



Empathetic Innovations: Connections Across Boundaries

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Abstract

Several motivations may guide quest of a creative person for solving real life problems either faced by oneself or by others. Honey Bee Network has been documenting and valorizing grassroots innovations and traditional knowledge practices for over two decades. In this paper, I review some of the lessons emerging from the innovations triggered by a feeling of internalization of somebody else's pain [*samvedana*] exactly as one's own. The concept of empathetic innovations resonates with the Gandhian philosophy in a very intimate sense. Way back in 1924, Gandhiji had announced a prize of Rs. one lakh to improve the design of charkha [spinning wheel]. When burden becomes responsibility and when concern triggers creativity, we encounter Gandhian spirit in action. He was a great action researcher.

In the first part, I summarise the journey of Honey Bee Network, the evolution of SRISTI (Society for Research and Initiatives for Sustainable Technologies and Institutions) on the advice of Policy and Perspectives Committee of IIMA, and establishment of Grassroots Innovation Augmentation Network (GIAN) as a follow up of International Conference on Creativity and Innovations at Grassroots held at IIMA in 1997. Later, NIF (National Innovation Foundation) was set up with the help of Department of Science and Technology in 2000 to build a National Register of Grassroots Innovations and Traditional Knowledge besides bridging formal and informal science. Recently, the NIF has become a grant-in-aid institution of DST. Nine key issues discussed in the paper to amplify the concept of empathetic innovations are:

Why does not adding value to people's knowledge and creativity excite majority of young and old institutional scientists?; Does wealth necessarily improve the propensity for risk taking and innovation or the lack of it, i.e., can poverty also be a trigger for innovation? Is frugality fungible?; Whether the nature of motivation influences the incentives or disincentives for diffusion?; Should national science, technology and innovation system be fertilized by the grassroots innovations in a fundamental manner?; Do Gandhian methods still matter?

Why did Gandhian institutions fossilize in the last six decades?; Will Incorporating innovations in the curriculum not trigger creativity early in life?; Will creating mobile and stationary museum of innovations help in transforming the minds? and Will Gandhian advice to youth for social engagement be still valid?

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There is a famous story that Gandhiji was very fond of recalling. A little girl was carrying her brother on her back in a hilly region. She was gasping for the breath but still smiling and chatting with her brother on the back. After a while, a person passing by asked her, “the load on your back must be hurting?” She replied, “it is not load, he is my brother”.

When burden becomes responsibility and when concern triggers creativity, we encounter Gandhian spirit in action. He was a great action researcher. Never hesitant to try things out, he was conscious that not every time, the outcomes will be to his liking. But, as is often said, experiment never fails. One can learn from the data that is contrary to one’s expectations. His desire to transform Indian psyche and consciousness remains unfulfilled. In fact, he did not want that after independence, the leaders of this country should live in palatial buildings so divorced from the life of common people. He wanted the present President’s house to be converted into a hospital. May be his idealism can still infect optimism about frugal ways of solving complex problems without losing the coherence of culture, imagination of a creative alternative and empathetic way of policy making.

From *Samvedana to Srijansheelta* seems to be one of the core principles of Gandhian way of developing technological solutions. Even though empathy is not the right translation of *Samvedana*, the idea of internalizing somebody else’s pain as one’s own is at the heart of the word, *Samvedana*. The pain [*vedana*] of someone else should be internalized exactly [*sam*] as that person feels it. Then, it does not remain as someone else’s pain. It becomes one’s own. The creativity [*Srijansheelta*] borne out of *Samvedana* then gets guided by a feeling of *swantaha: sukhayah;*, i.e., for one’s own happiness. The innovations that common people evolve to solve the problems sometimes faced by them but many times faced by others reflect this deep connection across boundaries of beliefs, sectors, spaces, social segments, etc.

During the journey of more than two decades, the members of Honey Bee Network [honeybee.org] have experienced extraordinary values embedded in creative expressions of common people whether in technological, or cultural or institutional arenas. I will describe some of these experiences to essentially assert that there is a very widespread consciousness in Indian society, which Gandhi symbolized and articulated. This consciousness was there before he came and is still there after he left. His contribution was to integrate or synthesize the disparate elements of yearnings, desires and pursuits of human mind for achieving seven Es, the core of Honey Bee philosophy: ethics, excellence, equity, empathy, environment, efficiency and education.

