Social Entrepreneurship, Nation Building and Happiness

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Talk structure

- What is social entrepreneurship (SE) and nation building?
- Issues involved in rural development.
- Why and how management students should be involved in SE?
- Technological challenges in rural development.
- NARI’s solutions towards some of them.
- Possible social enterprises.
- How we can become happy by helping our fellow citizens – essence of social entrepreneurship and Nation Building.
What is social entrepreneurship (SE)?

- Many definitions. Basic definition of entrepreneur (17th century French); Somebody who undertakes a significant project or activity.
- 19th century French economist Say; ”Entrepreneurs create value”.
- Most accepted definition by US economist Schumpeter; “Entrepreneurs are catalysts and innovators behind economic progress”.
- Social entrepreneurs; catalysts and innovators behind social and economic progress. Gandhi ji was a social entrepreneur.
- Attributes of social entrepreneurs:
  - Attack underlying causes of problems rather than treating symptoms.
  - They reduce needs rather than just meeting them.
  - Others see problems. They see opportunity.
  - Are persistent and tenacious. Also not fainthearted.
  - Do not let their limited resources keep them from pursuing their visions. Skilled at doing more with less. Follow nature’s evolutionary strategy
Regular enterprises create wealth. Social enterprises should create wealth and happiness!

All enterprises should create happiness since they provide goods and services to make life simple. In practice they provide fodder for greed.

SE is to further social and environmental goals. In true form SE should solve social and economic problems of downtrodden and create wealth and all round happiness.

65% of our population live in rural India. Most of them are poor. Social entrepreneurship should be geared to improve their quality of life.

Helping these rural poor to improve their quality of life is true nation building.
What is nation building?

- All life forms want a comfortable and happy life. In case of human beings it is a sum of 2 things; personal happiness and better environment.
- Personal happiness can be obtained from variety of ways. We will talk about it later.
- Environmental improvement is what I call nation building. It is the enabling environment which makes you feel happy to live in, work in and just be a part of it. This environmental happiness also gives us a sense of belonging, makes us feel proud and gives us a sense of ownership.
- Environmental improvement can only happen when quality of life of rural population improves and they are brought in mainstream development.
- Issues in rural poverty and development.
Issues involved in rural development

- 60% of our rural population live in primitive conditions. They have almost nonexistent electricity.
- They use very inefficient kerosene lanterns for light and biomass in primitive cook stoves. Modern technology somehow has not touched their lives.
- Besides the low quality of energy, indoor air pollution kills about 3 lakh people every year and lack of clean drinking water kills about half million children.
- Without these people getting into mainstream, India cannot progress and join the developed nations. Helping the rural poor is the biggest challenge for all of us.
- 54% of India’s population is below 25 years of age and most of them live in rural areas and are unemployed. Mass media (cell phones, TV etc.) has fueled their aspirations.
- Creation of sustainable rural enterprises is the best bet to create wealth and improve their quality of life.
Why SE for management students?

- First accept that whatever we are today is because of the country and society. Hence we should give something back to the society. Gratitude is the essence of being human.
- Purpose of our existence is to increase personal and societal infrastructure.
- Personal infrastructure: personal health, happiness and well being. Giving back to society increases society infrastructure. Both these activities give us a great joy and satisfaction.
- After our basic needs are satisfied we long to do something meaningful. Helping others is one such activity.
- You will all go and become important leaders in corporate world either here in India or abroad.
- Corporate India cannot survive without the 60% of rural poor coming in mainstream development.
- 1/3rd India under Maoist rule. Tremendous impact on national economy and development. Aspirations fuelled by mass media.
- Information is knowledge and power. Recent events in Middle East, UK, etc. attest to it. People know what exists and expect to improve their quality of life. Their march to achieve that is unstoppable.
What can you do now or in future?

