Dr R K PACHAURI The visionary Institution builder

Dr R K Pachauri: 20 August 1940 – 13 February 2020

2018	World Sustainable Development Forum			
2016	Protect Our Planet Movement			
2010	Order of the Rising Sun, Gold and Silver Star, Japan and			
	Order of the White Rose, Finland			
2009-12	Founding Director, Yale Climate and Energy Institute			
2008	Padma Vibhushan for services in the field of science and engineering			
2007	Nobel Peace Prize to the IPCC			
2006	Officier de la Légion d'Honneur, France			
	2002–15	Chair, Intergovernmental Panel on Climate Change		
	2001	Padma Bhushan for contributions to the field of environment		
		1994–2016 1983–94 1982–83	TERI, India Habitat Centre TERI, Jor Bagh TERI, India International Centre	
		1975-81	Administrative Staff College of India, Hyderabad	
			1972–74	MS and PhD in Industrial Engineering and Economics, North Carolina State University, USA
			1965–71	Diesel Locomotive Works, Varanasi
			1959–63	Indian Railways Institute of Mechanical and Electrical Engineering, Jamalpur

1953–58 La Martinière College, Lucknow

Dr R K PACHAURI The Visionary Institution Builder

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TERI Alumni Association

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TERI Alumni Association

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Preface

Dr R K Pachauri passed away on 13 February 2020. He left behind a sea of memories and important lessons. Some members of the TERI Alumni Association (TAA) felt that the association should publish a book – a commemorative volume – to capture those memories and learnings. The contributors to this volume are all members of the TAA (with the exception of Dr Saroj Pachauri and the Chairman and two Members of TERI's Governing Council).

The contributions are arranged in the order of the year in which the contributors joined TERI: this is shown as part of their affiliation; for those who left TERI subsequently, the affiliation also shows the position they occupied at the time of leaving TERI whereas for those who continue to be in TERI at present, it shows their current position in TERI. All the contributors are also listed separately, in alphabetical order, along with their email ids.

The editors wish to thank Ms Sangeeta Badhwar, Joint Secretary, TAA and Mr Shyam Sunder Nayar and Ms K Radhika, TERI, for their valuable support. Thanks are also due to Ms Anupama Jauhry, Mr Santosh Gautam, and others of the team in TERI Press for their help in the design and publication of this book. Dr Veena Joshi graciously shared a copy of the handwritten note addressed to her by Dr Pachauri (see page 233).

Our grateful thanks to all the contributors for taking some time off from their busy schedules to share their thoughts and helping us to create this book.

New Delhi August 2020 Yateendra Joshi Vibha Dhawan Rakesh Kacker

Personal Reflections Over a Lifetime

Patchy was an exceptional individual! Exceptional in many different ways: he was an exceptional leader; an extraordinary visionary and an incorrigible optimist; a rare institution builder; a caring mentor, a supportive colleague, and a good friend. Patchy combined many different qualities, which made him a memorable professional leader. With his warm and caring predisposition, Patchy touched numerous lives wherever he went, internationally and nationally, and most of all within TERI.

However, before Patchy joined TERI we lived in the USA where he worked for his PhD, while I worked to put bread on the table. I had a very demanding international position that involved long hours of work and a heavy travel schedule. I was so immersed in my work that I was inclined to give up my PhD undone. Patchy would not hear of it! He made sure that I submitted my thesis in time and defended it—despite the distractions of my job and my family responsibilities. Without Patchy's unfailing support, I could not have continued my career for which I will always be beholden to him.

TERI was Patchy's first love! He devoted his life to building this institution. TERI was his life's dream. As his wife, I remained a second figure who tried to support him in fulfilling his dream.

Beginning with a small office in rented premises in Jor Bagh, a few years later TERI was housed in an imposing six-storey building in the India Habitat Centre. As it outgrew that space, more offices were rented. TERI's grass-roots research results were reflected in its programme for informing national policy. Some of these learnings permeated the international arena through Patchy's role as chairman of IPCC, the Intergovernmental Panel on Climate Change. In this role, on behalf of IPCC, he was awarded the Nobel Peace Prize in 2007, which exalted TERI to a new level.

Through those years, we hosted many parties at our home for his colleagues from overseas and India. TERI's programme was exceptionally vibrant and dynamic comprising numerous workshops, conferences, and other events, which involved policymakers, researchers, and practitioners from far and near. At these informal get-togethers at our home, there was much comradery, fun, and enjoyment, which mirrored Patchy's own humorous and lively personality.

Patchy conceptualized a programme, which he named POP (Protect Our Planet) Movement. This is a movement to involve youth in efforts to address climate change. He strongly believed that intergenerational change would be needed and that the responsibility of making a difference should be vested in young people also, because the impact of climate change would be felt most by the coming generations.

The World Sustainable Development Forum (WSDF) was set up in tandem with the POP Movement and includes high-level politicians, scientists, businessmen, artists, and others. This forum provides a platform that enables these stakeholders to discuss important issues of climate change but, more important, to initiate actions to support climate change. Recognizing the complementarity of the programmes, WSDF and the POP Movement, it soon became clear that the two should interact to synergize their impact. Thus, when WSDF convened in Mexico in 2018, the youth from the POP Movement were involved as active participants. And in 2020, when WSDF met again in Mexico, 1200 young people from approximately 27 countries joined. The engagement of young people in the discussions at this platform inspired the members of WSDF to move their agenda forward. In turn, youth from the POP Movement were encouraged to undertake more projects, which were meaningful in their respective countries to promote climate action.

Over the past two years WSDF and the POP Movement have been further invigorated to pursue a common agenda. The programmes these organizations are undertaking will continue to grow and develop over the coming years. This may be viewed as a befitting legacy of Patchy for his lifetime of work.

Life has its brighter and darker moments. In his last years, Patchy's health began to fail. His work, however, never ceased. He continued to work relentlessly to the end. In this period, we spent many close moments in each other's company. I experienced a rare companionship with a loving and caring husband. Since he could not travel, we were together most of the time. He got engaged in joint activities for which he had no time earlier. For example, we saw some τv serials, including Doc Martin and the Crown, which we both greatly enjoyed. He pushed me to publish and launch a book I was writing, a biography of my work life. I will never forget that time—those precious moments. Sadly, that period was very short lived. He left us just when he had time to be with his family. His departure was a shock, difficult to overcome. I find it impossible to believe that Patchy is not with us!

Saroj Pachauri

A Game Changer

Dr Rajendra Pachauri and I were friends for over four decades, even before the time he came to TERI. I remember how much he helped us in the Planning Commission when we were coping with the many challenges our energy policy faced in the 1970s and 1980s. Later, when I joined the United Nations and led its work on sustainable development, our contact intensified, particularly after he took over as the chair of the Intergovernmental Panel on Climate Change. His tenure in the IPCC as a chair was outstanding and the Fifth Assessment Report that was prepared under his leadership led to a major turnaround in the priority accorded to climate issues in public policy.

Because the idea of sustainable development has been accepted by such constructive institutions as TERI, it is now quite rare to come across any serious discussion of development that does not recognize the central importance of the need to conserve natural resources.

> My engagement with him increased substantially after I returned to India in 2004, when he made me a Distinguished Fellow in TERI and got me engaged in the World Sustainable Development Summit.

Let me therefore focus on three key areas of his many achievements: the establishment and nurturing of TERI, his contribution to the Intergovernmental Panel on Climate Change, and his efforts, through the World Sustainable Development Summit, to broaden the support from political, corporate, and research communities to sustainable development.

Dr Pachauri built up TERI from a small start-up research institution to the largest and India's most wide-ranging producer of research, technology, and policy analysis in the environment, energy, and resources. He built up an organization that has international standing and that has played a powerful role in spreading the practical dimensions of sustainable development in public policy and corporate strategy. What is particularly striking is the strong emphasis on the impact on people's lives and the need to connect environmental action with their needs, as is typified in the Lighting a Billion Lives campaign that Dr Pachauri launched in 2008.

TERI has brought together environmentalists, engineers, economists, and social scientists both for the purposes of analysis and for finding technical and policy solutions to the challenges of sustainability. Sustainable development is a bridge concept essentially designed to bring together environmentalists and developmental specialists, who earlier tended to look at each other with a degree of suspicion. But because the idea of sustainable development has been accepted by such constructive institutions as TERI, it is now quite rare to come across any serious discussion of development that does not recognize the central importance of the need to conserve the natural resource base on which development depends and the fact that a significant part of what we should be working towards is reflected in the environmental quality of life that people experience (water, sanitation, and air quality, among others). Similarly, on the environmental side, it is rarer and rarer now for environmental groups or activists to take a purely conservationist stand; even the purely conservationists have now recognized that their concerns about conservation of species and biosphere cannot be served unless development concerns are simultaneously addressed. This is an area where, in terms of changing the mindsets of activists, the work of TERI has been most useful.

Dr Pachauri's most significant contribution was to get the IPCC to be more categorical about its conclusions.

Let me now turn to Dr Pachauri's contribution to the global dialogue on climate change. Dr Pachauri took over as the Chair of the Intergovernmental Panel on Climate Change in April 2002. Sustainable development requires action before the consequences of wrong choices can be seen, and this means heavy dependence on scientific analysis of evidence and projections. Thus Principle #15 of the Rio Declaration notes: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

This definition includes two key ideas.

- Scientific uncertainty should not preclude preventive measures to protect the environment.
- The use of 'cost-effective' measures indicates that costs can be considered. This is different from a 'no-regrets' approach, which ignores the costs of preventative action.

When sustainable development requires cooperative action by nation states, as is the case with climate change, this precautionary aspect requires consensus building across diverse scientific communities. This was the reason why the UN set up the IPCC. For over a decade the IPCC worked at building this consensus, but it was not until the third assessment report came out in 2002 that the IPCC said that since the mid-20th century, most of the observed warming is 'likely' (greater than 66% probability, based on expert judgement) due to human activities. Until Dr Pachauri took over, the primary focus of the work of the IPCC was on securing agreement among scientists and that lead to a lot of caution in how conclusions were phrased as can be seen in the third assessment report's statement about human impact.

Dr Pachauri's most significant contribution was to get the IPCC to be more categorical about its conclusions. Thus the Fifth Assessment Report, issued in 2014, said that human influence on the climate system is clear. It is extremely likely (95%–100% probability) that human influence was the dominant cause of global warming between 1951 and 2010. Dr Pachauri also focused attention on communicating the conclusions to policy makers and negotiators, who were generally not scientists by training. The Fifth Assessment Report and the organized outreach to convey its conclusions played a major role in securing the consensus in the Paris Agreement.

Climate change brought sustainable development into mainstream policy. Addressing the challenge of climate change necessarily required a re-examination of many areas of policy, most particularly energy supply and demand. It engaged the attention of not just governments but also corporate houses, who saw in it both a challenge and an opportunity. The sense of confrontation between environmental activists, corporate houses, and governments continues, but many corporate houses are now ready to make common cause with activists, particularly in this area of energy development.

The challenges posed by climate change led many of us to believe that a serious dialogue and partnership between governments, corporate houses, research institutions, and activists are essential. This is what led Dr Pachauri to launch what is now the World Summit for Sustainable Development, organized every year in Delhi by TERI. This summit brings together policymakers in governments, corporations, research institutions, and financing institutions in a dialogue that opens up new options and new partnerships. But its most valuable contribution is the injection of the concept of sustainability into the discourse of corporate policy. If environmental excellence is today an expectation of how a soundly managed corporation should be run, a significant part of the credit goes to institutions like TERI.

Sustainable development requires a change in the way that the development game is played. First, to secure sustainability we have to combine knowledge and expertise from multiple disciplines and that requires institutions that bring together ecologists, economists, engineers, and social scientists. TERI is one such organization. Second, we need to connect scientific research, particularly applied scientific research, with the challenges of sustainability. This is very much the focus of TERI's technological research work. Third, the realization of sustainable development will depend not only on governments but also on corporations and subnational entities including local authorities and community organizations. This requires a systematic dialogue between them on what the challenges are and what the answers could be. Dr Rajendra Pachauri's work in building up TERI, in his leadership of the IPCC during a crucial phase of its work, and his launch and support for the World Sustainable Development Summit have contributed greatly to this end and that is why in my estimation he is the game changer who brought sustainable development closer to practical reality.

> NITIN DESAI Chairman, Governing Council (2019–)

An Institution Builder in Action

The reminiscences in this volume bring out the multifaceted personality of Dr R K Pachauri. We, the members of the TERI Alumni Association, obviously remember him as the builder of TERI, including its many campuses across the face of India, and most of the write-ups in this volume refer to our common experiences in TERI. I have found it amazing that while Dr Pachauri was building up TERI, he was also building up a number of other institutions at the same time.

It is to Dr Pachauri's credit that he immediately saw the benefits of a collective facility, and the need to work towards detailing and defining the structure and nature of the collective facility, which was soon named as the India Habitat Centre.

> I think the most important of the institutions that he helped create have been the India Habitat Centre (where the TERI headquarters are located) and the Bangalore International Centre. The India Habitat Centre has matured and developed into an institution par excellence which, both because of its institutional structure and its commercial underpinnings, has stood the test of time. The Bangalore International Centre, after careful nursing by TERI and Dr Pachauri for over 17 years, is now settled down in its own premises (which are a stone's throw from TERI's offices in Bangalore) and has started stretching its wings. I have had the honour of succeeding Dr Pachauri in the management of both these institutions, and I think it is important to focus on his capabilities in bringing together a range of stakeholders towards a common goal, and then working with them to ensure that the institutions have a full and vibrant life.

The India Habitat Centre was conceived nearly three decades ago, when TERI, along with a number of other institutions, was allocated land on Lodhi Road to build their offices. Very soon, the idea of a collective set of offices to house all the institutions was mooted, initially by Mr S K Sharma, who was then the chairman and managing director of HUDCO. And soon afterwards, it was suggested that this facility should also include a restaurant and a hotel, apart from collective facilities to host workshops, conferences, etc. It is to Dr Pachauri's credit that he immediately saw the benefits of a collective facility, and the need to work towards detailing and defining the structure and nature of the collective facility, which was soon named as the India Habitat Centre. It is important to note that at that time, institutions were vying to create their own brick-and-mortar buildings, which could be monuments to their own importance and to the vision of their founders. I think this commitment to create a collective facility signalled Dr Pachauri's greatness: he saw the benefits of a collective facility in the heart of Delhi as compared to those of individualized office buildings. It also helped that the Gual Pahari campus of TERI was under development

at that time, and consequently the individualized showcasing of TERI's vision and expertise could be displayed there, and buildings could come up there one at a time, rather than necessitating a one-time display of TERI's skills and capabilities.