² To be published in a book entitled, “Timeless Legend of India, Gandhi” [Ed.] Dr. R. A. Mashelkar in commemoration of 30 years of Gandhi National Memorial Society, Pune, 2010

I will summarise some of the lessons of our journey for strengthening the innovation movement in the developing countries. Though some lessons might be useful for economically developed countries as well.

The Journey

The urge to respect, recognize and reward the unsung heroes of our society began to attract more than two decades ago, several volunteers who believed that this will help make our institutions [formal as well as informal] less patient with inertia, indifference and inefficiency. We had hoped that recognition to creative problem solvers will help in defining new points of reference for building an inclusive and innovative India. After Honey Bee Network began to gather strength, we set up SRISTI (Society for Research and Initiatives for Sustainable Technologies and Institutions, sristi.org) at the suggestion of the Policy and Perspective Committee of IIMA. It was felt that publishing claims of the farmers and other knowledge holders without prior verification might not be appropriate in an institutional publication. Accordingly, SRISTI was set up. Along with that, a section-25 not-for-profit company, SRISTI Innovations [SI] was also set up. SI became the publication and commercialization arm of SRISTI. The Pew Conservation Scholar award in 1993 further strengthened the efforts to create a knowledge-based platform for strengthening the intellectual property rights of the poor. At that time, Honey Bee Network's pursuit of leveraging the knowledge richness of economically poor people through various means appeared paradoxical to most people. In 1988-89, when this pursuit started, neither WTO had come about nor Convention on Biological Diversity was around. However, as it turned out, the open source nature of much of the knowledge and innovation base proved to be far more effective vehicle for creating awareness about the creative potential of poor people. It took a long time and considerable effort of a lot of colleagues in the Honey Bee Network to create a small dent on the mind of policy makers. In 1997, Grassroots Innovation Augmentation Network [GIAN, gian.org] was set up in collaboration with Gujarat Government to essentially forge the golden triangle for rewarding creativity linking innovation, investment and enterprise. It was obvious that the transaction costs of innovators, investors and entrepreneurs have to be reduced if they have to meet and merge their expectations. It was very gratifying when GIAN established after a major recommendation from International Conference on Creativity and Innovations at Grassroots at IIMA in January 1997 got the best Incubator Award along with IIT, Madras at the hands of the President of India. In 1998, having spent several months trying to convince various secretaries to Government about the need for scaling up the Honey Bee Network model in vain, fortunately Finance Ministry took interest in the matter. The then Finance Secretary, Dr. Vijay Kelkar and Expenditure Secretary, Dr. E. A. S. Sarma recognized the potential of the idea and the rest was history. The Finance Minister made an announcement in his budget speech of 1999 to set up a national foundation to build national register of grassroots innovations and traditional knowledge, link formal and informal science and help India become a global leader in sustainable technologies. Dr. R. A. Mashelkar, a champion of innovations agreed to lead the National Innovation Foundation [NIF, nifindia.org] which came about in 2000. By the time SRISTI was set up, we had about 5000 innovations and traditional knowledge practices, and when NIF was set up, we had 10000 innovations and traditional knowledge practices. It took ten years to reach this far. In the next ten years, with the budget going down every year due to inflation and database expanding, we could mobilize around 140,000 ideas,

innovations and traditional knowledge practices, not all unique or distinctive. Hon'ble President gave away the awards creating a new idiom in the era of knowledge economy. Former President, Dr. A.P.J. Abdul Kalam not only gave awards to the grassroots genius of our country, but also welcomed them to the President's house. The current President, Smt. Pratibha Patil went a step ahead. She became perhaps the first Head of the State to host an Exhibition of Innovations primarily from grassroots at President's house. This was completely in sync with her call to the nation to declare the current decade as a 'Decade of Innovation'. Hon'be President continues to champion the cause of grassroots innovations in various speeches of hers to draw attention of IITs and corporates to link up with the creative voices in the country. Department of Science and Technology, Government of India recognized the paradox of reducing budget and expanding database and therefore, decided to propose to the Union Cabinet an annual grant-in-aid status for NIF.