- In order to understand rural problems, do an internship for a year with a rural NGO. This experience will stay with you all your life.
- Once you have resources from your own enterprises, in corporate and other sectors, use them to help rural areas.
- Even if you go abroad think how you can create conditions to improve the lives of these people. This is your contribution to the society.
- For some of you who will go in banking and finance, help create venture and other funds so that rural enterprises can access soft funds.
- SE will also help you play a much larger and important role in India’s development. May also help you getting in politics.
- As quite a number of students in IIMs are from technology background, work in technology areas. Example of Steve Jobs, Dean Kamen and Bill Gates.
- World moves because of technology. Other “things” needed to facilitate this movement.
High technology needed for rural development.
It allows maximum extraction of materials and energy from dilute locally available resources; biomass, solar, etc.
Hallmark of evolution: size reduction; sustainability; increased efficiency; **room temperature processes and robustness**.
Gets in equilibrium with surroundings and hence uses all the forces around it.
Most of the new designs are following this route. Cell phones, power plants, etc.
Biomimicry as mantra for design. Is also spiritual!
Societies depend on quality and quantity of energy. Decentralized high tech energy solutions ⇒ softer sustainable decentralized societies.
NARI’s contribution to rural development

- Part of Saffola oil from some of our varieties. Whole plant approach.
- Pioneered the development of sweet sorghum for ethanol production. All India coordinated project with 2 dozen organizations participating.
- Cooking and lighting technologies for rural households. Globe Forum Award.
- Pioneered the concept and development of electric cycle rickshaws. Energy Globe Award
- NARI was principal author of national biomass power generation policy. Run by MNRE.
- Issues in agriculture and water.
- Introduced FecB gene in local sheep for twinning. CSIR’s highest award for rural development.
Sweet Sorghum

- Introduced sweet sorghum in India in 1970s.
- Whole plant approach. Food (grain), fuel (ethanol) and fodder from same piece of land.
- Solar distillation and detoxification.
- Ethanol as cooking and lighting fuel.
Draconian excise laws on use of ethanol for household purposes forced us to go for kerosene.
Developed the concept of kerosene Lanstove.
One device produces excellent light (250-300 W), cooks a complete meal for family of 4-5 and boils 10 liters of water. 3-5 times more efficient than electric cooking and lighting.
Tested in 42 huts which never had electricity. Excellent response. Present cost Rs. 7000/-. Business plan needed.
Excellent combustion in lanstove. CO< 3-4 ppm and particulate emissions less than WHO standards.
Lanstove is as easy to use and clean as LPG. Need to incorporate TE element for cell phone charging.
Energy and Wealth from agriculture

- India produces 800-1200 million tons of agricultural residues/yr.
- Mostly burnt in fields as a part of waste disposal. Loss of tremendous energy besides creating pollution.
- Has the potential of producing 90,000 MW of electric power (>55% of installed capacity) or 80% of total liquid fuel supply of India.
- Energy from agriculture could be an order of Rs. 400,000 crore/yr industry.
- Tremendous wealth flow to rural areas. India then can join the ranks of developed countries.

10 MW biomass power plant

NARI’s 500 kW_th gasifier
Agriculture issues

- Sophisticated technology needed in farming. Lacking in India. Best brains needed in agriculture science, technology and management. IIT/IIM students needed in this sector.
- Small land holdings fit for precision agriculture. Need for developing small and high tech farm machinery.
- In developing high tech small farm machinery, inputs needed from packaging and computer industry.
- Presently farming is non remunerative and unglamorous. Lowest growth rate among all sectors. Crisis in farm labor availability. Need for mechanization of farms on large scale. Need to make it glamorous.
- Farms and farmers are the backbone of any nation since they can produce food, fuel and wealth from the land. They should be helped.
Water Issues