Dr Pachauri believed and practised that institutions needed to create a place for themselves and their work well before they start investing in brick-and-mortar facilities. This is completely at variance with the accepted and received wisdom: the building of offices and facilities is seen as the first challenge of new institutions; developing a work plan which is meaningful and relevant comes later.

> However, the decision to invest in the IHC meant that Dr Pachauri had to convince Mr Darbari Seth, who was the chairman of TERI, about its utility. At that time, Mr Seth was convinced that TERI's future, in terms of offices, buildings and workshops, was in Gual Pahari, and was not convinced, at least not in the beginning, of the advantages of locating TERI's offices at the IHC and of the benefits of the collective facility. However, Dr Pachauri persuaded him, and Mr Seth came to both admire and appreciate the Lodhi Road offices of TERI. This was important because at that time, TERI was building infrastructure both in Gual Pahari and at IHC, and was under great financial pressure. Mr Seth's understanding and munificence helped TERI meet its commitment although it meant many sleepless nights for Dr Pachauri.

On the other side of the spectrum, Dr Pachauri also managed the many stakeholders in the construction of IHC. The design and architecture of the IHC speak of its timelessness, and all of us owe a gratitude to Dr Pachauri and the IHC leaders for choosing Mr Joseph Stein as its architect. This was an inspired choice, although it created headaches of its own, including Mr Stein's refusal to incorporate solar energy devices into the design-it was with great difficulty that he was convinced of the aesthetic and functional benefits of the solar canopies in the forecourt, which provide dappled sunlight there, making it pleasant both in summers and in winters. In his interactions with Mr Stein, Dr Pachauri also worked towards ensuring that TERI got a block on its own. This was not simple, both because it meant making a block which was smaller than the other blocks, as well as ensuring that this block was not too large and thus financially viable for TERI. Like Goldilock's porridge, we are, for the past 25 years, enjoying this block which is neither too large nor too small-and it is all our own.

Another major issue was operationalizing the IHC with a robust institutional structure with strong commercial underpinnings. TERI, as the second largest owner of space in IHC, would be permanently represented on its governing board. Consequently, today, HUDCO (which is the owner of the largest space in IHC), National Housing Bank, and TERI are the three permanent members on the IHC Governing Council, with the other institutional members being represented on the council on a rotational basis. Later on, as IHC became operational, Dr Pachauri insisted that the interests of the institutions who invested in IHC be protected since they invested in this facility, often at great odds. Consequently, the governance structure of IHC mirrors the founding institutions, who weigh the risks and rewards of institutional interventions that continue to be needed at IHC.

This focus on governance and the commercial viability of the IHC enterprise, was, in a sense, very typical of Dr Pachauri, and marks his management of the development of TERI as well.

On the commercial side, IHC stakeholders wisely decided to build on a commercial relationship that would underpin the services provided by the restaurants, the meeting facilities, and the hotel, rather than trying to run it themselves. This brought the rigour of commercial competition into the picture, and continues to ensure the viability of the services that they offer since the reality is that IHC competes with a number of service providers in each of these service areas, and in which the IHC institutions themselves have little expertise. The India Habitat Centre also decided, after a fair amount of deliberation, on the relationship with the service provider, which has been Old World Hospitality for all the years of IHC's existence (despite some early teething troubles, which Dr Pachauri handled with his usual magnanimity) being based on a sharing of the revenues, rather than of the profits. This precludes all the difficulties in assessing expenditures and profits, and enables a good estimation of the revenues that would accrue to the IHC in a year (except in extraordinary circumstances, as in the current COVID pandemic). This focus on governance and the commercial viability of the IHC enterprise, was, in a sense, very typical of Dr Pachauri, and marks his management of the development of TERI as well. However, what is different is that in IHC, he had to carry all IHC stakeholders with him in this process, especially at a time when the ruling paradigm favoured self-operation and the associated micromanagement, rather than building in competition, as well as institutional governance with built-in responsibility at different levels.

The second institution that Dr Pachauri nurtured is the Bangalore International Centre. This was an idea that was proposed by various Bangalore residents, including Professor S L Rao, who had very strong ties with TERI and Dr Pachauri. Dr Pachauri immediately saw the merit in the idea of a facility in Bangalore modelled on the India International Centre or the India Habitat Centre, and immediately committed to support this process. It has, however, been a long journey from the initial idea to garnering up people, money, and government support for the creation of the BIC. For over 17 years, Dr Pachauri and TERI provided space in TERI's Bangalore office for the BIC to carry out its activities. Consequently, the Centre had an identity and a presence well before it became a brick-andmortar facility. I believe that this is one of the qualities of Dr Pachauri, who believed and practised that institutions needed to create a place for themselves and their work well before they start investing in brick-andmortar facilities. This is completely at variance with the accepted and received wisdom: the building of offices and facilities is seen as the first challenge of new institutions; developing a work plan which is meaningful and relevant comes later.

Together with a few leading Bangalore residents (amongst them Professor S L Rao, also including Professor J Philip and Mr Girish Karnad), Dr Pachauri sought to create both a membership base of BIC as well as a regular programme schedule. He brought in Mr Pronab Dasgupta (who had recently retired as Secretary to the Government of India, Ministry of Education) to lead the TERI Bangalore office as well as the BIC. This made it convenient to schedule BIC programmes in the TERI building, and also for the BIC director to oversee the construction of the new BIC facility.

Later, along with others, Dr Pachauri convinced the then chief minister of Karnataka, Mr S M Krishna, to allocate land for the BIC (which is located some 150 metres beyond the TERI building in Bangalore) and convinced Mr Krishna to lay the foundation stone as well.

It is a matter of credit to Dr Pachauri that he and the founding members (who were the 'life trustees' of the BIC) were able to enthuse and motivate a set of committed and dedicated BIC members and bring them in as BIC Trustees, who then steered the construction of the BIC facility and raised resources needed to build it. This institution of trustees in BIC is somewhat different now as compared to what it was earlier, but the new structure continues to have TERI as a permanent member, in recognition of the sterling role it played and continues to play in the evolution of BIC.

The BIC building is now operational, but has yet to be formally inaugurated. A plaque at its entrance commemorates Dr Pachauri and his colleagues who helped create this institution. Another board thanks TERI for the support that it provided in nurturing the BIC.

A fine recognition indeed!

AJAY MATHUR Senior Fellow (1986–2000) and Director General (2015–)

Starting with a Cup of Tea in Jor Bagh

1993

This is when we first met. I was visiting Dr Pachauri in his office at Jor Bagh, New Delhi. There was a choice of teabags. Coffee, hot water and munchies were close at hand. Outside, it was wet from the monsoon of an August.

My meeting with Dr Pachauri was part of a visit from Lucknow to New Delhi when I was scouting for ways and means beyond routine templates on sustainable development. I was then working as Environment Secretary in the State Government and Chairman of the U P Pollution Control Board. The engaging afternoon with Dr Pachauri was a break from drafting legal affidavits at a time when industrial units faced closure in a court-directed pollution mitigation drive.

Our conversation took in stride foundries and blast furnaces, glassworks, refractory bricks, acid rain and the Mathura Refinery's emission trajectory, as well as the standing of public interest litigation cases in the emerging environmental jurisprudence. A stray remark led us into a flurry on the logic for the dimensions of the Taj Trapezium Zone.

The Taj Mahal's vulnerability to air pollution had put many in a tizzy. It was in this connection that Dr Pachauri got interested in the exchange that I was having with Roorkee University and the CSIR's National Environmental Engineering Research Institute in Nagpur.

I remember how we pulled in an assortment of contemporary subjects to make our discussion an interesting to-and-fro. Apart from the Rio small talk, there was the Babri Masjid and President's Rule.

1995-2002

This period saw several occasions of well-knit functioning with Dr Pachauri when I was with the Central Government as a Joint Secretary in the Ministry of Environment and Forests working in the areas of policy and law, pollution control, management of hazardous substances and climate change. We relied on TERI for an Asian Development Bank sponsored study on climate change impacts in India. This was followed by other projects on greenhouse gas inventories, adaptation, mitigation in various sectors and vehicular pollution.

Dr Pachauri's vision led to the building and strengthening of a multifaceted TERI with an expanding presence. The Ministry supported Dr Pachauri's nomination as Vice Chairman of the IPCC. He became IPCC Chairman later, which coincided with the time when India hosted the Eighth Conference of the Parties (COP) to the UNFCCC in Vigyan Bhavan, New Delhi. We consulted each other in my role as Special Adviser to the President of the COP when the Delhi Ministerial Declaration on Climate Change and Sustainable Development was adopted.

The preparatory work for the COP catalysed collaboration between the Ministry and TERI. There was a comfort level with Dr Pachauri's communicative style when the Ministry was identifying institutions and experts for energy and environmental issues. There would always be something to talk about, whether it was Al Gore's perspective on the Kyoto process or the impact of the Asian Brown Cloud on the politics of climate change.

Dr Pachauri, an enabler, represented TERI's willingness to join in with the Ministry in various initiatives. This included reporting on emissions in the industrial and building sectors, conservation and efficiency in energy use, pollution control modelling and energy audit.

2008–2010My interface with Dr Pachauri during this period was in my capacity
as Secretary to the Central Government's Ministry of Environment and
Forests. Among the subjects of interest to TERI was the National Action
Plan on Climate Change.

TERI'S Delhi Sustainable Development Summit provided a platform to showcase the work under way for the Action Plan's implementation. This was also the period when the Ministry went the extra mile for bolstering Dr Pachauri's working wherewithal as IPCC Chairman. The IPCC released its fourth and fifth assessment reports during Dr Pachauri's chairmanship.

Dr Pachauri handled the spotlight on the high table with TERI's calendar of events now increasingly attracting scholars, innovators and aspiring knowledge contributors. Over the years, Dr Pachauri's outreach kept me abreast of flagship initiatives like Lighting a Billion Lives and the leads being taken in areas such as bioremediation or nano-science applications.

Dr Pachauri had it in him to nurture associations, promote collaborations and take institutional effort to the next level. Our respective efforts in distinct working spheres saw both resonance and dissonance, but there was a oneness of purpose that ensured productive give-and-take and value addition.

- 2013It was a function at Lucknow's La Martinière College where Dr Pachauri,
an 'Old Boy' of the school, was invited to inaugurate the Alumni Office. I
was also there as an alumnus. Dr Pachauri and I walked together on our
way to the ceremony via the locker rooms and dormitories of the boarding
school. We reflected on the flood protection earthwork in the visible
distance that had led to the drying up of the school lake impacting the
eighteenth century architectural façade. We shared our stories about the
river Gomti in spate with boats plying on Lucknow's inundated streets in
the days bygone.
- 2019I saw Dr Pachauri in October. It was a Dussehra season wedding
reception at the India Habitat Centre, New Delhi. Effusive in his greetings,
Dr Pachauri was well turned out. We touched upon stubble burning,
Earth Day and TERI's collaboration with Deakin University. Dr Pachauri
spoke about the Protect Our Planet Movement and the World Sustainable
Development Forum. He outlined his ideas about these initiatives in the
spirit of flagging the point that in the domain of environmental protection
there would always be some unfinished business to be addressed.

One more word Dr Pachauri's work, whether for TERI OT IPCC, is well recognized. Ribbons of honour, decorations and institutions testify to this. There are national awards. Nobel accolades is part of the centrepiece. At the same time, Dr Pachauri was mindful of the pathways still remaining to be lit. This surmise comes from my last exchange with him. As I go back over the years for a recall of my moments with Dr Pachauri, there is the satisfaction of having sparked an equation that lasted. It had begun with a cup of tea in Jor Bagh. The connection, it would appear, still continues.

VIJAI SHARMA Member, Governing Council

A Visionary

My association with Dr Pachauri started in 2008 when I came to Delhi to work in the Ministry of Earth Sciences (MOES). From the first meeting itself, we became very good friends, sharing a common interest in issues related to climate change. He was then the chair of IPCC and we at MOES were deeply engaged in developing an earth system model. We used to discuss many topics related to climate change and its impacts specifically on developing countries. Dr Pachauri brought the topic of climate change in focus particularly with decision and policy-makers as well as political leaders. Under his dynamic leadership, IPCC contributed immensely to world peace and was awarded the Nobel Peace Prize.

Dr Pachauri was great visionary and institution builder. He nurtured TERI practically since its inception and took it to the global level. Today, TERI is one of the top institutions in the world. He was a great motivator and built an excellent team at TERI. He treated his colleagues with great respect and gave them full freedom to pursue their ideas, which led to many discoveries, inventions, and innovations from TERI. He invited me to be a member of the governing council of TERI in 2013. This provided me the opportunity to understand the kind of commitment he had towards TERI. He was very passionate about TERI. He had also realized the importance of education in advancing the cause of sustainability and set up a university, the TERI School of Advanced Studies (TERI SAS). He had created a unique educational system to produce leaders to advance the cause of sustainable development.

As a person, Dr Pachauri was very humble though he used to rub shoulders with top leaders in the field of science, technology, and civil society and with politicians. I was fortunate to have such a friend, and I will cherish his fond memories forever.

> SHAILESH NAYAK Member, Governing Council, teri

Witness to the Creation: first six years in Delhi

My first meeting with Dr Pachauri was one late winter evening early in 1982 in a bar at LaGuardia airport in New York. He had suggested that we meet there. He had some time between flights and I was driving back to Boston. More than a meeting, it was an interview for a position in the in-house research wing of the Tata Energy Research Institute, to be established in New Delhi in the Fall of that year. Although it has been my only job interview in a bar, I now have no recollection of the exchanges in that meeting. I came away impressed with his pragmatism and his disregard for conventions. A few weeks later I did receive an offer to join TERI as a Fellow.

My second meeting with Dr Pachauri was during a seminar that he gave at the Massachusetts Institute of Technology a few months later, related to energy planning in India. During the question-and-answer session that followed, Dr Pachauri answered one of the questions, which he thought only partially. He turned around and posed the same question to the questioner. Again, I do not remember the question but came away impressed by his humility and his not losing an opportunity for learning. I was to witness these traits several times during the talks he gave.

I joined TERI in October 1982. At that time TERI was operating out of one room in the Jeevan Tara Building in Patel Chowk on Sansad Marg in New Delhi, offered to us by a liaison office of one of the Tata companies. It was there that Dr Pachauri helped me negotiate a 3-year lease for a house to rent in Saket. The only other employee was Ms Anupam Chopra, who was Dr Pachauri's secretary. We soon moved to two rooms at D-3 India International Centre. Charu Gadhok and Leena Srivastava were the next to join as Dr Pachauri's research associates. Mr K S Subramanian joined as Administrative Officer after retiring from Asci, the Administrative Staff College of India, Hyderabad. We soon outgrew that space and moved to a rented house at 90 Jor Bagh.

