


Interim Report, 1st October 2013 to 31st January 2014	
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Home University : Institute of Environment Education and Research, Bharati Vidyapeeth University, Pune	
Visiting University : University of Cologne, Germany	
Duration of Stay : 1.10.2013 to 31.03.2014	
Research topic : Guest Professor for the winter semester (2013-14) on: <ol style="list-style-type: none"> 1. Comparative Environmental Law (Full course) 2. Seminar on Biodiversity Law 3. Advanced Seminar on Conservation Law 4. Field work at the Kazirnaga National Park, Assam, India 	
Short description of your research topic and your results : 1. Comparative Environment Law Environmental law is a discipline of its own since approximately 1970, especially after the Stockholm declaration, 1972. Several countries around the world including India have developed specific environmental laws. The history of environmental law has its roots in the social events of the 1960s, which themselves were a product of social unrest. Some of the social unrest was due to worldwide awareness that the industrial processes that enabled rapid growth in wealth, also came with great costs to the social and natural worlds. In its first generation, environmental law thus came about as an attempt to provide specific legal tools to conserve natural resources and protect human health and the natural world. In its second generation, through the principle of sustainable development, environmental law now also includes economic and social concerns. India has the unique position of being a global biodiversity hotspot and huge development pressures. It has a plethora of environmental laws to deal with various conflicts that arise from the conflict of resource use. Tools like the ‘Public Interest Litigation’ are unique to India and have been used widely to deal with environmental issues. India is the third country after Australia and New Zealand to set up ‘Green Tribunals’ akin to ‘Green Courts’ under the National Green Tribunal Act	

2010. The Tribunal is dedicated to the effective and expeditious disposal of cases relating to the subject of forest, environment, biodiversity, air and water. It is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues. The National Green Tribunal is India's first dedicated environmental court with a wide jurisdiction to deal with not only violations of environmental laws, but also to provide for compensation, relief and restoration of the ecology in accordance with the 'Polluter Pays' principle and powers to enforce the 'precautionary principle'.

In the course offered in the winter semester 2013-14, the objectives were to enhance student understanding of the function of law in solving problems presented to society through the natural sciences giving specific examples of India, Germany and the US, enable students to understand some specific environmental laws from his or her country and at least one other country and intelligently compare the legal solutions offered by several domestic legal systems to environmental problems.

2. Seminar on Biodiversity Law

Biodiversity underpins all ecosystem goods and services responsible for providing food and water, buffering the impacts of climate change, controlling the outbreak of diseases and supporting nutrient cycling. Biodiversity also serves as the foundation of many spiritual, recreational and cultural benefits.

The Convention on Biological Diversity (CBD), an international legally binding treaty to which 193 countries are signatories, helps promote biodiversity, not as a problem, but as an opportunity to help decision-making processes achieve broad social and economic goals.

In 2010, Parties to the CBD adopted the Strategic Plan for Biodiversity 2011–2020, a ten-year framework for action by all countries and stakeholders to safeguard biodiversity and the benefits it provides to people. As part of the Strategic Plan 20 ambitious but realistic targets, known as the Aichi Biodiversity Targets, were adopted.

Governments across the world have committed to establishing national targets in support of the Aichi Biodiversity Targets. The development of national targets and their incorporation into updated National Biodiversity Strategies and Action Plans (NBSAPs) is a key process in fulfilling the commitments set out in the Strategic Plan. National Biodiversity Strategies Action Plans are principal instruments for implementing the Convention at the national level and reflect how a country intends to fulfill the objectives of the CBD and the concrete actions it intends to take especially ensuring that the strategy is mainstreamed into the planning of activities in all sectors whose activities can have an impact (positive and negative) on biodiversity.

Beginning with a brief overview of the scientific aspects of species, ecosystems, and genetic resources, this course delved into the interplay between science and law throughout its analysis of the National Biodiversity Strategy and Action Plans (NBSAPs) and legal and other instruments set up for achieving the Aichi targets using India as a case study. The course used examples of protocols developed under the CBD (access to genetic resources and benefit sharing, biosafety, ecosystem services, etc.) and case studies from the NBSAPs of different countries bringing into the classroom a

rich debate on this very important international legal instrument of sustainable development.

3. Advanced Seminar on Conservation Law

This course reviewed the major principles of international law for the conservation of natural resources and biological diversity. The course discussed a selection of international agreements on conservation and biological diversity. The course has used a problem-solving perspective that takes account of biology and reviews policy and management tools for conservation.

From medicinal native plants to nearly-extinct mammals, the law attempts to preserve and conserve, but also to balance these tasks with the rights and interests of the local persons who have co-habited for hundreds of years with these species. Trophy-poaching, plant and animal gene patenting and other globalizing and economic forces have placed greater demands on legal conservation measures than ever before.

In this course, with inputs from Prof. Dr. Erach Bharucha and Adv. Gouri Joshi from India students were led through the through the process of understanding the interplay between natural sciences, social sciences in dealing with the problems and the role of law in remedying some of the problems. While examples were drawn largely from the biodiversity hotspots of India, the problems were discussed in a global context.

4. Field work at the Kaziranga National Park, Assam, India

In addition to the classroom course, a field work to India has been organized from 28 February to 16 March 2014 in the Kaziranga National Park in Assam, India. The Park a World Heritage Site allows for first hand experience of the interplay between natural and social sciences and the law in dealing with wildlife management and people wildlife conflict as well as wildlife crime.