Accordingly, under the leadership of Dr. T. Ramasami, Secretary, DST, NIF became a grant-in-aid institution maintaining its autonomy, flexibility and culture of reaching the innovators at their doorstep. If like many other public initiatives, NIF had waited for innovators and TK holders to come to its door, it would not have received more than 10 – 15000 entries in the last decade. The scouting process involving search for creative people in different villages and urban areas helped in achieving a new global benchmark of uncovering grassroots talent.

To bridge the gap in personal and professional life between hours in the air and on the ground, and also to pursue the age-old process of learning by walking together, shodh yatras were started twice a year in summer and winter, 13 years ago. SRISTI took the initiative to mobilize volunteers to join in these walks in different parts of the country. So far, we have walked for more than 4000 kms., in twenty states. In summer, we try to walk in the places, which are hot, and in winter, the places which are cold. The next shodh yatra is in Meghalaya in Jan 2011. Voluntary suffering has always commanded respect in our society. One does not need to prove any more the authenticity of one's pursuit. People open up without much convincing to be done. In the last four years, we made one more effort to go to the bottom of simmering anger in the economically disadvantaged regions of the country. Beginning with Anantnag district in Jammu and Kashmir, we have walked in Purulia [West Bengal], Dhemaji [Assam and border of Arunachal Pradesh], Arku valley [Andhra Pradesh], Koraput [Orissa], Champaran [Bihar] and Bastar [Chattisgarh], etc. These are the regions where extremists have taken to violence as a means of articulating their anger at the continued neglect and indifference by the state. Notwithstanding the tensions, we received an extraordinarily affectionate and considerate reception in these regions. However, there was no way we could have remained unaffected by the pathos and tragedy people live with in everyday of their life in these regions. And yet, people innovate and try to overcome some of the historical constraints in improving their life. We have learnt a great deal more about the pervasiveness of frugality, *samvedansheelata* [an approximate, empathy] and creativity in different walks of life.

Some lessons: some pointers

- a. *Why does not adding value to people's knowledge and creativity excite majority of young and old institutional scientists?* It seems that professional value that we have built over the years does not put premium on achieving excellence in societal impact, instead of just the academic excellence. Undoubtedly with little imagination, both can be blended. One can be a good academic and also make tremendous social impact. Gandhiji had once announced a prize for making improvement in charkha ("24th July 1929, Akhila Bharatiya Charkhaa Sangh Workers' Samiti has decided to organise this Contest for inventors and engineers all over the world that if they could come up with a Charkha or a Samyukta Yantra which - for making the thread and cloth , that satisfies the following criterion - shall be awarded a Prize money of 1 Lakh Rupees or 7700 pounds"; the conditions were specified later. Indian Government is yet to announce the challenge awards to solve problem that have remained unsolved for centuries!! But see www.techpedia.in for problems in search of solutions at sristi.org). He believed in the capacity of modern science and technology to blend with local and/or traditional knowledge. He also believed in incentives though not always monetary ones.

- b. *Does wealth necessarily improve the propensity for risk taking and innovation or the lack of it, i.e., can poverty also be a trigger for innovation? Is frugality fungible?* Gandhiji had great concern for overcoming poverty and always insisted on having the right priorities. However, he perhaps could not spend adequate attention to the creative potential of the poor. He did appreciate artisanal excellence and was always concerned about their future. Contrary to the dictum of Maslovian hierarchy of needs, he also realized that one could achieve the spiritual goals despite being poor and not sure of meeting basic needs. In our search for innovations, we have come across many people who despite being unsure about their basic subsistence have tried to innovate socially meaningful solutions. Rozadin designed pressure cooker based espresso coffee making attachment. In a few hundred rupees, he will modify the cooker that people brought along with the other material and convert it into coffee machine. First time, when we met him in Motihari, Champaran, Bihar during the shodh yatra and offered a token financial support for keeping some devices ready to be sold at premium, he refused support. He was not sure that he needed any money when the buyers brought their own material to be fitted by him. He charged only for his labour. He could have taken this money, improved his current consumption and gone on with the life. He didn't. He didn't charge even the users much. Is it because he lacks greed, he can meet the need of so many people. His frugality was fungible insofar as his needs for self and his charges for others were concerned. Karimbhai was a potter and a healer. Even after his livelihood improved through some support from SRISTI and media exposure, he did not demolish that hut despite having built a pucca house. He wanted it as a reminder of his past and therefore, his concern for the future of his knowledge, skills and obligation to serve. Once a patient came from Mount Abu, hundred kms., away from his village. After taking medicine, he offered Rs.20. Karimbhai saw a bit of sadness on his face. He asked him as to how would he go back. The patient replied by walking because he didn't have the bus fare. Karimbhai gave his money back and in addition, gave him the bus fare. This

