

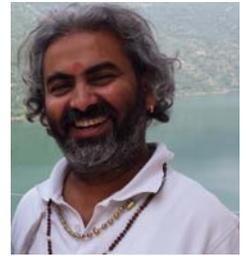
DRAFT Inaugural Seminar with a short Training at the Environmental Training and Research Institute (EnTRI) Uttarakhand, India



The inaugural seminar is tentatively planned to touch upon various needs, requirements, and development of a broad-based training and research focused on water, environment, rivers, life, and health from February 3rd to the 5th, 2016 at **Environmental Training and Research Institute (EnTRI)**, Uttarakhand, India. The seminar will be conducted by the **Rivers of the World Foundation** (<http://www.rowfoundation.org/>), Crofton, Maryland, USA in collaboration with the **Rishikesh School of Yoga and Ayurveda** (www.rishikeshschoolofyoga.com) of Swami Umesh Yogi. A 200-hr hatha yoga teacher training class is scheduled for January 16th to February 13th by the **Rishikesh School of Yoga** for Yoga, Meditation, Pranayamas, Yoga Clinics, Anatomy, Vedic Science & Teaching. Click [here](#) for further details.

The first two days of the inaugural seminar will be focused on developing the training program and looking into the research needs as indicated later. Part of the 2nd day (Feb 4th) will be used to conduct a short training to registered participants. A site visit for the registered participants will be arranged on Feb 5th.

Swami Umesh Yogi of the Rishikesh School of Yoga and Ayurveda, Rani Pokhri, (Dist. Dehradun), Uttarakhand, India 248145 will provide some insight of the Yoga Institute and will cover the details as part of the program development and the short Training.



There is a serious need to address various watershed issues in the Uttarakhand and other neighboring States of India. Severe erosion, mudflow, flood, and other disasters routinely strike the area. The local people and the agencies managing the ecology and environment in this area and elsewhere need to understand some of the current watershed issues in their respective areas. The outcome of such detail and clear understanding should reduce the frequency of such events and provide some protection/relief from these disasters.

Regional Environmental Issues:

Some of the issues are listed below.

- a) Climate Change related
 - Too little water during drought or even during summer- the issue relates to how we manage water for domestic consumption and irrigation purpose during such events or season, which is primarily an issue of lack of infrastructures.
 - Too much water during heavy rains/monsoon causing devastating mud flow, flash floods and other damages. These devastations are directly related to siltation/sedimentation.
 - Reducing/Controlling emissions from common activities, such as waste handling and management, pit burning, cooking/burning dungs , and other household and Municipal practices.
- b) Man-made
 - Pollution – A serious issue for the Ganges River and her tributaries.
 - Solid and Hazardous Waste - Improper disposal of waste by people, communities and local municipalities are causing major problems in small and big towns.
- c) Biodiversity
 - The issue of biodiversity was identified by the Canadian Urban Institute on their watershed health card. The biodiversity issue is present in many watersheds in the State of Uttarakhand and the neighboring areas.
- d) River Issues
 - Lack of knowledge on river issues and how to manage them is surely a major topic.

Proposed Course to be Developed, and the Research Areas

Climate change is a burning issue and with the recent focus on climate change in COP21 our approach and need towards sustainability is further underscored. Recognizing the factors which can impact the environment and climate is an issue for every individual, family, community, municipality, State, and a Country. If each one of us make an effort to do our best, collectively we will stand out as the most prominent color and dominate our presence and become exemplary to all others. Things will then change.

We would like to discuss about introducing some valuable information in the proposed training to provide answers to many of the above issues for the participants. This should have a direct benefit in reducing the carbon footprints, increasing the tree/shrub cover with various wetland plants, and thus helping in the carbon sequestration with appropriate watershed management by local people and agencies of the local government units and others.

It will provide the students with the fundamental mold of environmental science and technology and prepare them with a high degree of professionalism in conducting environmental projects. It will also attempt to tailor-fit the proposed short-term course to current issues that is happening to most of the watershed in the State of Uttarakhand and elsewhere in India and many other countries. .

Senior environmental professionals from the Rivers of the World (Rivers) Foundation, including professors from renowned universities, such as the Johns Hopkins University, Baltimore, Maryland actively seeded this idea and are working together to develop this training course with the active help and support of local faculties at the George Mason University (GMU), Fairfax, Virginia, USA. The local educators/faculties have also excelled in this field and gained significant depth by delving into a number of local environmental restoration projects in partnership with the Rivers of the World Foundation during the past few years.

The training will be designed to challenge the students through comprehensive research and interdisciplinary studies, to address a broad array of rapidly changing environmental problems that are posing significant challenges to sustaining biodiversity locally in India, and in the world today. It will provide the students with adequate knowledge to make appropriate decisions in areas such as ecosystems management, the impact of industrialization on the environment, economics and resource availability, regulation and law, environmental ethics, watershed management, developing eco-tourism plans and programs, environmental restoration, carbon sequestration, and floodplain management.

Students will also be exposed to various Environmental Treatment Technologies for Hazardous and Medical Wastes which will provide a systematic framework for analyzing the full range of outcomes that may result from many of the components of urban development and for

remediating their adverse effects. It will also provide you with the details on various waste treatment technologies for hazardous and medical wastes.

