#### LM THAPAR SCHOOL OF MANAGEMENT

New Indía starts here



# Boosting Academic Entrepreneurship through Re-Framing Social Issues Dream to Design

Padmakumar Nair

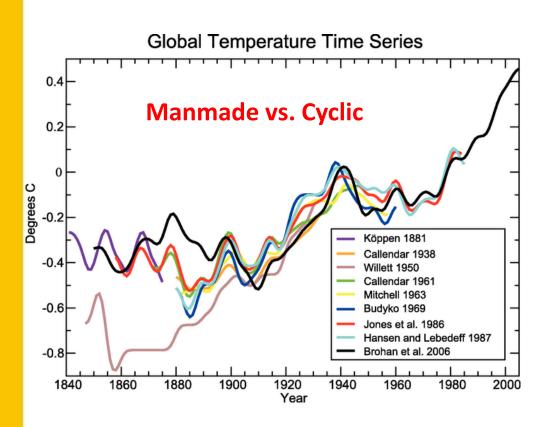
LM Thapar School of Management
Thapar University
India

# Convright 2013-2014

#### **Social Issues**



Subjective and Value laden





**Terrorist vs. Freedom Fighter** 



Eshun, 2015

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#### **Re-Framing**



- to Communicate / to Convince / to "Manufacture Consent"
- A problem solving tool
- An opportunity identification tool

Gauthier et al. (2015)

#### to Communicate / to Convince / to "Manufacture Consent"





"Criminals don't follow gun laws. Only law-abiding people follow gun laws. And there is just no evidence that these gun laws would prevent these shootings." Marco Rubio



SEAN RAYFORD/GETTY IMAGES

### THAPAR UNIVERSITY

### to Communicate / to Convince / to "Manufacture Consent"



"I believe we are smart enough, we are compassionate enough, to figure out how to balance the legitimate Second Amendment rights with preventive measures and control measures."

Hillary Clinton



SCOTT OLSON/GETTY IMAGES

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### to Communicate / to Convince / to "Manufacture Consent"



- The abortion debate:
  - —Prochoice
  - —Prolife

#### As a Problem Solving Tool



Addiopizzo: Fighting the Italian mafia



Vaccaro and Palazzo, AMJ (2015)

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### This Story Started About Two Years Ago...





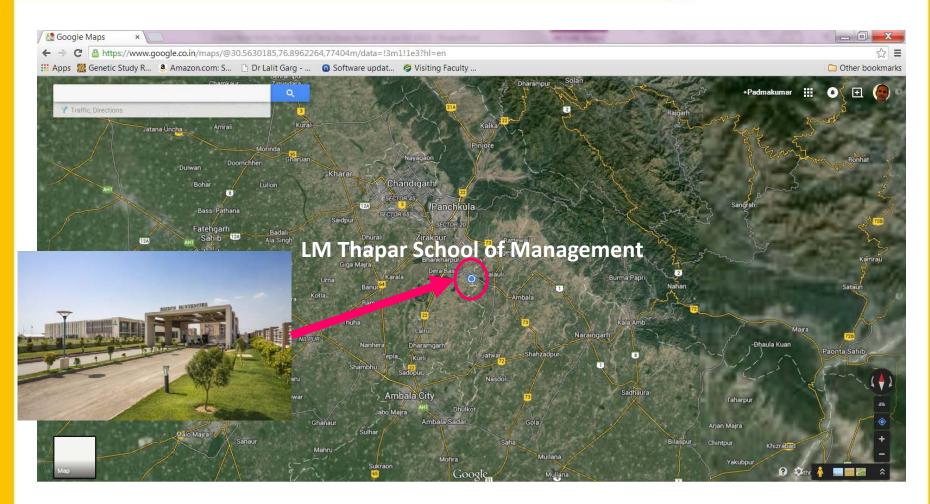




# Onvright 2013\_2017

#### Where Are We Located?





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### Onvright 2013-2014





### onvright 2013-201.





#### Area Around the Business School



- Several small industrial villages
- 400+ SMEs (Chemical, Metallurgical and Pharmaceutical)
- Very poor air and water quality
- 99% of the villagers earn less than Rs 100 (two dollars) per day per family