would not make sense to a modern mind seeped as it is in highly materialistic and utilitarian logic. There is another instance, which is equally touching in terms of one's concern for nature. Once we had gone with a film producer, Jayantibhai from Indian Space Research Organisation to make a film on his healing philosophy and practice. We requested him to sit on a stone and hold a twig of a roadside plant in his hand. Suddenly, we noticed that Karimbhai was upset. We didn't know which action of ours had perturbed him. When we asked as to what happened, he asked, "did you need this twig at this moment?" We replied that it would have made a good shot. He said that he could have sat near the plant and held the branch in his hand. At that moment, like a fool, I said, "but Karimbhai, there are so many plants on the roadside, would a small twig cause any harm to anyone?" This made Karimbhai even more angry. It took us a while to understand what we had known but not internalized, that in nature, there was nothing too much, everything had its own place in the ecological cycles. If one did not need a plant or a twig for healing someone or for meeting some other such basic needs, then there was no case for extracting it from nature. After that incident, I could not pluck a blade of grass or a few leaves standing besides shrub to just play with them, as I used to do earlier. Every time my hand goes towards plucking a blade of grass, I find Karimbhai asking me, do I really need it. The frugality at its core is also a spiritual act, which Maslovian hierarchy converts into a materialistic ladder. These are different worldviews. We teach Maslow but not Gandhi in most management institutes. This is indeed a Gandhi in action.

- c. *Whether the nature of motivation influences the incentives or disincentives for diffusion?* A senior colleague in Honey Bee Network and editorial advisor for Honey Bee newsletter, Riya Sinha asked this question in her Ph.D thesis. It was very instructive to note that the motivation to solve one's own problem did not necessarily come in the way of sharing it widely with the community without any restrictions or inhibitions. The innovations pursued for *Swantaya Sukhayah: i.e.,* for one's own happiness may indeed enrich the public domain in a very empathetic manner. At the same time, many innovators innovate to solve others' problems. They may not mind others copying from them but a word of acknowledgement is always appreciated. As a part of her thesis, Riya got together with the help of GIAN a group of imitators and incremental innovators who had innovated around a lead technology developed by Mansukhbhai Jagani. The motorcycle based ploughing machine was also patented in US and in India. Mansukhbhai had no intention to restrict others from adapting his innovation to meet local need. Various innovators had made small improvements in the original design to suit local needs and social ecological context. An idea of *technology commons* evolved in this meet implying that IPR should not be used to come in the way of people earning their livelihood. At the same time, the whole bundle of lead innovation and a family of incremental innovations around it should be licensable to the firm with the permission of the lead innovator and the commons. No other individual should have the right to license any improvement to a firm since it is a collective right and is derived from the lead innovation. The concept is still evolving but it humanizes the restrictive domain of IPRs such that neighbourhood economy gets enriched by such innovations in technological as well as socio-cultural domains.

