

University of Iowa  
**Sustainable Development: The Kerala Experience**  
[India Winterim 2019-2020, ABRD:3445, Sec. 0001]  
Trivandrum & Kochi, Kerala, India

Instructor: Jerry Anthony (jerry-anthony@uiowa.edu)  
Study Abroad Advisor: Ana Jimenez (india-winterim@uiowa.edu)

Course duration: December 28, 2019- January 15, 2020

### **Course Objectives**

India, like many other developing countries, is in the midst of a prolonged period of economic and urban development. Such periods of growth have historically been accompanied by widespread environmental degradation all over the world. In recent times, the environmental consequences of such development booms have spawned healthy debates about the cost and benefits of economic and urban development. Globally there is heightened interest in development practices and patterns that could capture most of the benefits of economic and urban development while minimizing harms to the environment. *In this course students will be introduced to economic and urban development trends in Kerala, the environmental implications of many of those trends and importantly, how individuals and organizations have attempted (and in many cases succeeded) in facilitating environmentally sustainable development.*

The course will focus on three facets of sustainable development -- low-cost housing, economic development, and eco-tourism – at two different locations in Kerala (Trivandrum and Kochi).

This course will provide an extraordinary opportunity to advanced undergraduate students and graduate students to travel to India, interact with highly acclaimed sustainable development professionals, and learn about many innovative sustainable development techniques.

### **Course Instructor**

The course will be taught by Prof. Jerry Anthony, Associate Professor in the School of Urban and Regional Planning, University of Iowa.

Prof. Anthony's teaches courses on housing policy, land use planning, smart growth and international urbanization. He has a Bachelor's degree in Architecture, a Master's degree in Town Planning, and a Ph.D. in Urban & Regional Planning. He has published several papers on housing affordability, land use law and international drinking water policies. He has many years of professional planning experience in the public and private sectors. Anthony was trained as an architect in India. He has taught international courses in Mexico and India and will be teaching this Winterim course for the 8<sup>th</sup> time.

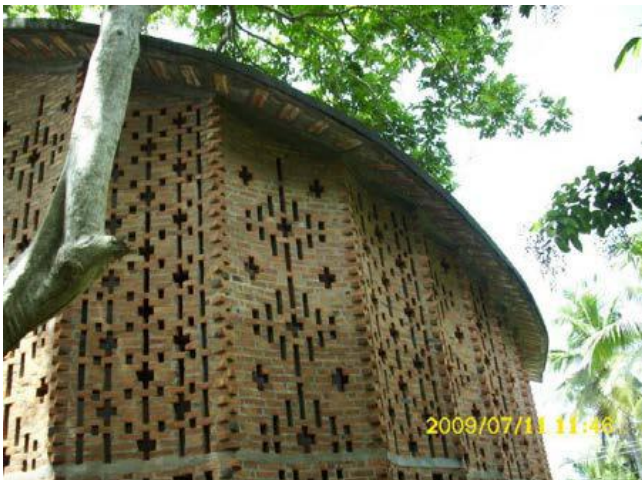
**Course Sponsors:**

This course is conducted in close collaboration with two organizations in Kerala – “Inspiration” located in the city of Kochi and “COSTFORD” located in Trivandrum. Inspiration (<http://www.inspire-india.com/>) has over 20 years of experience in nature-friendly and sustainable designs for hundreds of projects for clients ranging from individuals, businesses, corporations, governments, and NGOs. They have received state and national recognition and have won numerous national and international awards for sustainable eco-sensitive designs. They specialize in building authentic eco-tourism facilities. Inspiration’s team includes architects, planners, physical, engineering, management, natural resources, and biological science professionals.



Inspiration’s Office in Kochi, Kerala

COSTFORD is a non-profit located in Trivandrum. For almost four decades, COSTFORD has been developing cutting edge lower-cost construction technology, and building residential and institutional structures with them. Its expertise in this area has led to numerous awards from the government of India and the United Nations. COSTFORD’s efforts are guided by the design principles devised by one of its founders – Dr. Laurie Baker – a world renowned architect whose many accolades include the Order of the British Empire (1983), UNO Habitat Award & UN Roll of Honor (1992), Sir Robert Matthew Prize for Improvement of Human Settlements (1993), and the International Union of Architects Award (1993).