### How Can We Come Out of This Situation?



- Our assumptions (explicit and implicit)
  - Current air and water quality is very bad for our 300+ students, faculty and staff
  - People who built the business school at this location might have made a mistake
  - Almost impossible to deal with the situation because of large number of SMEs involved
  - Small companies do not have enough funds available for meeting clean air and water standards
  - Regulators are ineffective
- Question: What can we do now?
- Answer: Do whatever is in our control
- What did we do ???

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#### Doing Whatever is in Our Control



- Making all buildings airtight with a positive air pressure
- Filter intake air
- Bio wall around the campus
- All of this will make the campus air quality slightly better, may be a 10% improvement!
- Result: Frustration and disappointment

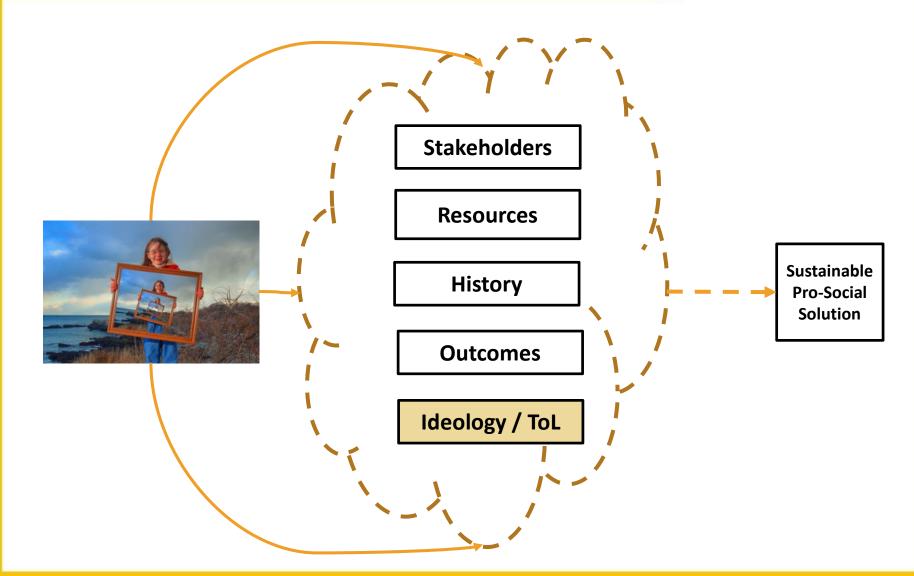
#### On Re-Framing Our Questions...



- The questions we ask and the answers we seek are not only prompted by our *Theory of Life* but also defined by them
- A behavioral question will lead to a behavioral answer!
- An economic question will lead to an economic answer
- An anthropological question will lead to a cultural answer

### Re-Framing: An Actionable Framework





### How Can We Come Out of This Situation?



- Our assumptions (explicit and implicit) (old)
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#### We Reframed the Issue this Way...



- New (modified) assumptions
  - Current air and water quality is not only bad for our 300 plus students, faculty and staff but also equally bad for the 20,000 villagers
  - Small companies have potential to meet clean air and water standards
  - Partnering with regulators and other governmental agencies is key
- Question: How can we engage all the stakeholders to find a useful solution to this problem?
- Answer: Helping (students, community, companies and politicians) through social entrepreneuring
- Result: Pride, excitement and sense of accomplishment