- d. *Should national science, technology and innovation system be fertilized by the grassroots innovations in a fundamental manner?* Dr. Mashelkar in several of his recent writings has been pleading for expansion, excellence and inclusion in institutions of higher learning including science and technology. He has also argued for Gandhian engineering essentially implying *more from less for more*. He has advocated restructuring the Department of Science and Technology as Department of Science, Technology and Innovation [DOSTI]. While one may or may not agree with the notion of Gandhian values being used to explain a very consumptive lifestyle because he believed in a frugal and simple life. It is a different matter that Sarojini Naidu once taking a pun at Gandhiji wrote about the cost of keeping Gandhi poor. She had tried to highlight that when Gandhiji lived in harijan basti during various trips, the cost of keeping the environment worthy of his presence was very high. Perhaps, she had missed the point that Gandhiji was making. He didn't want two standards of sanitation and social security, one for himself and one for others. This lesson has been almost completely lost. Gandhian spirit of experimentation, innovation and universal access can transform the agenda of science and technology in the country.
- e. *Do Gandhian methods still matter?* Having pursued shodh yatra in different parts of the country, I and my colleagues are indebted to the common farmers, students, innovators and others who take eight to ten days out of their life every six months to walk with us and learn from people. Now a days, even in the very important social functions like marriages, people do not get together for more than a day or two. Taking so much time out at one's own cost is itself a statement. When such walks are pursued in difficult regions where alienation of youth and others from the state is so intense, a new idiom of dialogue begins. In our society, it seems there is a tremendous respect for people who walk particularly in uncomfortable conditions. That apart, these walks have given us an extraordinary opportunity to observe and learn from the genius at grassroots. In Bastar, we noticed that local tribal communities *bury* a healthy person after death but *burn* a sick person. We also noticed that they make a memorial at the burial site of an extraordinary role model such as a herbalist, healer, teacher, etc. Idea perhaps is to inspire the younger generation about the standards of excellence achieved already which have to be surpassed in future. During the walk in Puruliya and Bankura in West Bengal, we noticed a tradition in one of the villages of keeping the most beautiful terracotta horses crafted by a potter offered to an old banyan tree. The purpose seemed similar, to showcase the current standards of excellence in a public place so as to create points of reference for the people passing by. We have come across extraordinary creativity, innovation and empathetic institutions all over the country. The fact that none of these find any place in our educational system is a sad commentary on Gandhian hopes. He believed that many core values of human life could still be found in villages. With rapid urbanization, the challenge before us is to create some of the communitarian platforms evident in different villages even in urban areas. It is not to deny the extreme exploitation, social injustice and gender discrimination that takes place in many villages just as in cities. Having said that, in many villages people do not let someone sleep on hungry stomach. But situation is different when the whole village is under stress.

There is a need to redefine the scope of Gandhian values, institutions and symbols in the contemporary context.

- f. *Why did Gandhian institutions fossilize in the last six decades?* A person who had the wisdom to nurture a large number of leaders, each one of whom was equally capable of becoming Prime Minister at the time of independence, somehow created institutions which could not nurture the same spirit. Engagement with youth and involvement of critical thinking became difficult in many of these institutions. Perhaps the subsequent governments found Gandhi as a symbol more valuable than Gandhi as a spirit of service. We realized this firsthand in Champaran where Gandhiji had gone to study the sufferings of indigo growers and their exploitation by British. He was also invited there to have a national convention to discuss the philosophy of education in the future. The seeds of basic education [*buniyadi taleem*] were sown at this convention. Mathura Bhagat, who served Gandhiji and took care of his needs during Champaran session still cleans the memorial everyday. But his grand son cannot study in the Navodaya Vidyalaya set up in Brindavan village (the village where first buniyadi taleem school was set up by Gandhi Ji in 1939, see Honey Bee Vol 20(1) January - March 2009, 4-6). These are the paradoxes which define India of his dream today! The grass was growing on the walls and the roof of several rooms in the first basic education school set up by Gandhiji. This is not atypical. Practice of Gandhian values is indeed not easy. But, pursuit of those values is not so difficult either, if we decide to do so. Our polity seems to have abandoned this journey and yet we have to keep trying the action research approach of Gandhi. We had an idea competition in this school and got many new ideas. But this world was not connected to the world of practice outside. May be while thinking about education, the idea of practice while pursuing abstract learning was not internalized by the thinkers. Today, vocational education is considered an alternative for less brilliant student and the so-called mainstream education is supposed to be devoid of any stress on practice. The IGNITE competition for creativity of children organized by NIF attracts large number of entries every year from children all over the country. The paradox of outstanding innovations by students not doing so fine academically is faced by us every year. Country has to make a choice, does it want innovators who have a bias for hand-on learning or only academics who have difficulty in translating learning into practice. Ideally, both can be accommodated. Those who are good in practice can also be encouraged to go for higher studies with bias towards hands-on learning. Gandhian spirit is badly needed in education to generate service and practice orientation among our future generation. But this is not part of educational reforms yet currently being pursued by the country.
- g. *Will Incorporating innovations in the curriculum not trigger creativity early in life?* There is hardly any lesson in the textbooks at any level, which sows the seeds of impatience in the minds of young people about various problems confronting society. Millions of women transplant paddy manually, pick tea leaves same way, extract kernel from the mahuva seeds to extract oil by using technologies, 10000 years old and yet it does not dent the inertia of elite policy makers or R&D people. Somehow, the grassroots innovators also have not been able to solve all the problems that they face. The problems of

