

construction of dams and ponds can substantially reduce contributions to streams, which could go dry. Deprivation of flow in streams can have significant effects on native plants and animals that depend on them. Dams and impoundments at non-optimal locations may contribute to high evaporative losses. Intensive interception of rainwater in upland watersheds can seriously affect water and sediment availability to flood plains. Erosional cycle and nutrient cycle are closely connected. Undue alteration of the erosional cycle by trapping sediments in numerous upstream impoundments will necessarily have long-term impacts on down stream distribution of flora and fauna.

Geologists, hydrologists, and ecologists are beginning to learn that the hydrological, nutritional, erosional and geochemical cycles that enable the existence of all life are in a delicate equilibrium. The greatest challenge to us as earth scientists is to learn to sustain ourselves in such a way that we do not "unduly" disturb these cycles. The future will require thoughtful, talented, and hard-working scientists who can develop sustainable methods for living within the constraints of natural resource systems.

As Dr. Radhakrishna has been pointing out for many years, there is a desperate need for the most talented of Indian scientists and engineers to devote their attention to the study of India's own natural resource problems, identify the central questions, and find answers that are uniquely suited for India's culture, traditions and social values.

Traditions and values are important because when we have to make hard choices, as we have to when we have a finite amount of water that needs to be shared by humans and other living things, the choices will be dictated by our unique set of values. It is rather sad that the most privileged of Indian youth, and the most proactive of Indian business people are preoccupied with technology and industry that have the potential for immediate monetary gains. If India does not have good water supply or sanitation, the feeling seems to be that they will "somehow" be taken care of by market forces.

There is every indication that water will play a more telling role than cheap energy in the future economic well-being of countries around the world. One can only hope that the most talented and the most privileged of the Indian society will find it honourable to pursue the study of the earth and its natural resources, rather than capitulating to the lures of modern technology.

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ANNOUNCEMENTS

NATIONAL SEMINAR ON ROLE OF FLUIDS IN THE CRUSTAL EVOLUTION: SPECIAL EMPHASIS ON THE HIMALAYAN MAGMATISM AND METALLOGENY. The Wadia Institute of Himalayan Geology is organising the National Seminar on this topic during 4-5 February, 2004 at Dehra Dun. This will be followed by one day post seminar field excursion on 6 February 2004, depending on the number of interested participants. The aim of the Seminar is to provide a platform to discuss, interact and disseminate knowledge on the various issues of Earth's fluid system. In addition to the geological processes and Indian case histories, emphasis will be provided to the studies of the Himalayan crustal evolution. For further details, please contact: Dr. Rajesh Sharma, Convenor or Dr. H.K. Sachan, Co-Convenor, Wadia Institute of Himalayan Geology, 33, General Mahadeo Singh Road, Dehra Dun - 248 001, India. **Phone:** (0135)2624806, 2620341, 2626335; **Fax:** 0135-2625212; **Email:** fluidsem04@rediffmail.com; rajesh_fluid@rediffmail.com; himanshusachan@rediffmail.com

COURSE ON APPLICATION OF REMOTE SENSING AND GEOGRAPHIC INFORMATION SYSTEMS FOR MINERAL EXPLORATION: The Geological Survey of India Training Institute (GSITI) in collaboration with ISRO is organising this training course at Hyderabad for 10 weeks from 19 January, 2004. For further details please contact: Deputy Director General, GSITI, GSI Complex, Bandlaguda, Hyderabad - 500 068. **Phone:** 040-24220681; **Fax:** 040-24220680; **Email:** gsitihyd@hd2.dot.net.in; and also visit the GSI website: www.gsi.gov.in