When TERI opened in Delhi it had three other functioning units: a library – known as DIC, the Documentation and Information Centre; and an extra-mural funding unit, both in Mumbai, and a Field Research Unit in Pondicherry. Earlier, when he was with ASCI, Dr Pachauri was the principal investigator of a TERI-funded research grant. TERI's consolidation phase began by stopping the funding of external projects to free up resources for intra-mural programmes. The documentation centre was moved to Delhi and those working in Pondicherry were offered employment in Delhi. It was at that time that Dr Veena Joshi and Dr V V N Kishore moved to Delhi. Dr Pachauri deserves the sole credit for consolidating TERI operations.

When our first research project proposal to measure emissions from biomass combustion stoves received only part-funding of Rs 93,000 by the Department of Environment (as it was known then), Dr Pachauri told me not to make an issue of it since at that stage we needed governmental sponsorship more than we needed the money. He also readily agreed to getting a simulated village hut constructed for experimental measurements in the building's courtyard. Professor Kirk R Smith, then at TERI on a sabbatical from the East West Center, Honolulu, collaborated with us on those early experiments.

Around that time, the Governing Council recommended that TERI also start a unit for research in biotechnology. I remember that most of the senior members of the research staff were unenthusiastic, mainly on the grounds that it was not a good fit with existing energy research in an institute steeped in physical, social, and environmental sciences. It is a credit to Dr Pachauri's vision that he was able to amalgamate life scientists into TERI and also get some of them to work on anaerobic digestion and tissue-culture-based propagation of forestry plants. To make place for the Biotechnology Unit, he along with some units moved to a bigger rented house at 7 Jor Bagh.

TERI's logo, designed by a student at the National Institute of Design in Ahmedabad, had all lowercase letters, but Dr Pachauri approved, saying he wanted TERI to have influence but always to keep a low profile.

Those were heady days. We all felt we were participating in institutionbuilding and in developing what Dr Pachauri would call TERI culture. He once showed me the draft of a letter to Mr Darbari Seth, the chairman of TERI's governing council, in which he had used the expression 'kneejerk' reaction. I suggested that using the word 'jerk' in a letter to a superior might set off unpleasant reverberations and suggested 'reflexive' instead. He readily agreed to make the change. In staff meetings, different viewpoints were not only tolerated but seemed welcome. The winning design of the logo of TERI, by a student at the National Institute of Design in Ahmedabad, had all lowercase letters, but Dr Pachauri approved, saying he wanted TERI to have influence but always to keep a low profile.

An art auction was organized in New Delhi early in 1985 for the benefit of the surviving victims of the riots in the previous year. Citing Dr Bhabha's example at the Tata Institute of Fundamental Research in Mumbai, Dr Ashok Gadgil and I prevailed upon Dr Pachauri to acquire some paintings for TERI. He gave us an indicative budget (Rs 1500 each). Dr Gadgil successfully bid for a piece of modern art by Gopi Gajwani that used to hang outside Dr Pachauri's office, and I bid for an abstract oil of a 'gurukul' scene, which used to grace the main corridor at 7 Jor Bagh.

Dr Pachauri would confide in us that as a part of his negotiations for accepting the post of a director, he had an unlimited (no-questions-asked) official entertainment budget. I remember being at several parties organized in conjunction with conferences or courses where sumptuous food was invariably preceded by a variety of drinks. Dr Pachauri meticulously cultivated anyone who could possibly be of some use to TERI, whether from the Indian Administrative Service or from the technical cadres, the ruling party or the opposition, national or international organizations.

One morning when I was driving with my wife, an autorickshaw slammed into our '59 Fiat. Before hitting us, the rickshaw had injured a pedestrian. The police impounded our car (as evidence) and kept us at the police station all day. When I called the office to inform what had happened, Dr Pachauri, aware of our naivete, sent Mishraji, TERI's worldly-wise accounts officer, to intercede. Then, as now, just to come on the police's radar was punishment enough. Mishraji succeeded in convincing the police to let us drive back home in our car. I recount this not only to indicate Dr Pachauri's concern: I am sure he would have shown the same concern had it been any other employee of the institute.

While I was visiting the US at the end of May 1988, Dr Pachauri nominated me to represent TERI at the first-ever International Conference on Global Warming in Toronto in June. I would work on global warming and climate change for the next two decades. Dr Pachauri was always ahead of the curve in noticing upcoming trends.

TERI soon outgrew all the many houses it had rented in Jor Bagh: after 90 Jor Bagh came 7 Jor Bagh, followed by 102 and 232. It became clear that being split across four locations was not conducive to maintaining cohesion. Dr Pachauri was in favour of investing in consolidating TERI at the India Habitat Centre. Although the governing council advised against it and the staff too cautioned against it – we had only recently managed to pay, with some difficulty, for the land at Gual Pahari, the original site meant for TERI's headquarters – it was Dr Pachauri who single-handedly persisted with the IHC option. Where TERI's growth was concerned, the arc kept moving monotonically upwards, his self-confidence growing with it.

The man who was a mentor to many missed having a mentor he cherished after Mr Darbari Seth's passing away. Like all larger-than-life characters in our epics, Dr Pachauri did have a blind spot. He identified himself so completely with the institution he headed that when an employee would leave TERI, he took it as a personal rejection. Lest we allow history to become an unforgiving judge, as it is wont to, let us ensure that the blind spot does not overshadow his many qualities and accomplishments. Here is a partial list: pragmatism, love of learning, strategic vision, far-sightedness, entrepreneurship, stamina, tenacity, perseverance, concern for the growth of the institute and for the welfare of its employees, his felicity in coining catchy acronyms.

Dr Pachauri was Patchy to his friends and peers, but always Dr Pachauri to us. To have been in TERI in the 1980s was not only professionally productive, it was also exhilarating and enjoyable. For that, we shall always remain grateful.

> DILIP R AHUJA Fellow and Area Convener, Energy Environment Programme (1982–1992)

The Leader Who Cared for His People

I never thought one day I would write something about Dr Pachauri in the past tense. Long after they are gone, some people refuse to die in our minds. For me, and I am sure for several others, Dr Pachauri is one of them.

Several people would have fallen for Dr Pachauri's charisma, even men. I shamelessly admit, I was one of them. I first met him when he interviewed me for a job in TERI in January 1983. Looking at his simplicity, listening to his soft voice, and all the more his killing smile, I was mesmerized. And this feeling continued each time I met him while I worked in TERI for more than 25 years, and even later.

Here are a few incidents that bring out the 'other' side of Dr Pachauri.

The bubbly young Anupam Chopra was Dr Pachauri's first secretary. She started receiving obscene calls on the office telephone. When it became unbearable, she complained to Dr Pachauri. The caller had the habit of disconnecting the phone if he heard a male voice. Dr Pachauri asked Anupam to pick up the phone and say 'hello' when the next call came, and then hand over the phone to him. She was then to run for her life out of the room. Nobody knows what he told him, but that was the last day the caller ever called on that telephone. The soft-spoken Dr Pachauri could be nasty, too, when needed.

During my initial days in TERI, Dr Dilip Ahuja organized a workshop. The invitation was cyclostyled on a Friday evening and copies were to be mailed on Monday. I, unfortunately, forgot all about the invitations that day! Only those with whom Dr Ahuja had regular contacts turned up for the workshop. When Dr Ahuja telephoned some of the others, they said they had not known about the event at all. I was asked if all the invitations were sent. I said 'yes', because that was what I believed. The postal department was blamed.

After a few days, while tidying up my desk, I found the invitations and the address list under some papers! I was shocked. I did not know what to do. Throwing them into the wastepaper basket would have been easy. But I would never have been able to pardon myself if I did that. I was advised to meet Dr Pachauri. As soon as I entered his office later that day, before I could say anything, he asked me, "So? ... If the invitations are kept on your table safely, how will people come for the workshop?" I thought he was smiling, too. He was not angry, but the sarcasm did have the desired effect. I apologized to him. He just asked me to be more careful in future. His shouting or reprimanding would have left me devastated. He knew very well when to reprimand a young colleague and when to encourage.

One day my wife came to TERI. I introduced her to Dr Pachauri. Those days one could just knock on his door and go in. After some initial chitchat he asked her, "Do you complain that your husband comes home late every day?" When she said 'yes', Dr Pachauri laughed and said, "Hmm, that is what wives are supposed to do. Husbands come home late and wives complain. He will again be late and you can continue complaining." Such was his way of mixing jokes with serious matter.

During the annual appraisals, Dr Pachauri used to meet every employee and discuss his or her performance in the past year and plans for the future. This was one occasion that colleagues eagerly looked forward to, especially those who did not have occasions to meet him otherwise. During these meetings he would invariably enquire about one's problems and also asked for suggestions. Even sweepers and gardeners used to feel at home with him. He used to come down to their level so that they were comfortable. He would listen very carefully and suggest solutions, or pacify you, or promise to look into your problems. Those were not hollow promises: he used to follow up on them.

During an appraisal I requested Dr Pachauri for an electronic typewriter. Manual typewriters ruled the roost then. He said he was all for office automation but could not grant that request right away. I suggested that maybe the budget of a particular project in which I had been working then could be used for the purpose. He said that budgets of all projects belonged to TERI and not to a particular project or division.

This quality of his was, I felt, extremely important for any organization to function successfully. I have seen, and known, organizations where money received in a project is independently handled by the project managers. But expenses on salary and infrastructure are, of course, debited to the parent organization. Such projects have all the credits and the parent organization all the debits. But not in TERI.

Dr Pachauri came and rang the bell several times but the guard did not wake up. Frustrated, Dr Pachauri jumped over the gate, collected the mail, jumped out, and went home. No locked gate could stop him.

> During the next year's appraisal, when he enquired if I had any complaints, suggestions, etc., I told him that I had a request, but would not raise it. He insisted that I do. I reminded him of the previous year's request for an electronic typewriter which had not been fulfilled. So, there was no point in raising it again. I do not know if he thought of it as a point-blank attack. He did not show any emotions, though. He asked me to send a note to him immediately, which I did. I received an electronic typewriter in a few days.

> Dr Pachauri used to attend several conferences and deliver lectures, mostly abroad, and used to receive handsome honoraria. He, without fail, donated all such money to TERI. This is one quality which I have not seen in many professionals. Without doubt Dr Pachauri's is an example which could and should be emulated.

It was Dr Pachauri's unfailing habit to take a round of the institute and greet every employee at his or her desk in the morning of the first working day in January every year. We actually used to look forward to this day. It was indeed an honour to shake hands with a legend. This practice, started at the very early days of TERI, continued even when TERI became an internationally renowned organization. He addressed everybody by his or her name. He remembered the correct spelling of the names of all the people he knew, may be a few thousand.

Once, while working in his office, I spelt a name wrongly. He advised me to be very careful. He said some people are very particular about their names and any mistake in that could upset them. When a letter was placed before him for signature, he would read not only the content but everything including the name and the address.

When Dr Pachauri was not present in the office, colleagues did not miss him because that is the culture he had built up in TERI. Everyone carried on with his or her work, whether or not the boss was around. Dr Pachauri used to keep abreast of every important happening in TERI even when he was abroad. Messages used to be sent to him daily and he used to give directions either through mail or phone. So TERI and he did not miss each other.

Dr Pachauri used to make many trips abroad. The return flights usually landed at midnight or early hours of the morning. On his way home, he used to come to his office and pick up the mail. He would reach office at least two hours before the normal opening time the next day. By then he would have already read through the mails. After one such trip, Dr Pachauri came to collect his mail (when TERI was located at 90 Jor Bagh). He rang the bell several times but the guard did not wake up. Frustrated, Dr Pachauri jumped over the gate, collected the mail, jumped out, and went home. No locked gate could stop him.

A TERI employee lived with a relation of his and yet claimed a house rent allowance for several months. When the matter came to Dr Pachauri's notice, it took him, in his own words, "only two minutes" to terminate the colleague's services.

He never let anyone carry his luggage and always carried it himself. I have seen him coming to office carrying three or sometimes four heavy suitcases. This was when several of the office staff would have considered it a privilege to carry his luggage!

Dr Pachauri was a Padma Bhushan and Padma Vibhushan awardee, the third and the second highest civilian awards, respectively, instituted by the Government of India and conferred on the awardee by the President. When some colleagues referred to him as Padma Vibhushan Dr Pachauri, he immediately sent out a circular prohibiting such mention. He wanted to remain only Dr Pachauri, and not Padma Vibhushan Dr Pachauri.

Once Dr Pachauri had a spinal cord problem and was advised bed rest for several weeks. The illness restricted his physical movement, but not his will power. He continued to lead TERI for several weeks lying on his bed at home through telephone calls and meetings which took place at his bedside. Such was his enthusiasm and never-say-die attitude. Later, Dr Pachauri could either stand or lie down, but not sit. I remember him standing for hours on end for many days in his office. He used to keep a stool on the table to make his working area conveniently higher. But he insisted that any visitor to his room, including junior colleagues, should sit, and not stand.

Dr Pachauri set his own example for others to follow. Every day he used to come to work at least a couple of hours before the opening hours and left a couple of hours after closing time. He was very particular that colleagues should be punctual. He could not tolerate even senior colleagues reporting late for work. He had a peculiar way of greeting late-comers. He used to greet them smilingly, "Good afternoon, so and so." How would they respond? Should they say 'good morning' thus contradicting Dr Pachauri, or 'good afternoon' thus admitting to being late? These were some of his small tricks. At least for the next several days the person thus reprimanded would make sure that he or she reached in time.

Dr Pachauri could never tolerate anyone cheating TERI. The firstever staff meeting, when TERI was still a toddler, was to explain such an incident. One colleague lived with a relation of his and yet claimed a house rent allowance for several months. When the matter came to Dr Pachauri's notice, it took him, in his own words, "only two minutes" to terminate the colleague's services. The message sent a warning to all colleagues.

Several years later, another colleague was caught cheating the organization. Not only was he terminated immediately, but a criminal case was filed against him and he was arrested and sent to jail. Later the colleague's parents met Dr Pachauri and apologized for their ward's mistake. They also reimbursed to TERI the money illegally siphoned off by the colleague. Dr Pachauri then relented and withdrew the case. While he never tolerated cheating TERI, he did not want to destroy the young colleague's future and was willing to give him a second chance.

Dr Pachauri, without fail, used to send a condolence message when a family member of a colleague died. I too received one such letter in 1995 when my mother passed away. He even apologized for sending the letter late, because he had been abroad for a long time. He considered family members of colleagues as members of the extended TERI family. He used to reiterate this during TERI retreats in the initial stages when family members of staff were an integral part of the event. It used to be a picnic in the true sense with lots of games and opportunity for the family members to get to know each other. No official business was transacted then.

