



Going back to the Grassroots:

Sustainability Abroad and at Home



About me...

- **Texas A&M '11**
- **Mechanical Engineering**
- **Joined IAC Spring 2010**
- **ASME Officer:
Philanthropy Chair**
- **Chi Omega Sorority**
- **Interned abroad in
Rajasthan, India
Summer 2011**



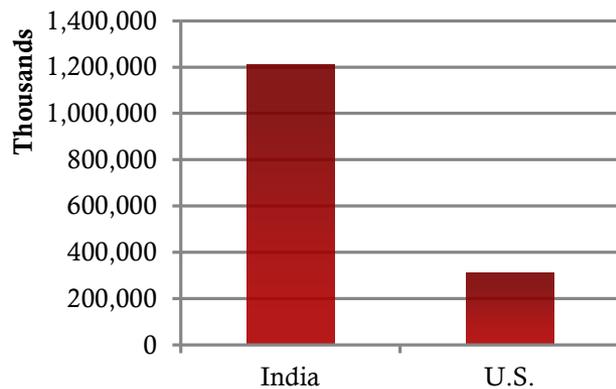
Summary of presentation

- **Comparison of U.S. to India**
- **Organizations I was involved with in India**
- **Solar advancement in small Indian villages**
- **Needs Assessment → Project selection**
- **Continuous practice**

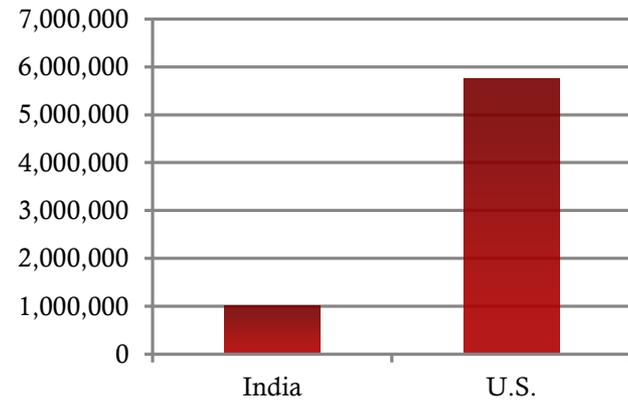


India vs. U.S.

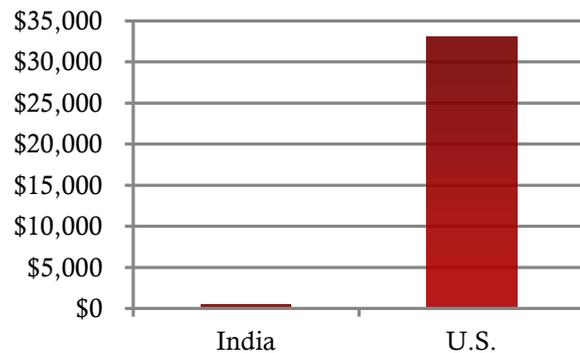
Current Population



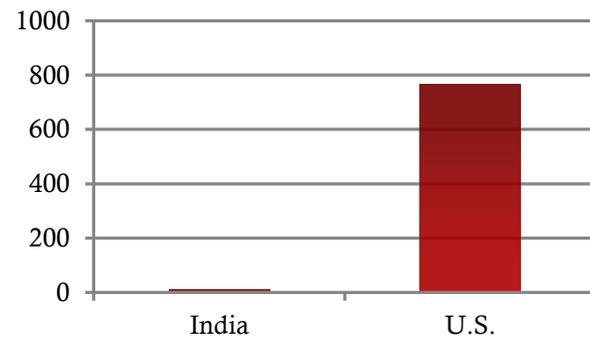
CO₂ Emissions



Gross National Income (per person)



Motor Vehicles (per 1000 people)