A building designed by COSTFORD

The two major partners of Inspiration, Mr. Jaigopal Rao and Ms. Latha Jaigopal, and members of the leadership team at COSTFORD will collaborate closely with Professor Anthony to oversee and guide all aspects of the design and delivery of this course.

### **Course structure**

Students will work with COSTFORD (located in Trivandrum) during the first half of the course and with Inspiration (located in Kochi) during the latter half of the course. The first half of the course will focus on a) low-cost construction technology for houses and public buildings, and on b) sustainable economic development and poverty alleviation programs. The second half, will be spent observing, discussing, and learning about the processes adopted by “Inspiration” in the development of sustainable eco-tourism projects. In both segments of the course, architects, planners and development experts will present information about different facets of sustainability through selected past and current development projects; students will visit several of these projects. Thus, students will be able to develop a comprehensive understanding about sustainable development. Besides spending time in these two cities, students will visit national parks and scenic regions of the Western Ghat mountains, historic palaces and buildings, numerous cultural performances, and beaches on the Arabian Sea coast of Kerala.

#### *Sustainability principles in low-cost construction technology, especially for housing:*

Good quality housing is a basic human need. However, it is not always available or if available is not priced at reasonable levels. This forces millions of families all over the world to live in bad quality or unaffordable housing, causing significant socio-economic, physical and financial problems. The scope and scale of the housing shortage is markedly greater in developing countries: one, because of the sheer number of people that need such housing, and two, because of the lack of public and private resources to address this need. These constraints have forced governments and non-profits in developing countries such as India to devise innovative lower-cost housing construction technologies that feature a high labor component, use many renewable resources, and have low impacts on the environment. The principles and practices used in constructing low-cost housing are also adaptable to building public buildings, and many public buildings are being constructed with those innovative techniques. Students will learn about these principles, visit buildings built using these principles and interact with architects, developers, investors and others involved in creating such buildings.

#### *Sustainability principles in economic development:*

Economic development that originates at the grass roots, that is built upon comparative advantages of local areas, and that uses local skills and locally available renewable resources is more likely to be sustainable in the long-run than top-down programs set up by national or state governments. As a developing country, India has struggled for several decades to increase incomes and quality of life of large segments of its population. Most of those efforts were top-down, capital-intensive programs that were not sustainable in the long-run and had limited benefits. These experiences are not limited to India; in fact, this is the story of failed economic development in the global South. Fortunately, new sustainable economic development efforts have been developed, and many of the most laudable ones are in Kerala. Students will visit with villagers that participate in and benefit from sustainable economic development programs and with agencies that support such programs.

#### *Sustainability principles in tourism:*

The eco-tourism portion of the course will include a visit to a wildlife sanctuary, tea plantation and tourism-oriented facilities. Students will meet with local entrepreneurs who have

developed sustainable practices and services for in-country and international tourists. The notion of “ecotourism” as low impact visits to ecologically significant and beautiful landscapes will be explored.

*Overall student outcomes:*

Students will learn about sustainable construction techniques, sustainable economic development practices and eco-tourism. In addition, students will gain a good understanding about sustainable water, sanitation, and energy practices and the process of integrating such practices within a holistic concept of resource management. Most students will develop an appreciation of how principles of sustainability help to protect the natural resources and built environment of the incredibly beautiful state of Kerala while advancing the goals of economic development and poverty alleviation. Students will also be able to see, understand, and evaluate how business and commerce can be conducted profitably yet sustainably. While the practices and programs that students are exposed to in this course are rooted in the social, political, economic and cultural context of Kerala, they will learn about principles and approaches to sustainable development that can be applied in other contexts, such as the U.S. Midwest.

Students will work individually and in teams, report findings to each other and the instructor in debriefing sessions on several evenings. Students will individually design and maintain a daily blog. Students will also present a summary (in the form of a presentation) of lessons learnt to host organizations at the end of the course.



**Course Requirements**

Be an active learner -- before departure to India, while in India, and after returning from India.