There are several other incidents that I can narrate. But all good things need to come to an end.

P K JAYANTHAN Information Analyst (1983–2008)

Once a TERIer always a TERIer

Before I joined TERI, on 1 December 1983, I was working for TELCO (now Tata Motors) during which time, around 1982/83, I met Dr Pachauri on two occasions at Jeevan Tara Building and he struck me as someone with a unique style and a great personality. Back then, little did I know that I would go on and work with him for 32 years.

Dr Pachauri would often say that researchers should think of themselves as research entrepreneurs and that they should work with wild imagination, which he believed would pave the way for great inventions. His vision was to make TERI an international organization.

> Mr Arunachalam, who was with Tata Services, offered me the option to move from TELCO to TERI, but I was not very keen as TERI was a very small organization with 4–5 staff. However, having met Dr Pachauri and solely due to the impact he had on me, I went for an interview at TERI (on 24 November 1983). Those 15 minutes that I spent with Dr Pachauri during the interview changed my mind completely and I decided to join TERI. He told me that TERI, unlike TELCO, isn't an organization where one can work for 8 hours and go back home in the evening. He said, "We never see what time it is. Here, hard work is the key and you may not like TERI." I told Dr Pachauri that I would work for a month and then decide whether I want to continue.

> Within a month, TERI organized a major conference, a conference of the International Association for Energy Economics, at Taj Palace in Delhi, and I spent the entire week at TERI without going home to complete the many tasks assigned to me ahead of the conference. My hard work impressed Dr Pachauri and he asked me to work in the administration department rather than the research department, because a few research staff didn't like me working with them.

> Working in the administration department was a great opportunity for me to closely work with Dr Pachauri on evolving many systems and procedures in TERI. I drafted a compendium with many benefits for TERI such as provident fund, gratuity, leave, and leave travel concession. Dr Pachauri's encouragement enthused me, energized me, and I was ready to do anything for the organization, so much so that I would not go home and instead work and rest in one of TERI's guest rooms several days in a row. Despite the fact that TERI didn't have many facilities compared to other organizations and we used to sit in verandas, kitchens, and restrooms, I enjoyed doing my job for all of which Dr Pachauri was the sole reason. That's how much I loved working under his leadership.

> Dr Pachauri had many major development plans for TERI. One of them was to move to the India Habitat Centre on Lodhi Road and acquire a space for TERI, and the other was to establish a field research unit in Gaul Pahari,

where he wanted to buy land. Dr Pachauri was a visionary. He would often say that researchers should think of themselves as research entrepreneurs and that they should work with wild imagination, which he believed would pave the way for great inventions. His vision was to make TERI an international organization.

Dr Pachauri was very considerate in compensating employees' efforts and services and he always ensured that a major part of TERI's surplus earning benefited TERI's employees and that the deserving ones got more.

Dr Pachauri was also a man of discipline. He had zero tolerance for silly mistakes and lethargy and would always tell us that work is worship and everyone should enjoy work. I was a young man from a small town and my command of English was somewhat shaky, whereas Dr Pachauri was someone who used to be very particular about language. He would never mind reprimanding people and correcting them, usually laced with sarcasm, on the spot and even during presentations. I used to write 'bear' for 'beer' on many occasions while preparing check-lists for events. Once Dr Pachauri wrote me a note, which said, "Beer is a drink and not 'bhalu' (bear)". He would correct me in such a way that I would never repeat the mistake ever again. He would say, "God almighty has given you mind; for heaven's sake, please use it."

Dr Pachauri was very considerate in compensating employees' efforts and services and he always ensured that a major part of TERI's surplus earning benefited TERI's employees and that the deserving ones got more. Under his leadership, many colleagues regarded TERI as a home away from home. We were one family, which we proudly referred to as TERI family. We never had overtime allowance or conveyance for working additional hours in the initial years of TERI, but everyone was so committed to work, not minding what time it was.

Dr Pachauri introduced schemes that many organizations could not even think of those days. In each meeting of the governing council, Dr Pachauri used to propose additional benefits and increased salaries to employees. The then chairman, Mr Darbari Seth, wanted to provide long-term benefits to employees rather than higher salaries. Dr Pachauri introduced two major schemes, namely superannuation, wherein 15% of the basic salary of an employee would go into a pension scheme, and 5% additional employer contribution by TERI towards provident fund. No other organization in India had such schemes at the time. Although many employees were against long-term benefits, today many enjoy the fruit of such schemes, the entire credit for which goes to Dr Pachauri.

Dr Pachauri had a great memory and he would remember any and every incident or document or material. He inculcated in me the habit of preserving documents and he told me to keep records in such a way that it would be easy to retrieve the required documents quickly. This habit helped me in preserving all proposals, documents, and programme-related materials of TERI—as a result, my colleagues often call me TERI's mobile knowledge repository. Dr Pachauri would always say that one should be in demand and in the limelight, and to attain that, one has to work extraordinarily well. I've tried my best to imbibe some of those qualities in me, which is why I have been successful so far.

Dr Pachauri never compromised work for any personal commitment. He would come straight to the office after 30 hours of travel and work for 5–6 hours thereafter before going home.

Dr Pachauri's speeches inspired employees and created a feeling of belonging, which made TERI what it is. In many of his speeches, he would say that one has to sustain the position they have worked so hard to achieve. He often referred to Charles Dickens: "It was the best of times, it was the worst of times". Among the NGO sector, TERI was at the top in terms of work, quality, turnover etc. TERI, being a society, worked as a mini corporation. Dr Pachauri's words of wisdom and encouragement have converted many young researchers into enterprising characters, many of whom have now become CEOS.

Dr Pachauri had a multidimensional character. He would adapt himself in terms of talking style and behaviour to match the capacity of those he was talking to. On the cricket field he would behave like a flamboyant youngster among fellow players, whereas at work he used to be this unrelenting leader at work. We saw him as a completely different man when he took his office staff for lunch at Sagar restaurant. This multidimensional approach towards different sets of people is hardly seen in many big leaders.

Dr Pachauri would never hesitate to praise deserving people for their exemplary efforts and contribution. I was one of those fortunate ones who have received a pat on the back from him on many occasions. One such incident was where Mr Karuppasamy, who was the head of IT, and I were given the responsibility of making slides for Dr Pachauri's presentation to the Parliament, and the slides were to be made using a camera attached to the computer. The slides were shot, and I personally handed them over to a film developer in Nanakpura at about 9 p.m. After handing over the slides, I went home and had dinner. However, instead of going to sleep, I went to the developer again to check if everything was alright. To my utter shock, he said that all the slides were blanks and need to be reshot. I went to Mr Karuppasamy's home and explained the situation. We both went to TERI in the middle of the night and reshot the slides, and went to the developer at around 3 a.m. The developer cooperated with us and readied the slides by 6 a.m. We directly went back and handed over the slides to Dr Pachauri for his presentation, which was scheduled for 9 a.m. Dr Pachauri came to know later about the series of events the previous night and circulated a note, generously praising both of us.

I consider myself lucky for being on the same floor as Dr Pachauri. At the end of the day, usually around 9 p.m., he would see that lights in my cabin were still on and would tell me, "Rajagopal, it is time for you to go home and spend time with family." But I would never leave before him. One day I left early, and I remember Dr Pachauri called me to ask if everything was alright. My hard work was invariably rewarded, but one day I said to him, "Sir, my loyalty towards TERI will remain the same, even if I am not given any increment." His response was, "Rajagopal, save as much as possible, and those savings would be of great help in difficult times." I write these words sitting in my home in Chennai, which I was able to buy with the money that I had saved until 2002. But for his advice and help, I would not have bought this house.

Dr Pachauri believed that to succeed, one should organize one's work, and the tasks assigned must be performed efficiently within the set time. He would say that the toughest job should be the first item of work to be completed in the morning because that's when our mind is at full capacity.

> Dr Pachauri never compromised work for any personal commitment. He would come straight to the office after 30 hours of travel and work for 5–6 hours thereafter before going home. He used to tell colleagues that he would never get into any conversation with his fellow passengers during his flights, as it would be a waste of his time; instead, he would spend that time usefully, working with his laptop or to come up with new plans for TERI's upliftment and development. Dr Pachauri would always eat frugally and spend his per diem allowance wisely on travel. He would save all that money and ensure that it went into TERI's account, unlike some who used to pocket the allowance. At times he would even starve to cut his travel costs, although he never used TERI's money for his travels, because it was always reimbursed by other agencies. He earned crores of rupees for TERI through his personal speaking assignments.

> Dr Pachauri was great with time management. He would never waste a single minute, and he would plan everything accurately. Once he was to deliver a speech on climate change at Silver Oak in the IHC at 1 p.m. but he also had a cricket match scheduled the same morning. He went to play early morning, returned at 12.30 p.m., showered, and was on the stage to deliver his speech at 12.55 p.m. He had that astonishing ability to multi-task and manage his time flawlessly. He made a presentation to colleagues on time management, and he said that time management is a very important to everyone's growth. He believed that in order to succeed, one should organize one's work, and the tasks assigned must be performed efficiently within the set time. He would say that the toughest job should be the first item of work to be completed in the morning because that's when our mind is at full capacity. Many people tend to postpone the toughest job to the later part of the day and prefer doing the easy ones in the morning. In the

process, they are weighed down by the tougher job and cannot complete even the easy ones. Thus, the whole day is wasted without accomplishing anything.

Dr Pachauri was serious about integrity. He never tolerated any dishonesty, whether within TERI or outside. The guards at the IHC used to be alert as Dr Pachauri would enter any time of the night and make their lives miserable if anyone was found dozing. He always practised what he preached and would never misuse any of TERI's resources. During one severe winter in Delhi, the central air-conditioning had failed and couldn't be repaired for more than a month. Dr Pachauri was provided with an oil heater to keep himself warm. But he said that when employees suffer, he would also have to suffer and that he is not to be exempted. He used to tell staff that TERI's money is sacred and it has to be used judiciously.

Dr Pachauri always gave preference to creating the best infrastructure for TERI. Once a team from Shell visited TERI and they complimented TERI for the best infrastructure it had in the 1990s; when many offices used overhead projectors for presentations, TERI already had a highly sophisticated projection system installed at its premises.

Even during Jor Bagh days, when people had to brave Delhi's scorching summers in the absence of coolers or air-conditioners, and with frequent power cuts, Dr Pachauri used to switch off the air-conditioning in his room, because he wanted to share the suffering of his colleagues.

An employee, Gautham Sarkar, once wrote a note to all staff when he retired at the age of 58, portraying Dr Pachauri as 'mahan' [a great one] and incomparable. Sarkar further said that if anyone in TERI had even one-hundredth of Dr Pachauri's abilities, they would achieve many great things. Dr Pachauri earned a lot of love, affection, and respect from many employees although he was very stern.

I joined TERI when it had a staff strength of 5–6, and I have seen it rise to 1200 under Dr Pachauri's leadership along with many assets and resources. I have grown up with TERI and I am on the verge of retirement now. I have personally seen the struggles of TERI under Dr Pachauri's leadership and how TERI and its brand have grown stronger because of Dr Pachauri's untiring dedication. TERI always stood at the top despite competition and its envious enemies. Dr Pachauri used to say, "Once a TERIER, always a TERIER, and one should cherish the time spent in TERI the most, no matter how small their role may have been and how short their time in TERI."

I worship Dr Pachauri for his service to society and for all his contributions to the world. To me, Dr Pachauri is God and whatever I have earned and learnt is *bhagwan kee den* [Hindi for God's gift].

> K RAJAGOPAL General Manager, Project Monitoring Unit (1983–)

Wit, Humour, Money, and Cricket

I never thought that I would be writing about Dr Pachauri. If anyone has to write, it should have been Dr Pachauri himself, but it did not happen that way. In his lifetime, Dr Pachauri would have interacted with thousands of men and women, and even if all of them wrote about him, the book would probably still be incomplete. Many have spoken to me on several occasions about him; some with awe, some with curiosity, some with admiration, some with anger, many with malice, but none with indifference. If all their thoughts were penned down into a book, it would be also incomplete.

I saw him closely, interacted with him on many issues, and fought with him bitterly on several issues. But our relations were always professional and work-related.

Some appropriate topics for the book would have been how TERI was built or how Dr Pachauri became the IPCC chair, but again these should have been written by Dr Pachauri himself. I hope somebody would write on these topics some time in future.

I would start at the beginning. It was with an extreme sense of insecurity, anger, and frustration that we prepared ourselves for meeting an outlier who was coming to destroy our work and close the place of our work. But perhaps I should go back a little further.

I had been part of TERI on two previous occasions. The first one was as a project engineer on a TERI-funded project for developing a solar water heater cum nocturnal radiative cooler at IIT Kanpur in early 1978. TERI was a funding agency then, but was known to upcoming energy professionals by the work being done at TERI's Field Research Unit headed by Dr Chaman Lal Gupta and by TERI's Documentation and Information Centre run by N K Gopalakrishnan. During the course of my project work at IIT Kanpur, I learnt a lot about solar energy and about the good work being done by these two stalwarts. We looked at Chamanlal *ji* as the grandfather of solar energy in India. The international solar energy conference organized by the International Solar Energy Society in 1978, held in India for the first time, witnessed many presentations from the Field Research Unit under the guidance of Dr Gupta. Hence when Veena (my wife) and I were offered employment at TERI Pondicherry in 1983, we jumped at it without any thought of salary negotiations. So I left a cushy job with the Central Salt and Marine Chemicals Research Institute in Bhavnagar, Gujarat, to go to Pondicherry-only to learn that the unit is likely to be closed soon. Hence the feelings of utter helplessness and anger were quite palpable when we met Dr Pachauri.

I was the first one among the staff who were called in to meet Dr Pachauri. He asked me what I would like to do. I told him that I have a lot of work to do on several projects which were going on at that time. He asked me if I can continue the work at Delhi, and I said yes. Thus began my third and last stint with TERI, which continued until I retired, in 2013.

Dr Pachauri remained more or less the same: witty, lively, impossibly ambitious and hard-working, but yielding to genuine and persistent requests.

During the 28-odd years I spent in Delhi, first with TERI (up to 2008) and later at the TERI School of Advanced Studies until 2013, Dr Pachauri remained the only person to conduct my annual appraisal. I saw him closely, interacted with him on many issues, and fought with him bitterly on several issues. But our relations were always professional and workrelated. The best way I can recount memories of Dr Pachauri would be to narrate stories, conversations, and incidents involving him. I would also group these into 1) his wit and humour, 2) the lively conversations during the early staff meetings, 3) his uncanny sense of smelling out sources of funds and the means of getting them, and 4) the occasions on which he would relent and say yes. In the earlier days, his office was always open with a poster which said, "Come on in; everything else has gone wrong." In later years, it was replaced with another one, which said, "Before you ask, the answer is no." But the man remained more or less the same: witty, lively, impossibly ambitious and hardworking, but yielding to genuine and persistent requests.

