forests – a conservation tradition

**Yana** - a sacred site of natural heritage & one form of nature worship through which, traditionally, a diverse range of ecosystems are preserved.

The two rock monoliths or hillocks, surrounded by thick evergreen forests and streams, rise sharply above the surrounding area near Yana village.

Students will visit Yana and learn about Sacred Forests, their role in conservation and the current challenges of degradation and loss



Well known pilgrim center in Uttara karnataka. The huge rocks at Yana are composed of solid black, crystalline Karst limestone



## Yakshagana Appreciation Workshop

Dance, music, dialogue, costume, makeup with a unique style and form is the equivalent of an Opera in Karnataka.

Students will not only get to watch a performance but will get to witness the back stage preparations and designing of the show & learn about its past, present and future.

## Programme Schedule (Tentative)

	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec														
		Arrival at Hubli@3:00am				Arrival														
	Assemble at School	Arrival at Sirsi@6am																		
08:00 - 08:30	Travel to LTT	Breakfast	Breakfast	Breakfast	Breakfast															
08:30 - 09:00		Nature Trail around Sirsi	Travel to Jog Falls	Travel to Yana	Close and Evaluation of Programme															
09:00 - 09:30	Departure for Hubli		Visit to Linganamakki Dam & Jog Falls - Forest Ecosystem and Water	Sacred Forests		Travel to Hubli														
09:30 - 10:00					Introduction to Forest Research by Indu Murthy		Travel to Hotel													
10:00 - 10:30						Lunch		Lunch												
10:30 - 11:00									Departure for forest Site	Rest	Departure for Mumbai									
11:00 - 11:30	Juice Break											Introduction to Frog Research	Yakshagan Appreciation Workshop							
11:30 - 12:00	Introduction and Orientation										Snack Break			Snack during travel						
12:00 - 12:30	Introduction to Forest Research by Indu Murthy														Yakshagana Performance	Visit to Town				
12:30 - 13:00																	Dinner	Dinner		
13:00 - 13:30	Packed lunch from home																		Frog Trail with Dr. Gururaja	Dinner in Train
13:30 - 14:00		Retire																		
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20:00 - 20:30	Dinner in Train																			
20:30 - 21:00																				
21:00 - 21:30																				
21:30 - 22:00																				

## About the Scientists

**Ms. Indu K Murthy** is a biologist at the Centre for Ecological Science, Indian Institute of Science. She has extensive experience working on forest ecology. Currently, she is focusing on climate change mitigation assessments in the forest sector. She has worked extensively in the Western Ghats, assessing the socio-economic implications of climate change on the livelihoods and economy of forest dependent populations.



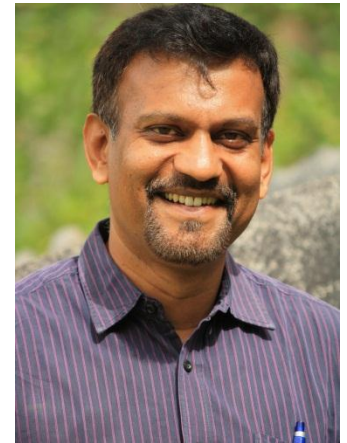
**Dr. K. V. Gururaja** has spent more than a decade in the Western Ghats and Western Himalayas searching for frogs, observing their behavior, and addressing ecological questions. He has described three new species of frogs and breeding behavior in frogs that was new to science. He wrote a guidebook to the region's amphibians, the pictorial guide to Frogs and Toads of the Western Ghats, and is part of the team that developed "Frog Find," the first Android mobile app on Indian amphibians.

## About the Facilitators

**Mr. Prashant Mahajan** heads Somaiya Centre for Experiential Learning (SCEL). He has over 22 years of experience in curating experiential learning programmes in the field of environmental sustainability and biodiversity conservation.

Prior to joining SCEL, Mr. Mahajan was heading the Conservation Education Centre and Important Bird Area Programme (1993-2008) at Bombay Natural History Society (BNHS).