women have particularly remained neglected. At the same time, there are a lot of problems that have indeed been solved locally and even these do not get adequate support from the formal R&D yet. This concern has to expand and thus trigger a lot of blending of formal and informal science and technology. Exposing young people at the early stage to i) unsolved problems might trigger greater empathy (*samvedansheelta*) in the future and ii) creative grassroots solutions might generate humility, curiosity and some commitment about frugal and nature friendly solutions. Don't ask, why then it is not done, we have to persist with the mandarins in educational establishment till their inertia gives way.

- h. *Will creating mobile and stationary museum of innovations help in transforming the minds?* There are a large number of science and technology parks in the country but there is not a single museum of innovations anywhere. This is one area where lots of initiatives are called for by both public and private sector. NIF is planning to create such a museum in Ahmedabad and hopes that other states will take cue and create similar platform for showcasing the grassroots innovations as well as outstanding traditional knowledge to make society creative, compassionate and collaborative. Dr Vijay Kelkar, Chairperson, 13th Finance Commission had given a book on Innovations *from* and *for* each state apart from outstanding traditional knowledge practices for health, sustainable agriculture, and livelihood to each chief minister and leader of opposition apart from other dignitaries during his state visits. Many of the chief secretaries who took over their position later have no memory of these books. These museum should also provide workshops for visitors to try things out and overcome the hesitation that our education system so brilliantly builds, in taking initiatives to try unconventional solutions. The mobile museum on train, buses, trolleys and even through mobile phones is the need of the hour. When Gandhiji advised us to think of the last person while devising any policy or programme, we perhaps did not realize an implicit message in it. We should not merely deliver the services to such bypassed people and places but also learn from them. In Bastar, we found an interesting solution to overcome the design defect in the hand pump which we did not notice anywhere else in the country. Such platforms will help in changing the patronizing mind set and hopefully create more humility and curiosity to learn from knowledge rich, economically poor people. Who knows participatory design and delivery may become a reality rather than just a rhetoric, notwithstanding all claims to inclusion.
- i. *Will Gandhian advice to youth for social engagement be still valid?* Once a group of young people went to Gandhiji and asked his advice for taking up a rural development activity. Gandhiji replied that he had never lived in rural areas, so how would he advise. The students were insistent. Many people believed that Gandhiji would have a solution for any problem. Gandhiji himself did not believe in this. But, on seeing the persistence of students, he offered to mention what he would do if he were to work in a rural area. He would go to a village and decide in which sector should he begin. Assume that he had to start with animal husbandry. He would find the most efficient milk producer, whose cows or buffaloes yielded the maximum milk. Also, who was known for taking best care of his animals. He would document all