Sometime in 1985 or 1986, I was given an official telephone at my residence. A friend of mine named Gandhi was staying with us when Dr Pachauri called. My friend picked up the handset and said, in Hindi, "Main Gandhi bol raha hun. Aap kaun bol rahe hain? [This is Gandhi speaking; who am I speaking to?] Pat came the answer: "Main Nehru bol raha hun" [This is Nehru], and the phone went dead.

Once I went into his office and he waved me to sit down as he was on the phone. He listened for a very long time without saying a word; finally. he said, "Aap gadhe ho" [You are an ass], and kept the phone down.

In one of the staff meetings, I decided to tell him how badly he was treating a woman colleague by consistently disagreeing to several of her suggestions. So I reminded him of the saying in Hindi "Ghar ki murgi, daal ke barabar" [A chicken raised at home tastes as plain as lentil soup]. He simply looked at me and said "You mean, she is a chick?" I was dumbstruck.

On the occasion of one approaching Diwali, we had a meeting in which he exhorted all of us to clean our desks and keep our tables clean and neat so that "Lakshmi would be pleased and will bless us". One of the colleagues challenged him, saying that, as a research institute, shouldn't we be worshipping Saraswathi – the goddess of learning – rather than Lakshmi, the goddess of wealth? Dr Pachauri was caught on the wrong foot and was at a loss for words as everyone burst out laughing. Finally, he said "Our dear colleague seems to be thinking of probable names of his future wife." It was true that the colleague was in fact on the lookout for a suitable match at that time. In another meeting soon after we all had moved to the India Habitat Centre, Dr Pachauri informed us that soft piped music would be played during working hours because someone had told him that cows give much more milk when they listen to music. A colleague said, "But they would also produce more dung!" I don't remember what RKP said, but he was clearly taken aback.

Some of them would always ask, "Tell me, how your boss manages to get so much money?" How could I possibly convey to them the mad fury with which RKP worked to push ideas and project proposals relentlessly?

There was a time when TERI explored the possibility of a staff housing society. Interested members made an initial deposit, and the administration began looking for a suitable piece of land for the proposed housing colony. Some land was identified in a location called Patparganj and the matter came up for discussion during a staff meeting. Dr RKP was somehow not in favour of the idea. He said, "What kind of name is this Patparganj? If in future someone asks where you live, will Patparganj sound nice?" He was clearly making fun of the entire idea of Patparganj. I ventured to say that the name Patparganj is as good or as bad as Jamalpur. Anyone else would have been quite upset (Dr Pachauri started his career in the railways in Jamalpur). But he just grinned and let it pass.

Dr Pachauri's sense of consolidation was very strong. TERI was primarily an energy research institute: biotechnology was probably never on his agenda. However, Mr Darbari Seth, the chairman of TERI, had already committed funds for biotechnology, for which a set-up was likely to come up in Pune. During 1985/86, there were frequent - and sometimes quite heated – discussions on the relevance of biotechnology in TERI. I asked him privately what was the compulsion, and he told me that if biotechnology cannot be integrated, half the corpus of TERI would be diverted to set up a biotechnology centre, and he would never let that happen. It would be difficult to say whether he had a future vision for biotechnology or he simply acted instinctively. Several proposals were being prepared for funding biotechnology, and I remember that a major project was sanctioned for which he was the principal investigator. His name as PI was there on several other projects as well. Once I calculated that all the time he would spend as PI for different projects exceeded 365 days. I presented these calculations during a staff meeting and remarked, "It seems all your time is accounted for in projects, so you are not directing the institute!" Everyone roared with laughter and RKP simply joined the crowd.

During my many travels I met people who were either already directors of new institutions or who had plans of establishing institutes for which some financial support was promised. Some of them would always ask, "Tell me, how your boss manages to get so much money?" How could I possibly convey to them the mad fury with which RKP worked to push ideas and project proposals relentlessly?

RKP also believed in keeping the average age of researchers low and in keeping a healthy gender balance. Overall, the idea of dozens of young men and women research entrepreneurs seemed to click.

> During those early days, we were preparing a project proposal in an area which was relatively new but showed a lot of promise. A new colleague prepared the proposal, and RKP asked for my comments. I said that the proposal seemed good, but conveyed my apprehension about the new colleague not having expertise in the subject. He said, "Don't you see the similarity between the names of this new colleague and the head of the funding agency?" I was taken aback by the implication, but didn't say anything. The ambitious project actually came through.

Dr Pachauri's concept of every researcher being a research entrepreneur was quite novel. Scientists do make proposals to funding agencies, which are usually limited to a few government agencies. But the idea of getting money not only for research but also towards one's own salary, for the support staff, and overheads seemed quite unrealistic and unachievable. People in funding agencies used to laugh at the huge salary component and would tell us in jest "Please get me a job in TERI". I told some of them that I would get them a job but they will be asked to get the same kind of money. Over time, the idea slowly sunk in, and many in TERI actually started believing that it can be done. It also made people reach out to funding opportunities which were never thought of before. RKP also believed in keeping the average age of researchers low and in keeping a healthy gender balance. In later years the average age probably increased because of the many 'Distinguished Fellows'. Overall, the idea of dozens of young men and women research entrepreneurs seemed to click, and is probably works even now. RKP used to say that money has no colour and no smell.

I will now narrate two occasions on which RKP agreed to relent on issues that he had firmly opposed initially.

The so-called TREE building in Gual Pahari, used by us as a workshop for several years, was never favoured by RKP. It was originally designed as a building complex consisting of six laboratories, a fabrication workshop, and an open space for installations related to renewable energy including solar energy. We coined a name for the complex, namely 'TERI Renewable Energy Ensemble' and the highest plateau within the Gual Pahari complex was selected to avoid shadows. An architect's model of the whole complex complete with laboratories, field installations, and the workshop, all interconnected, looked quite impressive. There was a lot of pressure to pay the instalments for the TERI block in IHC around the same time. As a compromise, the workshop came up first, with the remaining laboratories put on hold. Although the entire plan of TREE was discussed in detail and approved by RKP, when the lone workshop building came up, he didn't like it at all. He used to refer to it as 'that ugly building' or 'that warehouse to store potatoes'. At one point I asked the architect in desperation what can be done to improve its looks. He said that it is basically a stark building, but can be improved by modifying the exteriors. But any mention of doing anything extra was firmly rejected by RKP. I think he just hoped to demolish it some time, but it was too solid.

Sometime in early 1990s we were awarded a prestigious project from the US Environmental Protection Agency to generate a database for emissions from Indian stoves and rural fuels. That required construction of a simulated rural kitchen with provisions to adjust ventilation, etc. The drawings were shown to RKP for approval, but he did not like the idea of more construction there and suggested we make do with a temporary structure. But that did not suit our requirements because the structure was also to house several instruments. So it was a stalemate.

One day, I thought of creating an artist's impression of the proposed laboratory. My colleague's wife, who was a trained artist, agreed to do it but she was heavily pregnant. We made suitable arrangements to transport her to Gual Pahari as gently as we can, and made her sit there with all her drawing tools. I think it took her about 2–3 hours to complete the painting. I showed it to RKP and tried to convince him that the view does not look so bad. I think he already knew what was going on. He seemed quite amused at our efforts, and finally gave his nod. The project, led by the renowned Professor Kirk Smith, then at the East West Center, Hawaii, gave us some prestigious publications and a large database on emissions and thermal efficiency for a variety of combinations of rural stoves and fuels.

Dr Pachauri consistently encouraged colleagues to pursue higher education. TERI facilitated this by granting leave with full pay for the first year, somewhat reduced pay for the second year, and so on. I think many people took advantage of this scheme. I remember one colleague saying that everyone need not have a doctorate degree. The facility was not available for pursuing a master's degree, although several in my group wanted it. The application of one of my colleagues was turned down on the ground that there was no such directive from 'competent authority'. My discussions with the administration were unsuccessful. I was never comfortable discussing tricky issues with RKP because he would either talk me out of them or would get upset. So I used to write letters or notes to him. I soon realized that I had to write to him quite convincingly making a case for allowing those with only a bachelor's degree to pursue higher education. I don't remember the contents, but I wrote a very long-winded handwritten note, ending it with something like this: "People pray to god not knowing whether he is there or not, or whether he is listening to their prayers or not. I am trying to do the same through this note." The note did not come back to me but went to the admin. The rule was amended and I went to RKP to thank him. The only response was, "Why did you waste so much paper?" I am glad that almost all graduates in my group availed themselves of this facility and then went on to earn their doctorates, some even from abroad, and some of them are now in very good positions.

I cannot complete this account without mentioning RKP's passion for cricket. There was a time when he was suffering from acute back pain but kept working, standing all the time with an inclined desk mounted on his table. (I followed the same method when I had a severe back pain sometime later.). When he was on one of his regular rounds, I advised him not to play cricket until he was fit to play again. The door to my cabin was open. RKP proceeded to demonstrate elaborately how one can actually bat without putting pressure on the back. Almost everyone on the first floor was watching the action. Someone later asked me, "What was that?"

V V N KISHORE

Senior Fellow (1984–2008) and Professor and Head, Dept of Energy and Environment, TERI School of Advanced Studies (2008–2013)

The Down-to-Earth Visionary

There are special people in our lives who never leave us even when they are gone. Having worked with Dr Pachauri over decades, I say with pride that he was one such person who touched my life and continues to inspire me to this day. My association with Dr Pachauri started right after I had completed my PhD and joined TERI as part of a very small team. Thus began a long journey of nearly 35 years during which I had the opportunity to work alongside a visionary whose untiring commitment to work offers lessons to many. Whether it was putting in long hours at work, travelling extensively to gruelling schedules, or trusting his team members, especially the youth, he always led by example. One of his greatest strengths, which is a novelty otherwise, was the importance he gave to the opinions of his colleagues. I remember many conversations that began with 'we agree to disagree' but were followed by days of revisiting of thoughts and ideas. Never was an idea passed over without due thought to its possible merits.

Dr Pachauri calmly informed the DBT representatives that the project would be more fruitful if led by a young professional who perceives it as a career, rather than by a veteran for whom it is just another project.

> His untiring perseverance built institutions and launched initiatives that are unique and looked up to by all in the sustainability space. TERI as an institution bloomed under his leadership and grew with global, impactful projects delivered through a family-like team of thousand-plus employees. Alongside, other institutions such as the TERI University [now the TERI School of Advanced Studies] were developed, which are grooming the next generation of scientists to make a difference. Initiatives such as the World Sustainable Development Summit and Lighting a Billion Lives, amongst others, continue to have a strong impact across the world.

> As a leader, Dr Pachauri always encouraged his colleagues and trusted us to take decisions even on large issues with long-term implications. I still remember discussing with him quotations for supplying some bigticket items of laboratory equipment: "You know what works best for your project," he said, "stick to a decision that you will not regret later." Having said that, when it came to budgets and finances, he was never too busy to dot all the i's and cross all the t's to make sure that the resources were always spent judiciously. Another everlasting memory is that of a meeting in the early days of TERI, when we were establishing the Micropropagation Technology Park, and the Department of Biotechnology wanted someone senior to lead the initiative. Dr Pachauri walked into the meeting and very calmly informed the DBT representatives that the project would be more fruitful if led by a young professional who perceives it as a career, rather

than by a veteran for whom it is just another project, but we can wait for the leader's hair to turn grey too. His view turned out to be correct and the MTP continues to grow and flourish, now with a large team of equally passionate professionals.

Dr Pachauri's legendary commitment to and passion for work always shone, yet his concern and compassion towards his colleagues and their families never deserted him either. He would always begin a conversation by enquiring about family and shared a special bond with my parents, husband, and kids alike. In the last few years, when my parents were doing poorly, he would regularly enquire about their health and, despite his own health concerns, made it a point to be a part of my son's wedding last year.

Dr Pachauri was also a torchbearer for living life to the fullest. Be it his cricket matches or food, his zeal and enthusiasm were unparalleled. Once on our way back from one of the field trips in Tehri Garhwal, due to a landslide we had to walk some distance to get to the car, albeit with a big bag of jalebis for everyone. Even now, I miss the Jor Bagh days when the team was more like a family, being treated to *gol gappa*s and gulab jamuns during lunchtime by Dr Pachauri. There is a Japanese proverb that a day with a great mentor is worth more than a thousand days of diligent study—I was fortunate to get many such days over the past three decades and would always remember Dr Pachauri as the great mentor he was.

> VIBHA DHAWAN Distinguished Fellow and Senior Director (1984–)

A Biotechnologist in Disguise

I vividly recall my first meeting with Dr Pachauri way back in 1985 at 90 Jor Bagh and was impressed by his in-depth knowledge of biological sciences. We had innumerable interactions during my time in TERI's plant biotechnology area and I cherish his valuable guidance. Words are not enough to describe the energetic, visionary, self-disciplined, charismatic personality that we all fondly called 'Pachy'. Apart from his professional excellence known to everyone, he had great humane qualities, which I can never forget. I would like to narrate just a few examples from many. On learning that my husband, with a rare blood group, had to undergo a heart bypass surgery at AIIMS, Dr Pachauri arranged to get the blood group of all TERI employees tested and a list was prepared of standby donors. This became a tradition in the years to follow with our blood groups mentioned on the identity cards. Later again he was instrumental to seek an out-ofturn appointment for my daughter at the Tata Memorial Hospital, and all this willingly without any strings attached! On one hand, he was a strict disciplinarian in work-related matters; on the other, a caring head of TERI family in a true sense, extending utmost support to one and all during testing times.

Dr Pachauri was not a biotechnologist by training but he could appreciate the needs of researchers. I remember the discussions we had while a move to IHC was being planned on whether biotechnology laboratories should be at Gual Pahari or IHC. Our chairman, Mr Darbari Seth, was more keen on having the major infrastructure at Gual Pahari and since some of our work was spread in the fields of Gual Pahari and the Micropropagation Technology Park had already been established over there, it was quite natural to think that the biotechnology division should move to Gual Pahari. However, Dr Pachauri appreciated the concern raised by some of us that research cannot be confined to a 9 a.m. to 5 p.m. schedule and therefore we should be in the IHC. I am sure it must have been very difficult for him to have convinced Mr D S Seth about it.