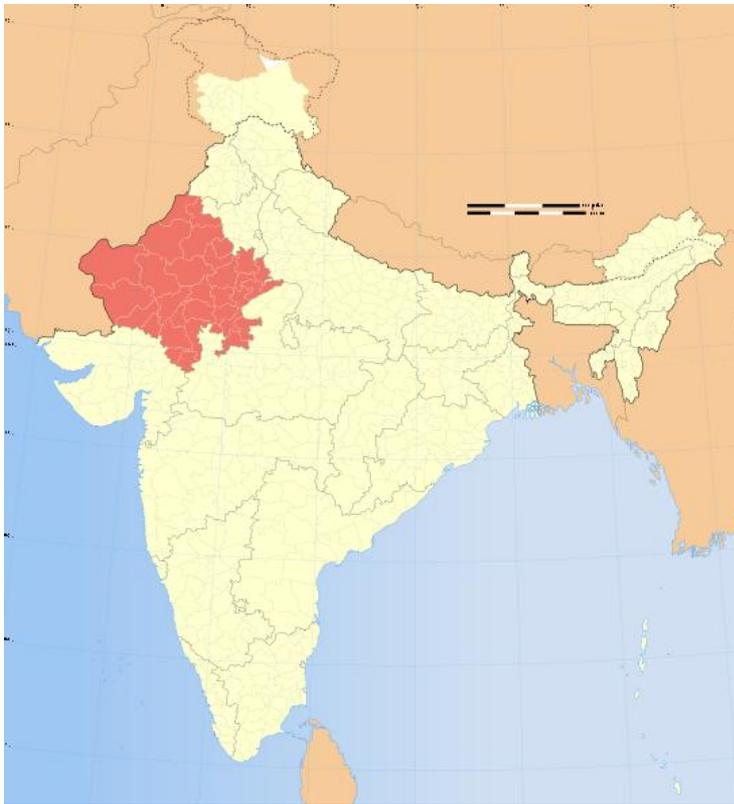


The Foundation for Sustainable Development



- Enhance the capacity of community organizations around the world to address health, social, environmental, and economic issues.
- Intern Abroad Program: Intensive training in grassroots sustainable development and provide human resources and tech support to partner NGOs.

Jodhpur, Rajasthan, India



- Population: 56.5 million
- Literacy Rate: 61%
- Major Industries: Cement, Chemicals, Handicrafts, Sugar, and textiles.
- Largest State in India
- 1/5 of Urban population lives below the poverty line

Basecamp-Sunder Rang



Projects:

- Local craft center
- Education
- Health
- “Green Villages”



Basecamp aims....

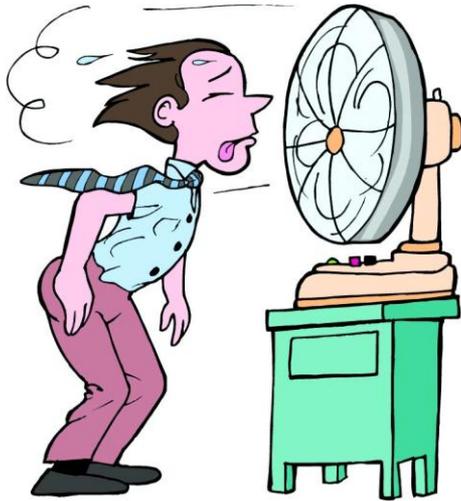
“to contribute to the protection of our nature and cultural heritage based on the knowledge of the close interaction between people and nature, [and we] will advance international cultural cooperation and local sustainable development.”

Barefoot College

Provide basic services and solutions to problems in rural communities for:

- Solar Energy
- Water
- Education
- Health Care
- Rural Handicrafts
- People's Action
- Communication
- Women's Empowerment
- Wasteland Development





Importance of Light

- Mark Bent—President of SunNight Solar and created the Bogolight
- 1.6 Billion people live without electricity (about ¼ of humanity)



Chandelao Village



Greenhouse Construction

- Type of material used for the structure (Steel vs. PVC pipe)
- Water supply: gravity feed drip system irrigation
- Shade net vs. polycarbonate sheet
- Costs of materials
- Location



Sustaining the Greenhouse

- Who is involved
- Maintenance
- Business plan
- Sustainability

क्र. सं.	विवरण	चिन्ह
1	हाँ की जगह पर उपयोग करना है। yes	✗
2	नहीं की जगह पर उपयोग करना है। no	○
3	5 वीं कक्षा तक की स्कूल school up to 5 th grade	
4	8 वीं कक्षा तक की स्कूल school up to 8 th grade	
5	स्कूल में कमरे . जितने हों उतने डब्बे बनाना # of rooms in school	
6	पुरुष अध्यापक . जितनी संख्या है उतने चिन्ह बनाना male teacher	
7	महिला अध्यापक . जितनी महिला अध्यापक हो उतने चिन्ह बनाना female teacher	
8	लड़कों का शौचालय (गददर) boy's urinal	
9	लड़कियों का शौचालय (गददर) girl's urinal	
10	लड़कों का पेशाब घर boy's toilet	
11	लड़कियों का पेशाब घर girl's toilet	
12	शौचालय का उपयोग होता है urinals & toilets being used	
13	शौचालय साफ है urinals & toilets clean	



Websites worth checking out:

The Foundation for Sustainable Development

<http://www.fsdinternational.org/>

SunNight Solar

<http://www.bogolight.com/>

Basecamp Foundation

http://www.basecampexplorer.com/basecamp_foundation

Basecamp Foundation—Sunder Rang

<http://www.sunderrang.com/>

Barefoot College

<http://www.barefootcollege.org/>