He also worked with Earthwatch Institute on a global citizen science programme on Climate Change (2009-2014).



**Ms. Sudha Iyer's** professional journey in the space of sustainability education and learning began in the forests of Western Ghats where she worked on a global Citizen Science project that engaged corporate employees to relook at how they did their business.

Sudha holds a Master's Degree in Commerce with a Post-Graduate Diploma in Journalism and Mass Communication.

At SCEL her key focus is designing, marketing and co-facilitating site-based learning programmes that focus on natural and cultural heritage conservation and action for schools students, youth and corporate employees.



# Programme Logistics

## Accommodation

Students will be staying at the Hotel Panchavati in Sirsi on triple sharing basis. Each room is simple yet comfortable with bed linens, ceiling fans & an attached bath. Solar powered hot water will be available during specific times.



## Food

The restaurant next to the hotel will provide breakfast, lunch and dinner meals. Depending upon the distance to the learning site and any changes in the programme schedule, breakfast or lunch will be eaten at the hotel, or provided in the form of a packed meal to be carried to the site. Please keep in mind that participants will eat local foods i.e. predominantly vegetarian south-Indian diet. Other special diets are not likely to be accommodated due to availability, location and local conditions.

Please notify Somaiya Center for Experiential Learning (SCEL) of any special dietary restrictions (e.g. diabetic, food allergies etc) via the Health Form.



## Travel

Students will travel Mumbai-Hubli-Mumbai by Train in AC 3 tier:  
Onward on 26<sup>th</sup> December 2015 by 17318 LTT Hubli Express;  
Return on 30<sup>th</sup> December 2015 by 17317 Lokmanya TT Express

Students will travel Hubli-Sirsi-Hubli by mini van

Further, local travel in and around Sirsi will also be in a local mini van





## Packing Checklist

**It is compulsory that your ward carries ONLY ONE piece of luggage – a BACKPACK for the programme. NO TROLLEY BAGS/SUITCASE allowed.**

### **Clothing/Footwear**

Sports shoes for outdoor activity  
Calf length socks  
Lightweight cotton shirts/T-shirts for outdoor activity (preferably full sleeves in the shades of brown, grey and green)  
Full length pants for outdoor activity  
Clothing to wear during evening indoor sessions/within hotel premises  
Night clothes  
Slipper/Flip Flops to wear within hotel premises  
Light jacket/Sweater  
Cap/Hat  
School I-Card

### **Field Supplies**

Small daypack/backpack  
2 Water bottles. Refill facility will be made available  
Head torch or hand-held torch  
Stationery (for writing, sketching and art activities): Notepad, pen, pencils, eraser, ruler, sharpener, compass, craft scissors, glue

### **Personal Supplies\*\***

Personal toiletries (soap, shampoo, towels etc.)  
Personal medication (if any)  
Sunscreen lotion  
Insect repellent  
Plastic bag to carry soiled/used clothes