I salute his involvement while we were designing the laboratories. Inexperienced researchers like us would not have thought beforehand how the equipment will be transferred to the 5th-floor laboratories at IHC, but he ensured that all equipment was shifted before fixing the windows. He never hesitated to provide funds to start a new activity and, once agreed, gave a free hand to young colleagues to execute it. We always cherished the monthly area meetings as they were not only for reporting our research results but also for generating new ideas.

I am thankful to the Almighty that I had the opportunity to meet him in October 2019 and tell him personally that I was ever so indebted to TERI and to you, Sir!

> Abha Agnihotri Fellow (1985–2009)

A Change Agent

This is a great opportunity and honour for me to write about Dr Pachauri and his decisions during his great journey to build an institution of excellence, which has attained global recognition. Dr Pachauri to me has been an emotionally passionate leader who led by example and remained always a young, bubbling, and enthusiastic individual who used to daydream but at the same time provide detailed and self-committed work plan to make sure that the dream becomes a reality soon enough.

The second incident was his walking into 90 Jor Bagh during lunchtime one day to ask me to lend him my motorbike: he enjoyed his brief ride, said what a nice bike Yezdi was, and how he loved it. Friendly leadership is something that he nurtured, which has probably touched each one us.

> Having been part of the committee of directors for many years, I have seen Dr Pachauri taking major decisions together with all of us. This includes the birth of TERI university, opening of regional centres, and creation of facilities such as that at Leti Bunga for fellow colleagues to come back recharged and committed to the mission to make TERI an agent of change globally but also to see that each initiative in TERI grows at its best pace. Dr Pachauri's continued encouragement and personal touch remained exemplary and a great experience for me and probably for all others in TERI along a wonderful journey in TERI.

When we took the major decision to sign an agreement with Deakin University, Dr Pachauri was first of all truly happy and also committed at the same time to building this relationship based on mutual interests. I have no hesitation in saying that under his leadership this relationship with Deakin University grew by leaps and bounds and provided a great opportunity and hugely important infrastructure. Dr Pachauri also supported another major programme, a flagship programme at the time in TERI, namely the BP [British Petroleum, at one point] biofuel project, which ran into approximately Rs 59 crore (Rs 590 million) of funding to TERI. Unfortunately, we could not take the initiative to the next higher level because of a policy change at BP, but I must say that when we were struggling to take a decision to close the project, Dr Pachauri's leadership, commitment, and maturity removed all hurdles and we ended on a good note.

I joined TERI as a fresh PhD student who was yet to write his thesis, but Dr Pachauri was particularly helpful to me. He always had a personal touch, and his sharp memory and genuine caring were par excellence. He not only supported me in completing my PhD but also allowed me at an early stage to pursue post-doctoral research on biotechnology under a UNESCO award at USDA (the US Department of Agriculture).

Of the many encounters, I narrate here a couple of small incidents that

make me smile even now and make me realize how much I miss him.

On a very hot summer afternoon in early June 1987, I was leaving 7 Jor Bagh after work and he too was taking out his car. On that day, Dr Pachauri was driving his Maruti 800 and offered to drop me home. On this short journey, he conveyed a very strong and encouraging message that I had been taken in TERI for building this area of research on mycorrhiza and that he would like to see that I lead this from the front not only in TERI but at global level. Such great encouragement and those words keep resonating in my ears over all these years.

The second incident was his walking into 90 Jor Bagh during lunchtime one day to ask me to lend him my motorbike: he enjoyed his brief ride, said what a nice bike Yezdi was, and how he loved it. Friendly leadership is something that he nurtured, which has probably touched each one us.

His major decision that TERI should move to the India Habitat Centre at a very early stage of TERI was a great visionary decision. During my interview, he did mention that although at that time TERI was unable to offer me a well-equipped laboratory, one day we would move into a building where I would have an excellent laboratory—and he delivered on that promise. I have seen him grow, and I have seen him grow this organization with his vision, his energy, and his enthusiasm. I have never seen such leadership in my life. I truly feel indebted to him and strongly feel that whatever I am today it is because of his leadership: it is his encouragement that made a professional out of a raw and naïve recruit.

TERI is now spread all over the world as a change agent and has lived up to Dr Pachauri's vision under his leadership—but it has also left us with the major responsibility of taking his vision forward with whatever we can do. I can only hope that we would strive to match his level of energy, leadership, passion, and capability in the rest of our journey in TERI.

> Alok Adholeya Senior Director (1986–)

You Play Cricket, Don't You?

As I think about Dr Pachauri, my mind goes back three and a half decades. It was early 1986 when I, as a young man of 21, walked into TERI to be interviewed for a job. I was, expectedly, very nervous. To add to that, I went through a serious and formal interview with late Col. K K Puri, who was the then chief, Administrative Services. This was my first-ever interview, and the solemnity of it all had made me anxious. Just when I thought it was all over, I was told that I would have an interview with Dr Pachauri. I walked into his office, very tense. But it took him only a few seconds to put me at ease. Suddenly, I found myself relaxed and we seemed to be having a normal, friendly conversation rather than a job interview. At the end of it, he asked very casually, "Cricket toh khelte ho, na?" ["You do play cricket, don't you?"] This is the job for me, I thought to myself.

I have heard that the best way to make children learn swimming is to throw them into water and allow them to thrash their way to safety. Just four months into my job, Dr Pachauri called me to his office and said, "Sandeep, the first visit of the Governing Council is coming up and I want you to look after the logistics."

And there was this dithering, nervous me mumbling, "Me, sir? But I'm so new here".

"Nonsense," was all I got in reply.

That was the kind of faith Dr Pachauri placed in his colleagues. Once he had made up his mind on who to give a job to, he would put his entire trust in that person. He then gave me the freedom, not just financial, but also to organize things independently. It not only motivated me but pushed me up the learning curve in TERI's administration.

For 12 long years, I worked tirelessly at Gual Pahari, contributing to building on Dr Pachauri's vision. There were many obstacles, but Dr Pachauri never took 'no' for an answer: we all learnt that very quickly. Dealing with the state government officials, dealing with the angst of the local villagers, somehow became child's play when he would put in a word.

The next incident that spurred me on came about two years later. I had cleared an examination for a government job. I was elated, as in the 1980s, a job in the government was coveted. I therefore decided to resign from TERI and handed in the mandatory three months' notice. The next thing I knew, I was summoned to Dr Pachauri's office to be given a very polite dressing down. "Sandeep, TERI is a fast-growing research organization; this is where the future of the country lies. You must withdraw your resignation," he said to me. But I was adamant and stood my ground. I was going to join RAW, the Research and Analysis Wing, in the Government of India. How could I let this opportunity go?

A few days later, I saw my father in TERI! I was more than just surprised: here he was, visiting my workplace when he had never even come to my school for any of the meetings of the parent-teacher association or to my college. "Oh, Dr Pachauri has called me for a meeting," was all he said. Little did I know that that was the end of my dreams of joining RAW! Dr Pachauri had impressed my father not only with his own charm but with the vision of TERI and what it would contribute to the country and the world. Those impressions were drilled into me in the evening.

The next day, I quietly withdrew my resignation.

But now, as I reminisce, I think I made the right decision. I have thoroughly enjoyed my career in this great organization. I have served TERI for 34 years so far and have never, even once, regretted my decision. I was fortunate to have worked very closely with a personality like Dr Pachauri, who not only had full faith in me but gave me full freedom to take independent decisions.

Giving us surprises was, I think, Dr Pachauri's forte. In the early 1990s, the campus at Gual Pahari was coming up. Although I was involved in many things there, including the legwork for the first electricity connection, I was suddenly moved full-time to Gual Pahari. "From tomorrow" was what Dr Pachauri told me, before the enormity of the task sunk into me. Now I would have to commute from Noida, where I live, and I would have a six-day week; I would have a dust-filled day. Oh, well!

For 12 long years, I worked tirelessly at Gual Pahari, contributing to building on Dr Pachauri's vision. There were many obstacles, but Dr Pachauri never took 'no' for an answer: we all learnt that very quickly. Dealing with the state government officials, dealing with the angst of the local villagers, somehow became child's play when he would put in a word. Such was his charisma. Gual Pahari soon boasted of laboratories, cricket grounds, a golf course, and a conference facility—a quiet haven from the noise and the bustle of the city.

I remember being apprehensive about RETREAT (Resource-Efficient TERI Retreat for Environmental Awareness and Training). I expressed my view to Dr Pachauri that no one would like to come there for attending residential conferences as there would be no recreational facilities, no shopping malls, no television in rooms, nothing to do in the evening hours. He smiled and said, "Sandeep, you take my word: one day this facility will be the pride of TERI and companies would love to have their meetings at RETREAT." How correct he was! Within a few months, big names such as Hindustan Unilever Ltd and Canon became our regular clients at RETREAT, and the list of companies vying to use RETREAT facility for their off-site events and conferences kept on increasing.

Dr Pachauri had another surprise for me in 2006. He called me to his office late one evening and said, "Sandeep, I am transferring you to our biodiesel field project in Andhra Pradesh. It is a mega project, and it will be good for your career."

This time my mind did not protest. I simply went along with the

flow. After working for nearly three years on the project, I realized that Dr Pachauri had actually done me a favour by giving me some exposure to fieldwork under harsh and inhospitable conditions. Looking back, today I believe this boosted my confidence and my people skills.

And finally, I moved to the TERI University – this time, the university asked for me, and Dr Pachauri willingly agreed – to a very different but very satisfying life. It was so very obvious that the university was a treasured venture of Dr Pachauri. It grew exactly the way he wanted it to, gaining international repute in very short time. Dr Pachauri loved being with the students, and one could see his happiness whenever he would spend time on the university campus. I think it was that happiness and satisfaction that pushed some of us old-timers, who had spent time both at TERI and the university – now the TERI School of Advanced Studies – to put in our very best for the institution.

As I come to the end of this walk down the memory lane, I can't help but think that Dr Pachauri shaped the lives of so many of us at TERI. He never failed to inspire us and pushed us to bring out our very best. All of us treasure these memories, which will be with us forever.

> SANDEEP ARORA Additional General Manager (1986–2017)

The Silhouette Behind the Frozen Mist

Writing anecdotes based on the memories of Dr Pachauri is fraught with the literary peril of not being able to come up with an article befitting his memory. One can almost see that frown on his face while looking at papers and making corrections in his characteristic style with a pencil or imagine the printout with overwriting, strike-throughs, and comments scribbled in the margin in his precise handwriting. There is then the question: Why should I be writing an article about an international celebrity?

Dr Pachauri was quick in clarifying that the work was not his but that of his team and scientists. Even for a moment he would not bask in the glory of the Nobel Peace Prize, although he had every right to do so as the head of IPCC.

Am I a colleague, a fellow scientist, or a member of a peer group that worked closely with Dr Pachauri, writing a memoir or critique of him? In other words, one of his equals? Well, the short answer is, I am not. Am I then a highly acclaimed, top-ranking, and opinionated journalist out to exonerate Dr Pachauri? No, not even that: I do not write for The Economist, the Daily Telegraph, or any other local or international paper. Why then have I agreed to write this article - on request of course - but why? I probe this question in my mind because I believe it is important to set this straight at the very beginning for myself and for the readers. When writing anecdotes, memoirs, or a piece on the persona of an eminent person, we touch the societal memory of that precious life and have the potential to either alter it or to derive some undue mileage. This is too a great risk! So that no one may misconstrue this article and my position as a writer in it, let me clarify that I am not amongst the equals of Dr Pachauri and happened to be one of the hundreds of employees during 1986-1994 of the organization (TERI) that he headed first as Director and later as Director General.

Therefore, when requested to write this piece, despite these perils, and lured by airing my views on Dr Pachauri and re-living some of those memorable moments in the 1980s and 1990s when I worked in TERI, even if only in imagination, I agreed, somewhat reluctantly, to write this article an account of what I saw and perceived.

Undoubtedly, Dr Pachauri was a gifted person with diverse facets to his personality. In the day-to-day involvement with him, people who worked closely with him would come across some of these unique personality traits in the manner he dealt with issues, situations, and people. However, prior to launching myself into a discussion on his unique abilities, I prefer to highlight his major contributions to society, so that in the smaller details we do not miss the larger picture.

After all, he did receive the highest and the most coveted prize, the Nobel Prize, on behalf of IPCC. The list of Indians who received the Nobel

Prize is not very long. Receiving the Nobel Prize on behalf of IPCC, the Intergovernmental Panel on Climate Change, has placed Dr Pachauri in an elite group of intellectuals who have received this prize over the past hundred years. When I called on him to congratulate him, what struck me was the simplicity of his office. His table appeared crowded with papers and files and on one side of the room were many conference kits and badges. When I congratulated him, he was quick with his humbleness in clarifying that the work was not his but that of his team and scientists spread all over the world. Even for a moment he would not bask in the glory of the prize, although he had every right to do so as the head of IPCC.

He warned the corporations, again and again, that if they did not address environmental and sustainability issues, they and their businesses would fail.

Whereas many of us consider important positions such as heading the IPCC as great achievements, few realize that the real achievement is in the ideation for the progress of human society and, if at all, its delivery from that high position. In my opinion, what Dr Pachauri achieved in the growth and evolution of TERI and later IPCC was in furthering ideas that form the basis for a fundamental transformation in human society. At IPCC and at TERI, he gathered information from innumerable sources to present to the world conclusive evidence of the setting-in of the anthropogenic climate change, its consequences, and future scenarios. While obviously he was not alone in this, no doubt with all his capabilities Dr Pachauri played a prominent frontal role.

Dr Pachauri was not a theorist but a man of modern times, leading teams of scientists to deliver the greatest international and intergovernmental collaborative work with sophistication and finesse. Future generations will remember him for trying to prevent this planet from sliding into a state of environmental instability that could harm or degrade its life-bearing capacity.

Dr Pachauri achieved all this in a lifetime of work, almost over four decades. Back in 1982, prior to his joining the Tata Energy Research Institute, that institute was a skeletal organization with a field research unit in Pondicherry and a documentation centre in Mumbai. However, Dr Pachauri had a different vision and instead of working in compartments, he combined the Mumbai and Pondicherry units into a single cohesive organization in Delhi. In these 40 years, TERI too achieved impactful eminence as an NGO.

In the early 1980s, environment-related problems were a far cry and climate change was almost unheard of. Dr Pachauri, as an economist, saw value in environmental conservation and sustainability. He warned the corporations, again and again, that if they did not address environmental and sustainability issues, they and their businesses would fail. Today, the writing is on the wall. In the COVID pandemic, which many see as an outcome of our damaging onslaught on nature, the businesses have faced shutdown and the world faces a severe socio-economic challenge.

A person as sharp and as networked as he was, Dr Pachauri could have easily amassed wealth, patents, businesses, and intellectual property, but he would have none of it.