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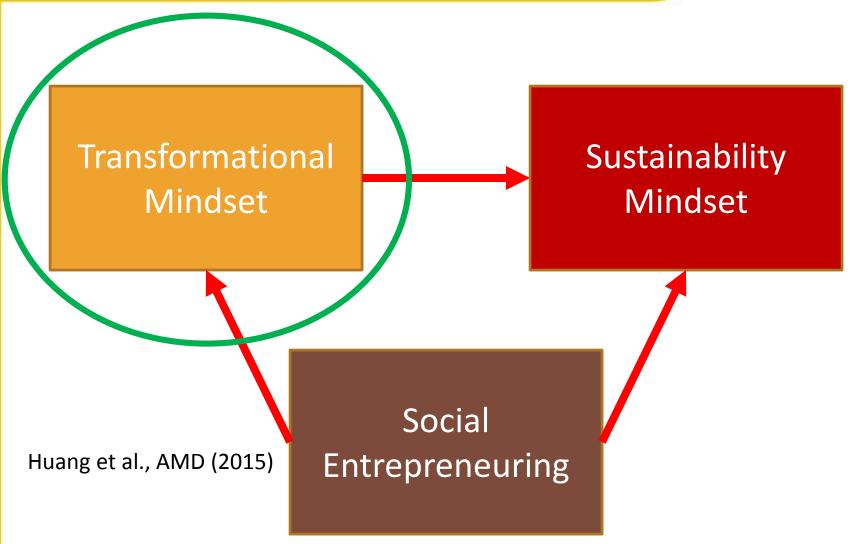
#### Helping Through Social Entrepreneuring



- Helping companies save money through process improvements, improved strategy and tactics
- Helping companies with trading carbon credit
- Lobbying with the government to reward good corporate citizens with tax benefits
- Instilling sustainability practices in the community
- Two new centres are being established:
  - Venture Lab Thapar (in collaboration with Prof. Aard Groen)
  - 3SC = Strategy, Sustainability and Society Centre
- We expect all of this will make the village air quality appreciably better, about 80% improvement!

#### On Developing Sustainability Mind-set





### Developing Sustainability Mindset Through...





**Design** thinking

**Physical Science** *thinking* 

**Framing** 

# Convright 2013-2014

#### On Teaching Sustainability



- Ideological nature of sustainability debate
- Highly interdisciplinary nature of the subject

#### On Teaching Sustainability



**Framing** 

Physical Science Thinking

Transformational Thinking

Design Thinking

#### On Teaching Sustainability



Framing

Physical Science Thinking

Transformational Thinking

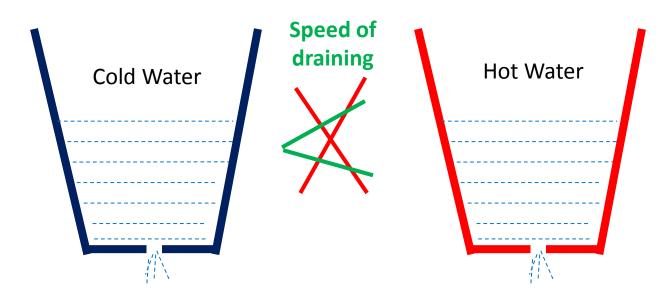
**Design Thinking** 

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#### February 2010

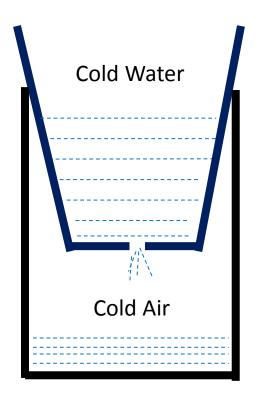


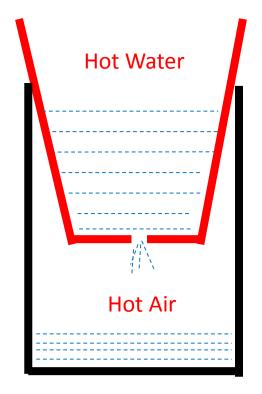
- A question from one of my colleagues at UT Dallas prompted my thinking in this direction
- School Science Experiment of her nine year old son



#### **How Fast Water Drains Out?**







### On Gaining a Deeper Understanding of the Physical World Around Business



- MBA students typically have a thorough understanding the socio-cultural, economic and political environment of the business
- Very little understanding of the physical world around them
- Materials Science is the most practical medium to help MBA students gain a deeper understanding of the physical world around them

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### Now the Difficult Job of Convincing Our Faculty!