Renowned faculty members, many who are environmental experts and share the same passion to effectively manage and safeguard our global natural resources, will teach the classes. The faculty members from US have held leadership positions at the US Corps of Engineers, U.S. Fish and Wildlife Services, Environmental Protection Agency, Bureau of Land Management, the Johns Hopkins University, the American Chemical Society and many other prominent government and nongovernment organizations. Most of the US faculty members belong to the board of directors of the Rivers of the World Foundation. Notably, Dr. William E. Roper ([Ctrl-click here for a short bio](#)), or Dr. Matthew Perry ([short bio](#)), or Mr. Subijoy Dutta ([short bio](#)) will personally present/instruct a significant part of the course as it begins this year. Their brief bio data are available at the links above.

The course would be useful for the environmental scientists, engineers, scientists at the Environmental and Natural Resources Office and similar organizations, NGO's, hospitals and medical organizations and students of environmental engineering and sciences.

ROUGH Outline for Inaugural Seminar Feb 3-4, 2016, Environmental Training and Research Institute (EnTRI), Uttarakhand

1) **Vision** - Inform and involve the relevant professionals and public in activities that foster the protection, enhancement, and establishment of clean rivers and sustainable development along the river banks and riparian areas. Our Mission objective #3 from the website: <http://rowfoundation.org/content/row/Mission-May-2011.pdf>

2) **Objectives** –

- a) To control erosion for the once-devastated Uttarakhand areas, and other similar areas elsewhere in India or other countries, initiate research and develop appropriate measures.
- b) To create an awareness about clean water
- c) To develop natural water resources
- d) To bring international exposure to an area.
- e) To undertake various government projects related to water and ecology.
- f) To educate local professionals in proper waste water treatment and management systems
- g) To create awareness and interest among future generation

3) **Benefits-**

- a) Exploring the possibilities of water resource

- b) Working on causes of water pollution in existing resources and rectification
- c) Gearing up Gov/ Private sector human resource for water management
- d) Creating and protecting an eco-friendly environment. And
- e) Encouraging a sustainable development and environmental protection by local people.

Project details

Inaugural seminar – Feb 3rd and 4th, 2016

Confirmed Discussion Leads and attendees providing inputs: (DRAFT Items)

- 1. Dr. William Roper
- 2. Dr. Tata Prakasam
- 3. Mr. Subijoy Dutta
- 4. Swami Umesh Yogi
- 5. Mr. Subi Subramanian (US AID and other Agency participation)
- 6. Swami Chidananda (Paramarth Niketan)/Nandini (Ganges River Protection)
- 7. Mr. Mahesh Mangalick (Developing one Village at a time ..)
- 8. Mr. Donald Henry (Finance and Business model) (Presented by Pratyush Sinha)
- 9. Dennis Haag (Wetland Biology)(slides only - not attending)
- 10. Dr. Kusuma Cunningham/Kiran Singh/Sharad Sindhia (Women empowerment)
- 11. Mr. Sudhir Nautiyal (Educating/Training Children right at their village, Ex: Ghansali Himalayan English School)

Confirmed Invited Attendees providing inputs:

- 12. Teachers and Students (~3) from Himalayan English School, Ghansali (Water testing and Monitoring using Tracer System and Monitoring Kits)
- 13. Tushar Kanti Guha (Industry involvement)
- 14. Girish Chaudhry (Yamuna watershed, Karnal, Haryana)
- 15. Chandresh Singh (Clean Ganges movement and active ROW volunteer)

16. Mr. Krishnan (Water Systems India, Chennai, TN CEO)
17. Suresh Soman (Eco-tech India, New Delhi, Pres.)
18. Mr. Richard Mack, NJ, USA (Slides only –CEO Nishpatti Foundation, Executive Produce, Nishpatti Media; Awareness tools with Media involvement and training)

Tentative Arrangements:

Inaugural Seminar:

- The Parmarth Niketan, Rishikesh (www.parmarth.org) has cordially offered to host the Inaugural Seminar at their facility.
- Pujya Swami Chidanand Saraswatiji has conveyed his approval to host and partake in this Training and Research Effort of EnTRI through the kind coordination of Ms. Nandini.
- One or two subject matter experts (SME) as listed earlier will lead a number of discussion topics.
- The time-slots for each topic and their sequence will be provided during the first week of January, 2016
- The ROW Foundation's local hospitality coordinator for the experts/participants at the inaugural seminar (Feb 2-4) will be Mr. Sucharit (Diplu) Dutta (sucharit2011@gmail.com). Diplu will be supported by Mr. Sudhir Nautiyal and Chandresh Singh as backups for local coordination support. The names and phone numbers will be published by the first week of January, 2016.
- The Rivers of the World Foundation will arrange for the hospitality coverage for Feb 2-4 (3 nights and 2 days). However, ROW Foundation will appreciate any donations, or contributions in kind from the Seminar participants.
- February 5th will be the set aside for site visits and other activities of interest to the attendees.



**Tentative - One day Training Course –
Separate Arrangement at the EnTRI building near Rani Pokhri (13 Kms from Rishikesh) –
NOT A PART OF THE SEMINAR
Feb 4th and site visit on the 5th:**

Expected Participants : Various organizations, individuals, and officials belonging to the State, Local and Central Government Agencies would greatly benefit from this training. In addition, environmental compliance and other professionals from water, wastewater, power generation, mining and other industries and NGOs will directly benefit from this training.

See <http://rowfoundation.org/0/regis-EnTRI> for details on the Training .