In the 1990s, TERI grew by leaps and bounds and some people attributed this to Dr Pachauri's marketing and networking skills, which is true to some extent, but what he was marketing, and networking for, was the concept of environmental sustainability. This was his business model and in keeping with it, he changed the name of the institute from Tata Energy Research Institute to The Energy and Resources Institute.

The TERI business model is not based on the capitalist system of profit and ownership, yet it grew because of a unique value proposition. Today, there are innumerable national and international NGOS but none of them has made as broad an impact on society as TERI, which has encompassed research, policy, industry, and academia in diverse but connected fields. The TERI we see is Dr Pachauri's vision of an alternative business model, with its roots in diverse aspects of modern human society, nationally and internationally.

As the chairman of IPCC, Dr Pachauri progressed to the next level by systematically pitching this alternative value system to the whole world. He saw this opportunity at the beginning of the climate change movement and influenced policy, economic, and scientific decision-making in the world. By the time he stepped down as chairman of IPCC in 2015, Dr Pachauri had made enormous contributions, giving a new impetus and policy direction to the idea of environment or should I say the idea of the Earth!

Before concluding this part on Dr Pachauri's significant contributions to society, I would like to add that his entire professional career of over four decades was a great act of 100% charity. Of the immense value he created during his tenure at TERI and IPCC in terms of the depth and understanding of environmental issues, he claimed no ownership at all. A person as sharp and as networked as he was, Dr Pachauri could have easily amassed wealth, patents, businesses, and intellectual property, but he would have none of it. All the value he created rests now with TERI, the UNFCCC, and the world.

What was the nature of this man, who has been responsible for the stupendous tasks discussed above? The rest of this article will enable readers to come to some understanding of Dr Pachauri as a person. When discussing him as a person, I can also not overlook the fact that Dr Pachauri has been criticized by many. Such criticism hardly needs any defence, except the fact that he was not infallible and was nonetheless a gifted and talented person working for the good of humanity.

Some of the interesting interactions I have had with Dr Pachauri, which I summarize here, provide us with a glimpse of his personality. Long after I had left TERI, one day I happened to visit the TERI library to refer to some journals. Generally, libraries are quiet but that day there was a little bit of hustle and noise because of some students of TERI University. All of a sudden, everything went quiet: as they say, you could have heard a pin drop. When I looked up to figure out why, I saw the silhouette of Dr Pachauri at the entrance of the library hall. His presence and a mere glimpse of his silhouette had silenced everyone in the large hall. Those who worked with Dr Pachauri in early years, when TERI occupied many residential buildings in Jor Bagh in Delhi, are all too familiar with this silhouette that would suddenly emerge on doorsteps, staircases, balconies, offices, and makeshift laboratories. This must have also been the case in the offices TERI later occupied, in mid 1990s, at the India Habitat Centre.

Dr Pachauri did not have a corporate look or that of a sophisticated scientist. With his beard, which he maintained all along, he looked more a cleric (a maulana)—so much so that in my initial days in TERI, I would greet him with a customary *adaab* of Lucknow out of sheer reflex but his response was always a Hi!

My first meeting with Dr Pachauri was in the form of my final interview at the 7 Jor Bagh office of TERI in 1986. Interestingly, he offered me the same salary that I was being paid in my current employment then, with the argument that the increase in salary lay in greater professional growth in TERI. When I objected and told him that this would not work, he said that as a special case he was prepared to give me a special lunch subsidy allowance, which I was to keep secret, making the offer look like a special and genuine pay-off. Although this allowance was quite small, I agreed to join TERI, half-convinced of the prospect of professional growth.

In a matter of few days, after I had made some friends in TERI, I realized that the same lunch allowance was being given to all—Dr Pachauri had bowled a googly and I had been caught leg before wicket (LBW)!

Coming from Regional Engineering College, Srinagar, which was considered a notch below some of the other leading engineering institutes in India – such as the Indian institutes of technology in Delhi, Mumbai, Chennai, and a few other places (the IITS) or the Indian Institute of Science in Bangalore – I was a bit shy initially in the highly charged research atmosphere in TERI, with many researchers from the IITS, Harvard University, or other such highly acclaimed institutions. Later, however, I became more expressive and perhaps somewhat of an extrovert.

After hanging around aimlessly in the research and consulting environment for a month or so, I was finally given some task, namely to develop a paper for the Department of Non-Conventional Energy Sources (DNES; now the Ministry of New and Renewable Energy) on policy recommendations and economic analysis of windfarms. In those days, access to a computer was limited: we used to write in longhand, and a computer operator or a secretary would key in the text using WordStar 4.0.

I used to report to Dr V V N Kishore and, after discussions with him, I began writing that paper. One day, Dr Pachauri suddenly appeared in front of me and asked for the paper. I replied that I was yet working on it. He looked at my desk, collected all the papers that were there, and was gone. I was surprised at this manner of papers being taken away from my desk. The papers were, however, returned to me a day later by Dr Kishore, who

said that Dr Pachauri was satisfied with the work. I then realized that this was his way of ascertaining a professional's quality of work in its very raw form: If your work in raw form is reasonably good, the final output too would be of the desired quality.

When I wrote to Dr Pachauri that he must be the only person after Shahjahan to do something about the Taj, the same day I received an email signed 'From the secretary to Shahjahan II'.

> Within a few months, I realized that apart from being a tough taskmaster and a manager, deep inside Dr Pachauri had humanitarian values and great innate goodness, which few people have. It so happened that a delegation from DANIDA (the Danish International Development Agency) and the RISO Laboratories in Denmark (Now DTU) was in Delhi. The delegation was exploring the possibility of setting up a testing and certification facility in India. Dr Pachauri's idea was to propose TERI as the hosting organization for the test facility. However, that was not working out easily, and the government was interested in setting up this facility as the Centre for Wind Energy Technology (CWET), to be based in Chennai. TERI planned a dinner meeting with the Danish delegation but with the pull and push in different directions, the delegation decided to go with the CWET option, and the meeting was cancelled. We were disappointed, and I said, "There goes our dinner too!" This remark reached Dr Pachauri, and he decided that something had to be done about this dinner thing. Although the Danish delegation was hard pressed for time - or at least appeared to be so – a senior functionary was somehow prevailed upon to join us for a breakfast meeting. At the appointed time, we landed up at the India International Centre. However, it soon became apparent to me that, apart from the discussions with the Danish official on possible areas of collaboration, Dr Pachauri's main interest was to encourage me in trying out dosa and sambar of the IIC cafeteria!

> Although Dr Pachauri often pushed his staff to extremes when it came to work, he had this very strong humanitarian side to him. As far as I remember, Dr Pachauri never refused to help his colleagues and to find some way of bailing them out of trouble, no matter whether the problems were related to work or personal. At least he never refused to take action, and that kept hope alive. He encouraged staff to participate in conferences, workshops, training programmes, and or go on a sabbatical or pursue a course of study. As a result, most of the employees who worked in TERI found the environment challenging and matured professionally, and many of them – whether they worked in administration or accounts or library – made a quantum jump in their careers. It is no mean achievement to enable and empower people in seemingly mundane jobs such as administration or in secretarial positions to transform themselves into managers and occupy key positions in international bodies including bilateral and multilateral organizations.

Even after I left TERI, whenever I wrote to Dr Pachauri, he would always get back and if he did not, I would invariably hear from his secretary. Once I happened to read a news item about TERI taking up a study to protect the Taj Mahal from pollution and wrote to him right away, saying that he must be the only person after Shahjahan to do something about the Taj. The same day I received an email, signed 'From the secretary to Shahjahan II', that Dr Pachauri was indeed pleased to hear from me.

Dr Pachauri had an amazing quality of making people comfortable when he interacted with them irrespective of their position in society. Be it a CEO, a top politician, or a watchman, he could discuss their issues with them within their comfort zone.

Dr Pachauri never shied away from expressing his gratitude towards those who helped him. One example is Darbari Seth, the chairman of Tata Chemicals, who initially set up TERI and set aside the initial corpus to fund its activities. This enabled Dr Pachauri to build a formidable institution almost from scratch. Dr Pachauri always expressed his gratitude to Darbari Seth even long after his death.

When it came to matters of the environment and pollution, Dr Pachauri would not refrain from airing his differences even over the corporate strategies of the Tata Group (of which TERI had been a small part). For example, he was critical of the Nano car project of Ratan Tata because Dr Pachauri believed that the car would add to traffic jams and pollution in the country. Ratan Tata specifically mentioned Dr Pachauri on the launch of the Nano, saying that "Dr Pachauri can sleep peacefully" as the car would comply with all the norms laid down to control emissions of pollutants from cars and would not create a problem.

Sometime around 2002/03, Venkat Sundaram and I decided that on behalf of a trust we had set up, the TERI Alumni Trust, we would present Dr Pachauri with the TERI Alumni Award for Excellence. In later years, the awardees included the late Dr Hermann Scheer, the German Parliamentarian.

My last meeting with Dr Pachauri was at an event organized by the Government of India in 2014. He looked troubled or thoughtful. Today, when I try to recall Dr Pachauri's persona, I see a blurred image. The silhouette that used to emerge unannounced in our rooms, laboratories, and libraries seems to be standing behind a mist that blurs the image! However hard we may try to peer, the 'frozen mist' gets in our way.

> JAMI HOSSAIN Area Convener, Renewable Energy Technology Area (1986–1994)

A Rare Visionary

In May of 1986, I applied for a job in TERI, then the Tata Energy Research Institute. Mr K S Subramanian, Executive Officer, who had conducted a written test that I had cleared, had sent a note to Dr Pachauri confirming that I had cleared the test and was a suitable candidate to work in the purchase department. I was sent to be interviewed by Dr Pachauri. This was my first interaction with Dr Rajendra Kumar Pachauri, Director of TERI. It was a friendly chat, with no serious questions about the assignment that I was to take up. Dr Pachauri asked me why I wanted to leave India International Centre to join an organization that does not have a proper office even. TERI at that time operated from two rented bungalows in Jor Bagh, New Delhi. Even the kitchen and washrooms were converted into offices. My reply was that the Tatas are known for their professionalism and good work ethics. I would consider it fortunate to be associated with such an organization. This may have, probably, impressed him. I was selected.

The largest contribution to TERI's staff welfare fund was the honorarium that Dr Pachauri used to receive for delivering lectures and giving seminars on various topics in his personal capacity.

> Though I was reporting to Mr Subramanian, I had to approach Dr Pachauri often for approvals as nothing was approved by Mr Subramanian without Dr Pachauri's nod. Later on, I realized that getting Dr Pachauri's nod was easier than getting Mr Subramanian's approval. During the Jor Bagh days of TERI, there always existed a family atmosphere. The head of the family, Dr Pachauri, was friendly with everybody. Anyone could walk into his office any time after a knock on his door. There was a fancy poster adorning Dr Pachauri's door. It said, "Come on in; everything else has gone wrong."

> Dr Pachauri had the unique ability to carry everyone together. Every individual, be it a senior researcher or the junior-most supporting staff, he valued each one's contribution. He had a clear understanding of the contribution of each individual to the functioning of the institute. He would not miss any opportunity to appreciate a clearly visible good action of any member of the TERI family. A letter of appreciation or a circular was always sent out for a task well performed or for something out of the ordinary. Various non-monetary reward schemes in TERI speak volumes for his generous thinking to keep colleagues at all levels loyal and motivated. 'Pat on the back', Loyalty award, Best Team Award, Roll of Honour, re-designations, etc. are some of the non-monetary mechanisms he thought of and introduced.

Dr Pachauri's concern for the well-being of his staff was noteworthy.

For example, once I happened to be near the entrance to 7 Jor Bagh when Suraj Pal, an office attendant, returned from his hometown – he had been on leave for the treatment of his mother – just as Dr Pachauri, carrying his briefcase, got out of his car. On seeing Suraj, Dr Pachauri enquired about his mother and other members of his family in his village. Suraj Pal stood there with folded hands, probably surprised at the concern shown by the 'big boss' for him and his family. After Dr Pachauri had left, Suraj Pal turned to me, beaming, and said that he was pleased to see that Dr Pachauri had remembered that Suraj had been away for the treatment of his mother. The fact that I remember this incident even after 34 years shows how deeply Dr Pachauri's thoughtful expression of concern for a junior staff had touched me.

TERI has a staff welfare fund, and contribution to the fund is usually in the form of sale proceeds of scrap, newspapers, plastic waste material, etc. but the largest contribution to the fund was the honorarium that Dr Pachauri used to receive for delivering lectures and giving seminars on various topics in his personal capacity. Once one of the laboratory attendants had to undergo a major treatment. He had exhausted the funds available for the purpose and already claimed what was possible under the medical insurance scheme. As his condition deteriorated, he asked a few other colleagues for loan. Somebody advised him to seek help from the staff welfare fund. A plan was made to approach Dr Pachauri with two alternatives, namely seek contributions from willing colleagues or explore the possibility of raising some amount from the staff welfare fund with Dr Pachauri's approval.

I went to Dr Pachauri and asked if I could send out a circular, appealing for contributions from colleagues. He told me not to trouble the employees with such issues and said that TERI can take care of its employees, adding that the expenses would be met from the staff welfare fund.

Another instance where Dr Pachauri went out of the way to care for the staff was when one of the employees was almost on his deathbed. The only way to save him, according to the physician treating him, was an injection, the cost of which was five lakh (half a million) rupees. It was impossible to arrange such a large amount at short notice. Some of the colleagues got together and thought of collecting donations. Dr Pachauri was in USA at that time. The matter was discussed with M M Joshi, the head of administrative services, and it was decided to call Dr Pachauri after verifying his meeting schedules. Fortunately, Joshi could get through to him and briefed him about the situation. Dr Pachauri's response was instant: "Please make the payment and get the injection."

Dr Pachauri took quick decisions to achieve long-term visions. Even when employees were taken on short-term contracts of one to three years, they were given such benefits as gratuity and superannuation although only those with long-term contracts were eligible for those benefits. He expected TERI to have more and more young people as its workforce and thought of their future. Believing that they were likely to be spendthrifts, he convinced TERI's chairman to devise a pay structure that would have more components for savings. Besides the contributions to superannuation and gratuity, the pay structure consisted of a contribution of 17% to the provident fund—a proportion matched by no other organization in India and so unique that even the PF commissioner was surprised and insisted on a written commitment that TERI would never lower this figure.

Dr Pachauri took on board good professionals and helped them to find work rather than finding people to fit into an existing profile.