 Do you agree that we must teach materials science to our MBA students?

#### -NO

 Do you agree our students should gain a deeper understanding of the physical world around them?



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### Enabling and Reinforcing Physical Science Thinking



- Teaching Materials Science to MBA students / managers
- Introducing Biomimicry in MBA curriculum
  - Reinforces physical science thinking

#### Brick and a See Shell







900 to 1200°C

10 to 20°C

### Teaching Biomimicry as a Way to Reinforcing Physical Science Thinking



- Why Biomimicry?
  - -Limits of predictive power of Science and Engineering
  - Power of three billion years of Science and Engineering through nature's experimentation

#### Leaves (Leafs) to Solar Cells

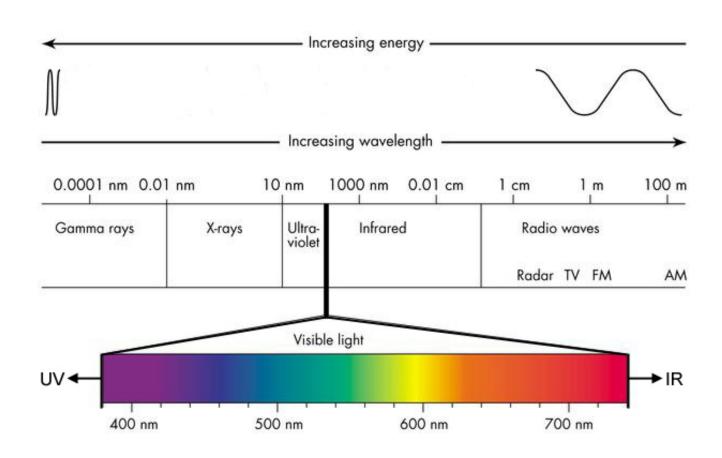


- Converting sun light into electrical energy
- Silicon (Si) is an ideal material for this purpose
- Silicon can absorb most part of visible light of sun light
- Titania or Titanium Dioxide (TiO<sub>2</sub>) is another useful material for this purpose
- Only problem with titania is it can only absorb the violet and ultraviolet part of sun light

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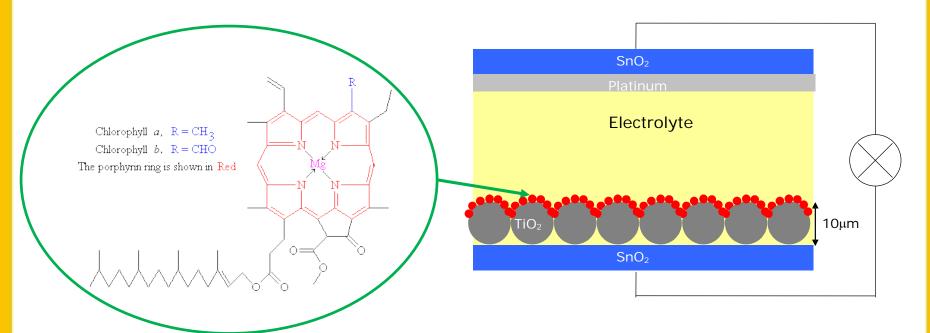
### Throwing Some Light on Light





### Chlorophyll-Like Dye Sensitized Titania Solar Cells





Regan and Gratzel, Nature 353 (1991) p737

### On Teaching Sustainability



Framing

Physical Science Thinking

Transformational Thinking

Design Thinking

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### **Design Thinking**



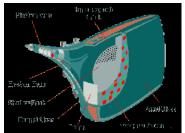
- Constraint as opportunity for innovation
- Compassion and Commitment
- Courage and Confidence