- If energy from agriculture picks up there will be pressures on the land and water will become the critical issue. It already is!
- Rain water harvesting and storage in earthen dams. Rainfall in India \( \approx 4 \times 10^{12} \) m\(^3\)/yr. Water usage \( \approx 65 \times 10^{10} \) m\(^3\)/yr. (16% of rainfall). Creation of rural water utilities?
- **Water Act similar to Electricity Act needed.** Small utilities for rural areas; rainwater harvesting, production and supply of clean water.
- At Taluka and village level, strategy of combined power and water utilities. Flue gases of power plant can be used for water purification.
- High technology needed for water purification and distillation. Nanoparticles as photocatalyst for water purification.
- NARI’s work on solar energy for water purification. Water filtration through 4 layers of cotton sari and heating in solar water heater to 60\(^0\) C for an hour, removes 100% total coliforms.
- Drinking water supply for rural areas in cans? **Need a business plan.**
Possible social enterprises

- Micro power utilities (100-500 kW capacity) running on renewable energy. Lease of SEB infrastructure.
- Taluka power utilities. 10-20 MW biomass based plants.
- Electric cycle rickshaws. Business plan needed.
- PV powered fans and refrigerators. High quality end use requires high technology.
- High tech agriculture. Solar powered scarecrow, intelligent weed remover, precision farming tools powered by farm derived fuels.
- IT based medical diagnosis and solutions. BP checking, ECG, eyes (Aravind EH), snake bites, plant identification, etc.
- Spreading lanstove type technologies. Cooking/lighting and clean water for rural areas. Business plan?
- Providing eating facilities for rural and urban poor. Business plan?
- Modification in curriculum to incorporate SE issues. Social entrepreneurship should be taught to all management students.
Philosophical issues in SE

- Since SE is tough calling you should have a powerful mind and capability to work hard in taxing environment.
- Develop a habit of focusing on task. Great inventions and ideas have come from intense concentration. Practice Yoga. It helps in concentration. ADS is a disease. Try removing it.
- Develop a “can do” approach. You should be bubbling with ideas. Best ideas are maximum ideas.
- Be positive in your approach. Rise above the negative things. Make them irrelevant. This is how nature evolves.
- Don’t worry about the outcome. Positive things will happen. You are doing the society work for your own benefit – discipline, discovery and happiness.
- Follow the Wikipedia model. No remuneration for increasing the world’s knowledge.
- Tremendous satisfaction and happiness results in helping others.
How to create personal Happiness?

- Happiness is a state of mind. You start feeling happy when you become internally secure.
- Deep thought or Sanyam helps in creating internal calmness and security. A powerful mind can move mountains. Besides it makes you very sensitive to surroundings and gives a perspective in life. That is the genesis of wisdom and nonviolence.
- This internal security also helps us become less greedy for materials and resources. This is the genesis of spirituality and creation of corruption-less society.
- Spirituality is different than being religious.
- Spirituality helps us becoming more sustainable.
- High technology with spirituality should be the mantra of development and basis of nation building.
Sustainable living

- Spirituality also helps in *Simple living and high thinking.* Examples of Mahatma Gandhi and Einstein.
- With this motto one can live a decent and fulfilling life with 50–60 GJ/person per year (HDI of 0.8; European lifestyle of 1970s). Present Indian consumption is 18 GJ/person (HDI~0.6). US uses ~350 GJ/person!
- If every citizen of India follows US consumptive lifestyle we will need all the resources of earth to sustain it.
- Could lead to WW III!
- Urban elite as role model? Need for all of us to live simply.
- With the reduction of greed the environment can be made better.
- A happy individual can then give back to society both knowledge and resources. This is the essence of SE and nation building.
Thank you
Useful sites

www.nariphaltan.org (Institute)
www.nariphaltan.org/writings.htm (AKR articles and writings)
www.nariphaltan.org/simplelife.htm (my experiment in simple living)
www.nariphaltan.org/ncsd (Center for Sustainable Development at NARI; works in promoting NGO/corporate partnership)
www.nariphaltan.org/kerolanstove.pdf (kerosene lanstove)

BOOKS
www.nariphaltan.org/usexp.pdf (my US journey and back)
www.nariphaltan.org/thoughtbook.htm (Nature of Human Thought)