the practices that the family members in the house followed for upkeeping the animals. How did they stroke the animal, when did they feed, what did they feed, how far they took animal for walk, etc. Then he would document the similar practices for common people with average level of milk production. Bridging the gap between the two set of practices was his agenda of action. If only we had heard his advice almost 100 years ago, we would not have to import the concept of *best practices* from the west. I am not suggesting that Gandhiji was genius in every aspect of management. But, his genius in many respects has not been adequately appreciated. Last year, I met an engineering student from SVNIT Surat who was very keen to invite me for a lecture. I refused because I didn't find much action after such lectures. He challenged me to give him a goal to be accomplished before I reconsider his request. I had been planning to build a portal of all the engineering projects done by the students in their final year and link these students with the unsolved problems of society as well as with the grassroots innovations waiting to be augmented. I had not accomplished much in the previous six years since I began to talk about it. Hiranmay Mahanta mobilized his friends and pooled 5000 projects in a month as per the target. I of course went for a talk, appreciated his efforts and requested the faculty to support such initiatives, which bring science, technology and society together. But, that was not the end of the story. Hiranmay asked what next. I said 10000 projects. Once he finished that, I doubled it again and very soon within six months, with the support from SRISTI, he and his friends had pooled more than 100,000 projects from over 500 institutions and pursued by 350,000 students at techpedia.in. The technological mind of the country had been mapped in a manner unprecedented in the history. No western country would offer such information at an open access platform. Wouldn't it make it difficult for a student to do what has been done before? Wouldn't the originality quotient go up? Now the mission is to mobilize mentors who would guide the students to scout for the problems of MSME as well as grassroots informal sector and link them with the students projects. Learning from the local best practices, augmenting them by blending with modern science and technology and diffusing them among small entrepreneurs, farmers, tribals, etc., are the challenges ahead. I still feel guilty that I had given such a small target to a person who was capable of accomplishing ten times what I had asked. Isn't that a major problem with an Indian mind? We expect less and we get satisfied with too little too early. I am not denying the need for frugality, but I certainly think that frugal means can achieve very major milestones in the society. During the last decade, NIF expanded its database ten times in ten years with its budget going down every year. SRISTI not only spawned GIAN, NIF but also techpedia.in, each becoming a point of reference in its field globally. Most colleagues in SRISTI cannot read and write in English and are paid the least among all the institutions that they have helped in creating. What motivates them further to organize SATTVIK, a traditional food festival for last six years at IIMA campus to stimulate demand for those crops, varieties, traditional recipes which are disappearing fast despite being more healthy? More than thirty to forty thousand people visit the festival and interact with the creative communities. NIF organizes an exhibition of innovation on the occasion to create wider awareness. Gandhian spirit when pursued in action, provides its own reward. With least resources, maximum uncertainty, colleagues in

SRISTI perhaps are also least anxious. They don't worry about organizing shodh yatras in regions where conflicts are so intense. May their breed grow.

There are many more examples I could have shared to underline the continued relevance of Gandhian philosophy and practice. Let me close by recalling a moment of great dilemma I faced while preparing for a talk on Gandhiji's birthday in Rashtriya Shala set up by him in Rajkot. People much more worthy than me had given this talk in the past. I was not sure that I was competent or qualified to deliver this talk. There were many things in my personal life which didn't tally with Gandhian values in the strict sense. I do enjoy a glass of beer once in a while and I don't always follow a disciplined life in day to day existence. Having been put in a situation like this, I wondered what to do. While talking to one of my colleagues in office, I asked as to how do we make gold ornaments. As is well known, if ornaments have to have stability, then gold has to be mixed with some impurity. Discussing further, I discovered that the diamonds can be held in place by gold having even more impurity. Next day, I justified my qualification for talking about Gandhiji by referring to the Gandhian thought as diamonds. To hold them in my hand, I had a higher quota of imperfection and impurity.

That is the beauty of Gandhian thought. It does not make impossible demands on those who wish to pursue it with noble intentions. Gandhi was imperfect. He made many mistakes and he wanted to have the right to make mistakes. But, his stubborn and headstrong attitude was embedded in *karuna*, i.e., the compassion and kindness dissolved in the most noble human spirit. Let us hope that instead of building more memorials to his memory [as is being attempted at Dandi by spending hundreds of crores of rupees], we will learn from his values and try to impregnate our polity with his ideals. The former is more costly but will still be done. The latter is easier, does not require much money but requires much more effort. Who said making a difference was always very difficult.