## Science Should be Considered as an Opportunity to Design...



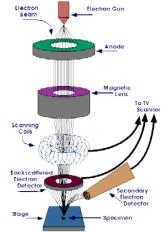
- Electrons as particles
  - TV picture tube
  - Cathode Ray Oscilloscope





- Electrons as waves
  - Scanning ElectronMicroscope
  - Transmission ElectronMicroscope

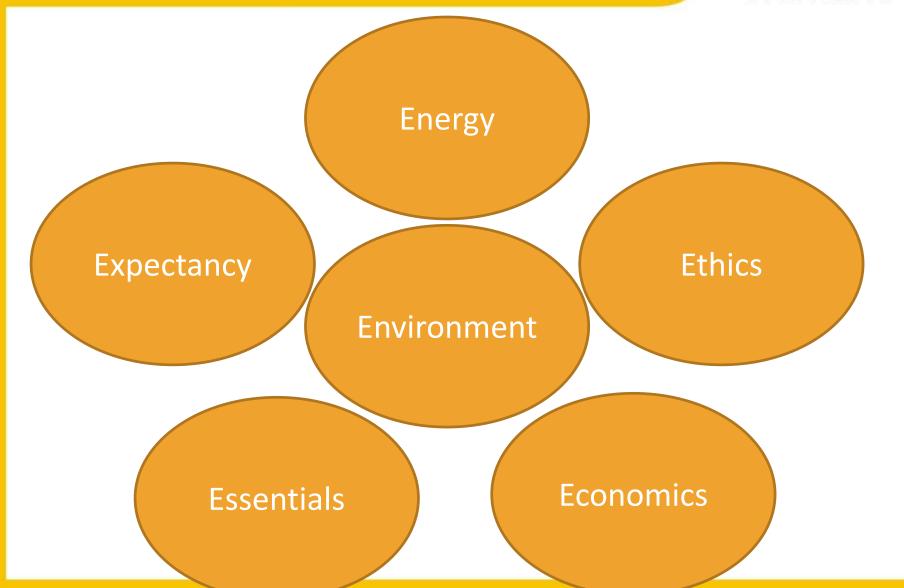




not a means to finding the truth!!!

### Six Design Pillars of Sustainability



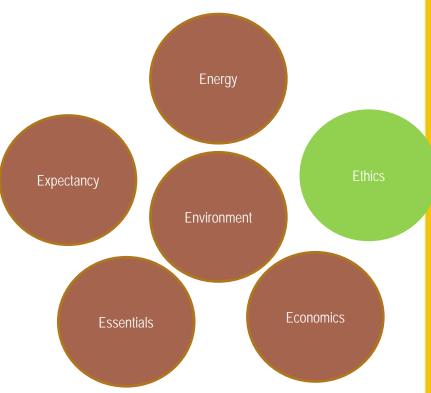


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### **Ethics**



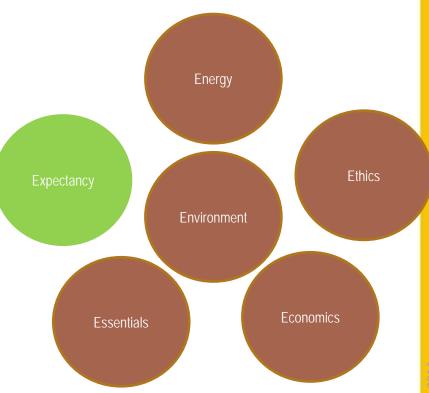
- What is the right thing to do?
- Cost of doing the right thing
- Cultural variations and global considerations



### Expectancy



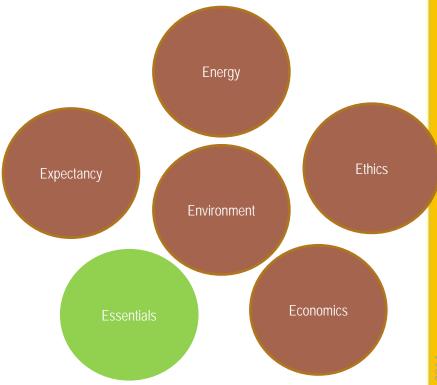
- Are we convinced about the need to address the issue of sustainability?
- Are we confident that we can do some thing about it?