Activities during your stay (esp. implemented lessons) :

Teaching sessions of two hours every week for each of the above three courses have been implemented in since October 16, 2013. The details are as follows:

1. Comparative Environmental Law

Part 1: Comparing sources of environmental law

October 16: Week 1: 'What is Comparative Law and What is Environmental Law'

October 23: Week 2: The sources of environmental law and the making intelligent comparisons

October 30: Week 3: Sources of environmental law-statutes from around the world with a special focus on India (Adv. Gouri Joshi)

November 6: Week 4: History of Environmental law

Part II: Tools of implementation and enforcing sources of environmental law

November 13: Week 5: Litigation and the unique tool of Public Interest Litigation with case studies from India (Adv. Gouri Joshi)

November 20: Week 6: Green Tribunals for environmental conflict- General and special green tribunals with case studies from India

November 27: Week 7: The Conventional of Biological Diversity

Part III: Applying legal tools to specific environmental problems

December 4: Week 8: Implementation of the Biological Diversity in India through the Biological Diversity Act (focus on access to benefit sharing through the law) (Prof. Dr. Erach Bharucha)

December 11: Week 9: The law of National Parks, Sanctuaries and other Protected Areas (Prof. Dr. Erach Bharucha)

December 18: Week 10: Air pollution and the law

January 8: Week 11: Water pollution and the law

January 15: Week 12: Waste management and the law

January 21: Week 13: Agriculture and the law

January 28: Summary and review and discussion of assignments

2. Seminar on Biodiversity Law

October 31: Week 1: Biodiversity and Intellectual Property Rights (Adv. Gouri Joshi)

November 14: Week 3: Convention of Biological Diversity – background and global implementation

November 21: Week 4: Biodiversity conservation through other international conventions (Ramsar, CITIES, CMS, WHO)

November 28: Week 5: Conservation through Protected Areas – new paradigms and new legal frameworks

December 5: Week 6: Implementation of the Biological Diversity Act in India (Prof. Dr. Erach Bharucha)

December 12: Week 7: The legal framework of Protected Areas in India (Prof. Dr. Erach Bharucha)

December 19: Week 8: Biotechnology, biopiracy and the law

January 16: Week 9: Seminar presentations by students

January 23: Week 10: Seminar presentations by students

January 30: Week 11: Seminar presentations by students and summary with discussion on upcoming field work to India)

3. Advanced Seminar on Conservation Law

November 1: Week 1: Overview of Conservation Laws in India (Adv. Gouri Joshi)

November 8: Week 2: Global conservation of endangered species and the law

November 15: Week 3: The Convention of Biological Diversity, Cartagena Protocol and the Nagoya Protocol – role in biosafety and access to benefit sharing

November 22: Week 4: Conservation through international conventions

November 29: Week 5: Connectivity Conservation – legal framework

December 6: Week 6: Implementation of the Biological Diversity Act in India (Prof. Dr. Erach Bharucha)

December 13: Week 7: The changing legal paradigm of Protected Areas in India (Prof. Dr. Erach Bharucha)

December 20: Week 8: Legal framework for ex-situ conservation

January 17: Week 9: Seminar presentations by students

January 24: Week 10: Seminar presentations by students

January 31: Week 11: Seminar presentations by students and summary with discussion on upcoming field work to India)

5. Other Activities : Meetings

A. Participation in Conference

Presented paper, 'Education for Sustainable Development: Experiences from a capacity development program aimed at implementing ESD in India, Mexico, South Africa and Germany' at the 7th Annual winter Meeting of the International Consortium of Interdisciplinary Education about Health and the Environment' held on 7-8 December 2013 organised jointly and sponsored by Faculty of Biology and Didactics, Chair of US American Law, University of Cologne and the International Masters in Environment Sciences.

Though sustainable development has been a heavily diagnosed concept over the past twenty years, business as usual action in the 21st century is not an option. There is an urgent need to accelerate implementation and to scale up good practices for sustainable development at all levels. This will entail strengthening capabilities for envisioning the future. This paper outlined the outcomes and lessons learnt for a multi country project being implemented in the four countries of India, South Africa, Mexico and Germany. It highlighted the outcomes and the lessons learnt in this multilateral cooperation process for strengthening ESD at the school level.

B. Meetings

- i. **Meetings with Dr. Stefan Bildhauer, Head of International Office, University of Cologne and Dr. Susanne Preuschoff, International Relations Manager Asia** to brief them on my activities at the University of Cologne and provide an overview of collaborative activities done till date and explore possibilities for future collaboration.
- ii. **Meetings with Dr. Heike Mocke, Head of South Asia DAAD and her team** to explore further opportunities for joint summer school, research programs.
- iii. **Meetings with Dr. Kirk Junker, Chair American Law, Dr. Kirsten Schluter, Head Biology Didactics, Dr. Hans Edelmann and Philipp Kramer** from the Institute of Biology Didactics University of Cologne to discuss restructuring of the Environment and Health Journal published by the Research Center for Health, Environment, & Education, Institute of Biology Didactics, University of Cologne. I have been appointed as one of the members of the Editorial Board of this journal.
- iv. **Meetings with Dr. Ingrid Jung, Division Education, Health, Social Protection, Head Sector Programme Education for Sustainable Development, GIZ** to discuss possibilities of tripartite collaboration with Chair American Law, University of Cologne and Bharati Vidyapeeth University, Pune with GIZ. The Institute of Environment Education and Research, Bharati Vidyapeeth University is already a partner with GIZ for their programs in India.
- v. **Discussions with Prof. Karl Schneider, Dean Faculty of Mathematics and Natural Sciences** on joint guidance of Ph.d. project (as sandwich Ph.D.) of Mr. Lakshmi KantaKumar, Ph.d. scholar at the Institute of Environment Education and Research, Bharati Vidyapeeth

University, Pune