*Prior to departure*

- Attend orientation meetings (via Skype for out-of-town students)
- Attend two Friday afternoon seminars (via Skype for out-of-town students)
- Read or view the required materials
- Write a short pre-trip reflection paper

### *During the stay in India*

- Attend all planned activities and excursions
- Attend all nightly group meetings
- Develop and maintain a daily blog
- Complete five one-page reflection papers
- Conduct research and write a paper on a topic of the student's choice but with prior approval of the instructor. This is required only for students seeking graduate credits for this course; others are encouraged to but not required to do this.
- Participate in a service-learning project.
- Present a summary of lessons learnt from the course at half-day conferences in both host cities.

### *After returning from India*

- Submit a 12-page (about 3,000 word) research paper based on research conducted in Kerala (**required** only for students seeking graduate credits for this course; others are encouraged to do this).
- Write a 400-500 word newspaper style article for a newspaper in your home community (unless you have arranged to blog for the paper)

### **Tentative list of readings (will be expanded later)**

Brightsmith, D.J., Stronza, A., Holle, K., 2008. Ecotourism, conservation biology, and volunteer tourism: A mutually beneficial triumvirate. *Biological Conservation*, 141. pp. 2832-2842.

Gössling, S., 1999. Ecotourism: a means to safeguard biodiversity and ecosystem functions? *Ecological Economics* 29, pp. 303-320.

The Brundtland Commission Report. 1987. Our Common future. Available in HTML format at <http://worldinbalance.net/intagreements/1987-brundtland.php>.

Satterthwaite, David. 2003. The Millennium Development Goals and urban poverty reduction: Great expectations and nonsense statistics. *Environment and Urbanization*, 15 (2): 179-190.

Ze'rah, Marie Helene. 2006. Conflict between green space preservation and housing needs: The case of the Sanjay Gandhi National Park in Mumbai. *Cities* 24 (2):122-132

Choguill, Charles. 1996. Towards sustainability of human settlements. *Habitat International*, 20 (3), pp. v-viii.

### **Course Grade Determination (for graduate students):**

- 20% Attendance at all seminars and five single-page reflection papers
  - 20% Active engagement in a service-learning project and in discussions with students, hosts and instructor
  - 20% Daily blog and reflection papers
  - 5% Newspaper article/blog for newspaper
  - 15% Conference participation/presentation in Kerala
  - 20% Research paper
- [Undergrad students are not required to do the research paper.]

**Pass/Nonpass**

Students participating in Study Abroad programs of four weeks or less may not take Study Abroad courses on a Pass/Nonpass (P/N) basis.

**Eligibility and Prerequisites**

Students must be in good academic and non-academic (disciplinary) standing in order to participate. Please see the Study Abroad website for further details.

**Waitlist Procedure**

Admission to this course will be determined based on the time the complete application was submitted to Study Abroad with preference given to students who applied earlier than others, assuming all other eligibility criteria are met. This course can accommodate no more than 20 students. Study Abroad will maintain a waitlist and notify any students who are waitlisted. Further information will be sent out to waitlisted students about next steps.

**Program History**

India Winterim is an intensive, three-week field-based program that provides students with the opportunity to learn from and directly interact with leading social entrepreneurs, non-profit organizations, and academic institutions within India's diverse cultural, socioeconomic, and geographical mosaic. India Winterim was founded in 2006 by Professor Rajagopal of the University of Iowa's Department of Geographical and Sustainability Sciences. The program began with 24 students and has since grown to the largest single program offered by UI Study Abroad. India Winterim was the recipient of the 2016 Institute of International Education (IIE) Andrew Heiskell Award for Innovation in International Education.

**Administrative Home**

International Programs, University College is the administrative home of this course and governs matters such as add/drop deadlines and other related issues. Different colleges within the university may have different policies. Questions may be addressed to 111 Jessup Hall or see: <http://uc.uiowa.edu/academics>.

**More Information**

Contact Prof. Jerry Anthony at [jerry-anthony@uiowa.edu](mailto:jerry-anthony@uiowa.edu) or stop by his office (340 Jessup Hall) during his office hours (Monday, Wednesday, 10:30-12:00).



Map of India locating Kerala (identified by the star)