#### **Essentials**



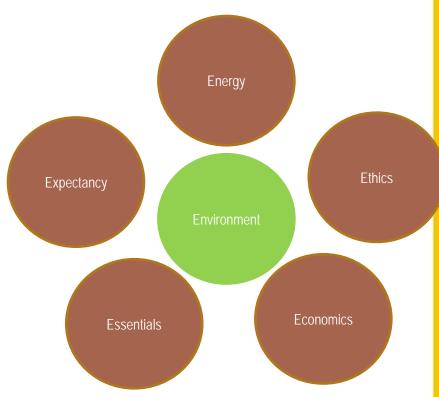
- Are we dependent on scarce essentials like rare earth and precious metals, minerals etc.?
- Are there technologies available to do what we do without these scarce essentials?



### Environment



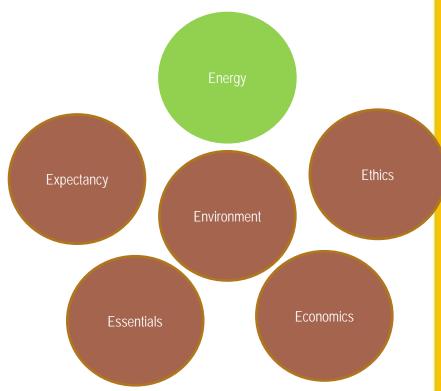
- Impact of your business on the environment
- Pollution, potable and industrial grade water
- Climate Change / Global warming
- CO<sub>2</sub> and other gas emissions



### Energy



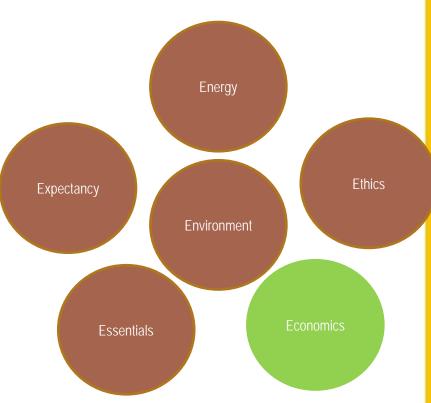
- Affordable and abundant energy
- Non / less polluting energy sources
- Energy efficient processes
- Developing Energy-Shy economies



### **Economics**



- Is it affordable?
- Who would and who should pay?
- New ideas of value creation
- Useful value versus economic value
- Will it be profitable?



### On Teaching Sustainability



Framing

Physical Science
Thinking

Transformational Thinking

Bhutiani et al. 2012

**Design Thinking** 

### Transformational Mindset in MBA Classrooms...



 Business Schools predominantly teach a transactional approach to organizing, managing and leading...

**Transactional** 

**Transformational** 



- Hierarchical
- Contingent reward / punishment
- Frequent layoffs
- High salary differentials
- Designed for control
- Profit / executive centric

- Relatively flat
- Idealized influence / Insp. Motivation
- Layoffs are managed and rare
- Relatively low salary differentials
- Designed for creativity
- Customer and employee centric

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# How Effectively Can We Develop Transformational Mindset in Modern Organizations / MBA Classrooms?