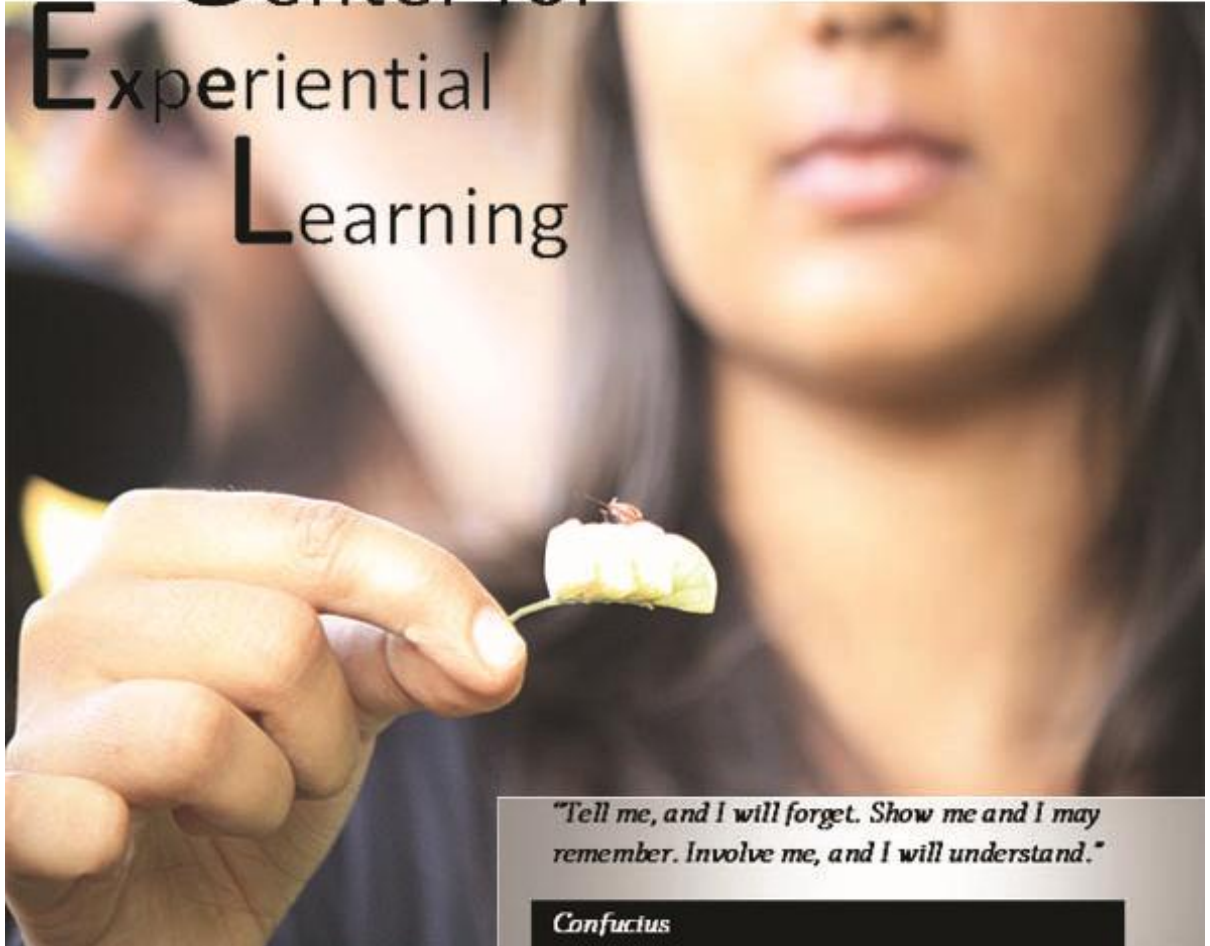
**\*\* Please ensure your ward carries sufficient (5-6 sets) of clothes, undergarments and personal supplies for 4 nights 5 days. There is no laundry facility available during the course of the programme**

### Expenses

Parents may wish to give some personal spending money to their wards (not more than Rs. 1000/per student)

**Please ensure that your ward is not carrying expensive items such as watch, mobile phone, I-pad, fancy games etc.**

# Somaiya Center for Experiential Learning



*"Tell me, and I will forget. Show me and I may remember. Involve me, and I will understand."*

*Confucius*

**The Somaiya Center for Experiential Learning (SCEL)** provides immersive learning experiences that enhance learning, integrate theory and practice, and promote active citizenship. The Center designs and facilitates learning programmes that enables participants to be curious, creative, think critically and feel empowered to participate in issues that affect the community and the world around them.

The Center draws upon educational theories such as place-based education, experiential learning, contextual learning, constructivism and service-based learning, to create unique experiences for participants to further their learning goals.

The mission of the Center is to engage, inspire and increase awareness among individuals and societies and foster pro-conservation behavior.

Like us on facebook! [www.facebook.com/SomaiyaCenterforExperientialLearning](http://www.facebook.com/SomaiyaCenterforExperientialLearning).

# Anuṃti

*A site-based learning programme*

