

Global Encounter-India

Environment-Making a Difference

Individual Written Responses to Questions Related to the Topic

Procedure used to generate this document:

This document represents the summary of responses individuals wrote to questions related to their self-selected area of interest/expertise within three topic areas (Education; Environment; Food Systems and Agribusiness; Gender, Poverty and Social Inequalities; Health; and Technology and Economic Development). All responses received are included and are typed verbatim with some explanation of acronyms. There is no significance in the ordering of the topics or comments as presented in this report.

A. What are your current or future focused areas of teaching, research and/or outreach related to India?

1.
 - Sustainable hospitality/tourism. However, my role is in a support capacity. I'm just assisting with development of sustainable hospitality linkages in Himachal Pradesh. AJ Singh is the primary mover.
 - Also interested in other opportunities in India for faculty more broadly
2.
 - Using nanotechnology to develop sensors to detect environmental chemicals and hazards, especially in water
 - Especially interested in how low-cost technology can enable these tools to be used in developing countries to detect environmental chemicals and hazards
 - Pathogen detection/water safety
3.
 - Microbial ecology/physiology
 - Bioremediation using fungal biotechnology as a tool
 - Lignin biodegradation-a research area that has implications to Environment-Biofuels
 - Teaching-Infectious Diseases
4.
 - Renewable fuels as a way to address both energy and environmental issues (India is likely to be both a major consumer and producer of energy.)
 - Corporate environmental management

5.
 - I am studying Joint Forest Management in India as a masters student in Forestry. I hope to work for an NGO in community forestry following my studies. I'd like to invite MSU faculty to visit India to advise the project.
6. Teaching courses on application of spatial and remote sensing techniques to the environment
 - Human-environment interactions; emphasis on forestry
 - Tropical biodiversity
 - Conservation of natural resources
 - Development and environment

B. What resources (existing at MSU or working in collaboration with MSU) should be considered as the University moves forward on any and all work related to India?

1.
 - Ongoing updates on process, as sense of mission/agenda evolve. This is a very good start.
2. If I had only 5 cents to spend from MSU resources, I will print a post-card with one of the "cows" from MSU Dairy and use it as a way of boasting what MSU has to offer that is so relevant to India: culturally, economically with respect to expertise.
 - If I had more resources, I will identify opportunities for joint funding and bring Department of Science and Technology (India) and the National Science Foundation (NSF) International Program Officer (together) to MSU
 - If I still had more, I will open a satellite lab/class in India in the north and in the south.
3.
 - I have had several collaborations each of which resulted in joint publications.
 - United Nations Development Programme (UNDP) Consultantship to teach and do collaborative research at Tamil Nadu Agricultural University
 - Environmental Microbiology and Rumen Microbiology UNDP consultancy at Indian Dairy Research Institute
 - Ongoing collaboration with the Center for Advanced Studies in Botany at U of Madras
 - MOU signed between Center for Microbial Ecology of MSU and National Institute of Oceanography (NIO) in Goa, India. I went there twice on two short visits; NIO scientists visited my lab for 6-9 months twice.
 - Joint publications resulted from the MOU.
4.
 - Investments in Bio-economy initiative at MSU should have significant "India" component (China & Brazil.)
 - MSU's Environmental Science and Policy (ESP) initiative should have an India component.

5.
 - Very few faculty in the Forestry Department are interested in international forestry.
 - Encouraging faculty interests overseas would be a great help to the Forestry Department.
 - The Forestry Department is in the process of replacing 4 retired faculty; please hire new faculty with international experience.
6.
 - Organization resources at centers such as Center for Global Change and Earth Observations
 - Capacity building in solving environmental problems

C. What are the top three to five things that MSU should be doing in regards to this theme/area of concern in India over the next five to ten years? How would we know that we had been successful?

1.
 - We have only recently begun work on the sustainable hospitality/tourism project but hope to expand links on site and through the Indian hotel Industry, seeking to increase sustainability of practices.
 - It might also make sense to link sustainable hospitality/tourism initiatives MSU faculty have in other countries to create a global sustainable hospitality theme.
2.
 - Establish a program that establishes a large presence of the dairy in individual homes and villages
 - Establish 5 to 10 labs related to environmental research (water safety, nanomaterials) with collaborative funding from USAID/NSF and the Department of Science and Technology (DST) of the Indian government or the Ministry of Environment and Forests.
 - Note:** The following links are especially useful in exploring activities of the DST and the Indo-US Science and Technology Forum:
 - <http://dst.gov.in/scientific-programme/ser-nstmis.htm>
 - <http://www.indosstf.org/>
 - In addition to this, India has initiated a new commission called "India Knowledge Commission" <<http://knowledgecommission.gov.in/>>.
 - Recruitment tours to India Institutes of Technology and highly respected colleges of Engineering, Science and Social Sciences.
3.
 - With the Biofuels initiative at MSU and the fact that India has been doing good research in this area in India, new joint research programs between MSU and India would be timely and excellent.
 - Bioremediation research is quite hot in India. We have a lot of world class researchers in this area at MSU.
 - Exchange programs in the area of bioremediation at the graduate student and post doctoral levels would be ideal.

- Joint research conferences in the area of bioremediation would also be very productive.
4.
 - Bioeconomy Initiative should seriously consider international dimensions and implications to Global warming and development, potential roles that China, India, and Brazil can play in the future.
 - A major move to incorporate “sustainability” aspects in Indian education, especially in agriculture, business, and engineering
 - Studying starker tradeoffs between economic development and environment in India and implications for global commons-biodiversity, water
 - Virtual University – collaborative development with Indian universities
 5.
 - Increase the number of university linkages in India (from 5-10?.)
 - Maintain university linkages in India (3 of 5 listed in the session handouts are inactive.)
 - Make students aware of university linkages in India.
 - Promote coordination of MSU efforts.
 - I learned many new things about India today.
 - Make the Global Encounter: India an annual meeting.
 - Develop a website (www.India.msu.edu) to list all MSU people interested in India.
 - Areas of research:
 - biofuels
 - fuel wood
 - bioremediation
 - sustainable development
 6.
 - Engage more strongly on environmental challenges such as pollution of air, water, and loss of biodiversity.
 - Alternative energy sources, renewable energy sources, biofuels
 - Social and economic consequences of environmental change- adaptation, vulnerability
 - Application of new techniques to address environmental problems
 - Develop expertise on current models of conservation or past conservation practices.

D. Additional Comments

1. ●May be value to provide this form (Group Breakout Task form) online so people who couldn't attend the encounter could provide input.
2. **NO RESPONSE*
3. ●I have taught Infectious Diseases of Animals for over 30 years at MSU and I am enthusiastic to go and teach in Tamil Nadu Agricultural University for a semester.

●Graduate students/DVM students/research scientists level of collaboration is on going already between MSU and the scientists at the Center for Advanced Studies in Botany (CASB) at the University of Madras. The former director of CASB is currently working in my lab as a visiting scientist.

●Lignin degradation research is another area that has important applications in India.

4. **NO RESPONSE**

5. **NO RESPONSE**

6. **NO RESPONSE**

This material was generated from Global Encounter-India, <<http://www.isp.msu.edu/globalencounter/india>>, held at Michigan State University on September 22, 2006. This interactive and participatory event was designed to obtain input and to elaborate in a country-specific forum on relevant themes, opportunities, issues, and opportunities affecting MSU's current and future engagement in India and to a lesser degree southeast Asia.