- Business schools are not doing a good job of developing (transformational) leaders (Pfeffer and Fong, 2002; Mintzberg, 2005; Bennis and O'Toole, 2005)
- "The mainstream management theory is still dominated by the gloomy vision—indeed, if anything, the dominance is becoming stronger as the intellectual influence of the "Chicago agenda" is spreading to all the main areas of business school research" (Ghoshal, 2005)
- Unfortunately we do not value any thing which could not be measured!
- "More than knowledge, leaders need character. Values and ethics are vitally important. The basics of leadership can be taught. What is desperately needed is more responsible leadership—a new ethic to confront the challenges of our day." —Oscar Arias (personal communication, June 18, 2001) taken from Doh, 2003.

### Our Working Definition of Transformational Mindset



A state of mind characterized by a world view that "what is good for corporations should be good for the community, the country and the world"

### An extraordinary sensitivity to the needs of all stakeholders



- Forms a common link amongst socialentrepreneuring, transformational-leading and sustainability thinking?
- About three years back we developed a framework relating Social-entrepreneuring to transformational mindset (Bhutiani et. al., 2012)

### Developing Transformational Mindset...



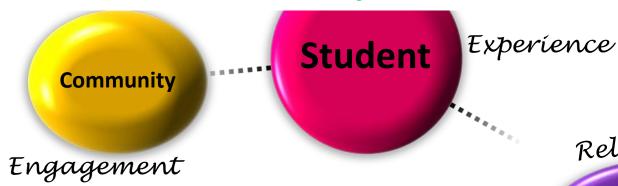
- What is common amongst socialentrepreneuring, transformational-leading and sustainable thinking?
- An extraordinary sensitivity to the needs of all stakeholders
  - A meta-disciplinary view of "value"
  - Not just the "economic value"

### **Our Business School Today...**





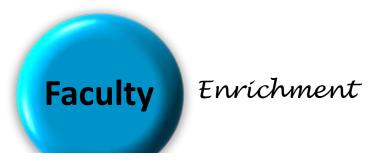
Ultimately we want every MBA graduate to have a Social Entrepreneurial Mind-Set!





### **Our Business School Today...**





We educate Globally Sensitive Scholarly Practitioners With Social Entrepreneurial Mind-set!







### Globally Sensitive Scholarly Practitioners With Social Entrepreneurial Mind-set



#### Global Sensitivity

We believe that what is good for the world should be good for the nation and what is good for the nation should be good for its citizens. We want to groom a generation of thinkers, practitioners and leaders who are adept at solving both local and global problems with utmost global sensitivity. Global sensitivity has a much broader scope than just cultural sensitivity. It encompasses everything from rules and regulations to economic situations to geographic peculiarities.

#### Scholarly Practice

- We base our philosophy of educating scholarly practitioners on the following two assertions:
  - "Nothing is as practical as a good theory" by Kurt Lewin
  - "Nothing is as dangerous as a bad theory" by Sumantra Ghoshal
- We want our graduates to be able to understand the power of good science and at the same time recognize its limitations. We pay special attention to generating new ideas and synthesizing and integrating existing ideas for applying them to solve real world problems.

#### Social Entrepreneurial Mind-set

We want every graduate to have a strong entrepreneurial orientation with an emphasis on doing social good. Irrespective what kind of enterprises they create or work for, a strong orientation toward societal good must be the starting point of any decision they make. We believe only the right balance between social and economic good can produce sustainable businesses. Also we consider social entrepreneurial mind-set as synonymous with sustainability mind-set.

## THAPAR UNIVERSITY

## We Follow the Honey Bee Strategy!



Little extra effort of all of us will lead to an appreciable improvement in the air and water quality!

### Result of All These...



#### Campus

- Moving towards energy neutral
- Waste reduction / recycle

#### Curriculum

- At least 25 % sustainability content in everything we teach
- A core course on Social Entrepreneurship
- All students are engaged in community activities

#### Community

- Instilling the spirit, attitude and behaviour for living sustainably
- Every Friday is clean Dera Bassi day

## New clean Indía is starting at Dera Bassi!