Dr Pachauri believed in being less rule-bound and more logical and objective. At one time, a candidate had been interviewed for a research position in one of the divisions in TERI. After shortlisting the candidate, the director of the division asked me to arrange an offer. The offer I prepared, given the qualifications and experience and following the rules for pay fixation at TERI, did not appeal to the candidate. The divisional director then asked me if there was any possibility of a better offer. Considering what professionals with similar backgrounds are paid in TERI and given the background of the candidate, I replied that this was what could be offered normally but also suggested that higher salary can be offered in exceptional cases provided it is approved by the Director General, that is by Dr Pachauri.

The director met Dr Pachauri and told him that according to Joseph, any salary can be offered if approved by the DG. Dr Pachauri called me to his office and asked me, in the presence of the divisional director, why I had misled a director. I was sent away with a warning to be careful in explaining such rules. A few days later, Dr Pachauri called me to his office and gave me a cv, asking me to prepare an offer. I prepared an offer based on the qualifications and experience and I took it personally to Dr Pachauri. Looking at the offer, he said the candidate would be unlikely to accept it and that we should raise our offer. I remonstrated, saying that according to the policy, a higher package cannot be offered to the candidate in question.

Dr Pachauri was quick to silence me by quoting a verse from the Bible. "What did Jesus tell the disciples when they broke the law on the Sabbath day?", he asked. He was referring to the Holy Bible, Ch. 2:27, which said, "The Sabbath was made for man, not man for the Sabbath." The offer was revised.

As a matter of fact, Dr Pachauri was not in favour of a formal recruitment policy for TERI. Absence of such a policy, however, did not pose a problem. Unlike in the corporate world, it was not possible to have a recruitment plan at the beginning of a financial year to fix the type and quantum of expertise to be added to the existing pool of expertise, nor was it desirable. There has been a regular flow of CVS to TERI, which include those of professionals with a passion for research who knew about TERI, those who had attended workshops organized by TERI, and engineering graduates from IITS and other reputable institutions. This led to the creation of a CV bank in TERI. A willing and passionate researcher with a track record of generating innovative ideas was never deprived by Dr Pachauri of a chance to be associated with TERI, even if no opportunity existed to involve him or her in any ongoing project. Dr Pachauri followed a method of taking on board good professionals and helping them to find work rather than finding people to fit into an existing profile. This led TERI to diversify into many fields. Some people believe that TERI lacked focus, but this policy of taking on good people is what has led to the diversification and growth of TERI seen today. TERI's human resources department was held by Dr Pachauri himself, signifying the importance he attached to building human capital. It was only in January 2010 that TERI had its first HR director.

Dr Pachauri's ability to read quickly and grasp any subject or spot errors in a document that many would have left unnoticed, despite reading repeatedly, often amazed me. Give him a 10-page document for perusal and comments, and he would read through it in minutes and point out errors including missing commas and errors of spelling and any other trivial errors, instantly producing a perfect document. If a mistake was repeated and left to him to be corrected a second time, you would get an earful! His insistence on perfection was unmatched.

Dr Pachauri always addressed research staff and support staff separately because he knew for sure the type of appeal that would work best with each group. Although he considered researchers to be the breadwinners, the support staff were often made to believe that they were indispensable if researchers were to be effective in what they do. Continued improvement in the efficiency and productivity of support services was what he always harped upon whenever he addressed the support staff. To highlight the importance of research and support staff working together, he used the analogy of an aeroplane where the engine plays the role of researchers and the admin staff are the nuts and bolts that ensure that the wings remain attached to the fuselage.

Taking advantage of the generous breakfast offered by European hotels, he would pack a sandwich or two—which would be his lunch. By sharing this practice with colleagues during staff meetings, Dr Pachauri was able to deliver a clear message on cost cutting.

Nobody at TERI worked harder than Dr Pachauri. I'm told that he would sleep on average only 4 hours. Very often, arriving at Delhi airport at 2 or 3 a.m. from a trip abroad, he would come directly to the office to clear pending files and to attend to accumulated paperwork. This enabled staff to get the necessary approvals, clearances, and advice right on their desk when the office opened at 9.30 a.m. This habit of Dr Pachauri, however, posed a threat to the security guards on night duty at the IHC. He often urged employees to imbibe Japanese work culture to improve productivity.

Cost-cutting and austerity measures to keep TERI in good financial

health were always close to his heart. Building up a corpus to ensure financial independence was a matter of concern to him. A major portion of any surplus was always set aside for building the corpus. Austerity was not something he merely preached but practised. Whenever abroad on TERI business or for lectures, he always chose to stay in hotels in which breakfast was included in the room charges. Taking advantage of the generous breakfast offered by European hotels, he would pack a sandwich or two—which would be his lunch. By sharing this practice with colleagues during staff meetings, Dr Pachauri was able to deliver a clear message on cost cutting.

It was his vision to see TERI grow into a world-class organization. This vision realized, he dreamt of making TERI a truly international organization on the lines of the United Nations or the World Bank.

Being a climate champion, Dr Pachauri believed that efforts to find solutions to the problem of climate change need to begin with the youth and even from kindergarten. This led to setting up of TERI University for the youth and TERI Prakriti School for the budding climate champions to inculcate in them the love for nature in their formative years. Environment and sustainable development became the talk of the day among children of TERI Prakriti nursery school. Dr Pachauri had a vision to set up 450 schools across the globe to make children the ambassadors of sustainable development. His vision was to set up a chain of schools along the lines of what was achieved by Sunny Varkey of Varkey Foundation, a Dubai-based educational entrepreneur who set up 130 schools in more than a dozen countries. This was revealed by Dr Pachauri to me when he got the shocking news about the closing down of TERI Prakriti School—a dream unfulfilled, a vision grounded by circumstances!

> Р Т Јоѕерн General Manager, нк (1986–)

Head in the Sky and Feet on the Ground

Dr Pachauri was always ahead of the curve and dreamt big. In 2008, when he asked me to think of a programme around solar lanterns, the terms 'energy access' and 'sustainable energy for all', had not even been coined.

Although RKP's dreams were big and so were his ambitions and expectations from his team, once the targets were set for me and my team, he gave us a free hand to shape the programme.

> Within a couple of weeks of our initial discussion on the proposed solar lantern programme, he christened it 'Lighting a Million Lives' and, within a few days, changed it to 'Lighting a Billion Lives', or Labl for short. The scale of the challenge – 1.2 billion people in the world without access to basic electricity services – was not even acknowledged or understood fully, but RKP had the entire unserved population in mind when he set the target at a billion lives. Later, in 2009, the World Bank's ESMAP (Energy Sector Management Assistance Program) launched 'Lighting Global', its flagship initiative to build markets for off-grid solar products in response to the billion lives challenge. And in 2011, the UN launched Sustainable Energy for All, or 'SEforAll', with one of its goals as providing access to basic electricity services for household, productive, and community applications.

> Although RKP's dreams were big and so were his ambitions and expectations from his team, once the targets were set for me and my team, he gave us a free hand to shape the programme. The Labl worked towards replacing kerosene- and paraffin-based lighting devices with cleaner and efficient solar lanterns across rural households and other establishments to provide better illumination for children to study, a smoke-free indoor environment for the family, and livelihoods both at individual and village level. The programme was designed and operated on a fee-for-service or rental model, in which solar charging stations were set up as rural enterprises and people rented fully charged solar lanterns at nominal and affordable rates. By 2012, the programme had reached to over 1000 villages in India and in a few African and Asian countries. It had partnered with several public- and private-sector initiatives that were working towards basic education, women empowerment, sanitation, health, and livelihoods and used clean, reliable, and affordable lighting as a catalyst to advance their objectives. The programme is currently operational in about 3400 villages and now includes clean cooking in its ambit (LaBL.teriin.org).

> The period between 2008 and 2012 (the year I left TERI) revealed to me some of Dr Pachauri's best leadership traits. He would stand by us and support our decisions, whether it was to reject well-known international brands of solar lights for not meeting Labl's requirements or setting up

our own testing facility for solar lights, which is now an accredited and government-recognized testing laboratory at TERI School of Advanced Studies.

Such was his passion and conviction for the cause that a solar lantern would always be by his side in most of his public engagements, appearances, and meetings. The film on Labl, an in-house production, was always shown at all events organized by TERI and to all visitors to TERI.

However, one incident that would stay with me always occurred on the day the announcement was made of the IPCC winning the Nobel Peace Prize under his leadership. I happened to be in his office when the phone rang. It was an international call and he thanked the caller first (the news was broken to him formally, as I could gather), and then answered specific questions related to his date of birth, correct spelling of his name, etc. The call ended, he replaced the receiver, and leaned back with a faint smile of contentment or excitement or happiness—I could only guess as he showed no other emotion to indicate what had transpired a few minutes before at that historic moment. Although I had an inkling (as it was in the air), I didn't ask him and he didn't volunteer information. We concluded our discussions in the next five minutes, and as I came out of his office, TERI was ecstatic already but RKP remained nonchalant!

AKANKSHA CHAUREY Director, Decentralized Electricity Division (1987–1993, 1999–2012)

The Arab and the Camel

It is indeed a matter of great pride to me to write about Dr R K Pachauri. Before I write about my experiences in TERI and with Dr Pachauri, I would like to write his vision of building up this institution as a whole. I quote below some excerpts from the remarks he made in the staff meeting in TERI on 21 March 2003.

"I might also say that a vision is something which is not a one-time thing; vision is something that expands, which gets refined, which gets changed over a period of time.

Well, it was really in 1974 that Mr Darbari Seth who was then Vice-Chairman of Tata Chemicals Limited (TCL) decided on an entity called TERI.

... It was really in 1979/80 that I came in contact with Mr Seth, and we got to like each other. He asked me one fine day: "In fact, we are looking for a director. Would you be interested?" I said, "Well, I am not looking for a job." I was then at the Administrative Staff College of India. However, I told him that I was prepared to talk about it, and this dialogue continued. By early 1981, I was offered the directorship after I was interviewed by a few members of the governing council.

Mr Seth liked that because the land was outside Delhi and I also gave him visions of how one can create a renewable energy campus and do things that I knew were close to his heart. So he allowed me to invest the amount of Rs 42 lakh.

I moved to Mumbai for a couple of months – three months actually – in early April of 1981... Then I left for the US and while I was there, I was in touch with Mr Seth and making plans to come back. He said, "We have got a flat ready for you and your family in Harbour Heights", which is where I had stayed in those earlier three months, and "you can occupy your old office." I asked, "What about TERI as an institute? I mean, I joined this as an institute with some design, with some aspirations. What am I going to do there?"

For a few days we managed to beg for space at Tata Services in Jeevan Tara Building on Parliament Street. Five or six of us sat in one room there and tried to do some work. But obviously that was not going to be a permanent solution.

I must also mention that I was still in a dialogue with Mr Seth on what the permanent place for TERI should be, and he was totally opposed to our being located in a city and we were back and forth in correspondence on this. So, as a first step, what I did was to approach Dr Maheshwar Dayal, who was then Secretary, Department of Non-conventional Energy Sources.

Of course, we got it essentially at cost because we got approximately 69-plus acres [28 ha] of land, which cost us about Rs 42 lakh—so that was a bargain. Of course, Mr Seth liked that because the land was outside Delhi and I also gave him visions of how one can create a renewable energy campus and do things that I knew were close to his heart; he was quite sold on the idea, and so he allowed me to invest the amount of Rs 42 lakh. Subsequently, we bought up the surrounding plots a few acres at a time directly from the neighbouring farmers to get an area of over 90 acres [36 ha] altogether.

I still felt that we needed our presence in the city, so now what could we do? It was the Ministry of Works and Housing, which is now the Ministry of Urban Development, that allocated land in the city. So I put in a proposal and asked Mr Seth to forward it to the Ministry of Works and Housing, which he did. I knew Mr Murli Deora in Mumbai quite well. I spoke to him and he said, "I know H K L Bhagat very well", the famous H K L Bhagat, who was then the Minister of Works and Housing. Mr Deora said, "I will write a letter to him; you hand it over to him ['aur aap le jake usko de do'], and he will definitely do your work." H K L Bhagat used to live on Aurangzeb Road. I went to see him one day and he being the 'dada' of Delhi, there were about a hundred people there. I somehow reached Mr Bhagat with great difficulty and I told him who I was and what I planned to do, and he being a sharp guy, immediately understood and said "Yes, you will be allotted land", and he wrote a note on Mr Deora's letter asking for favourable action and marked it to his Joint Secretary.

One has to see the vision of Dr Pachauri. How he built this institute when the then governing council of TERI did not have very big ideas for TERI as an institute.

The history of India Habitat Centre was that a number of institutions were to be given pieces of land over here, to construct their own buildings, and TERI by virtue of all these things and the follow-up one did was allotted this land. Then some of us got together and said, "We will need common facilities, so why not develop it as an integrated complex?" And this is how the India Habitat Centre and its underlying concept really emerged. Now, I still had a problem with my governing council because when I mentioned the cost of space, there was initial disapproval. Incidentally, to start with, we had applied for only 1750 square metres of space, which didn't seem like a huge expense. So I managed to get the okay of my chairman. But I had really spent sleepless nights in those days because one didn't know how one would be able to pay the instalments that were required for the India Habitat Centre, and at the same time pay the salaries of staff, which incidentally had grown to a significant size by then. We came up with a very good idea, and that was to start a membership for corporate organizations, called 'Professional Corporate Associates', and we charged each one of them Rs 7.5 lakh [Rs 750 000], in return for which they would get our publications free of cost, they would be invited to TERI events, and so on. And we raised something like Rs 85 lakh from that scheme. In that period, the late 1980s, that was a fairly large amount of money.

So all of this worked in our favour, but we were allotted only 1750 square metres of space. So I made out a justification for 2500 square metres after having convinced Mr Seth; then we went up to 3500; then to 4500, and then finally close to 6000.

I still had many arguments with Mr Seth, who wrote to me saying that the National Centre for Performing Arts in Mumbai was funded by the Tatas but is a bankrupt organization, because a huge amount was invested in the building. I had to convince him and I wrote him many letters and tried all kinds of ways of convincing him that we had a cash flow problem but not a financial problem, that TERI would be able to generate enough resources to take care of its expenditure but not right away. I said, "That is why I need some means, even if I can get a low-interest loan, to take care of our immediate needs."

"A vision is not a one-time thing; a vision is something that has to grow, that has to be evolved, that has to be refined, and I think it must carry aspirations, it must carry the desires and the reverence that you attach to human endeavour overall."

This is how Dr R K Pachauri got the beautiful building at IHC for TERI, the second largest occupier of space in IHC.

And the story does not end here: it had just started. One has to see the vision of Dr Pachauri. I quote again from the same meeting on how he built this institute when the then governing council of TERI did not have very big ideas for TERI as an institute.

"In 1981 itself there was a meeting of the governing council in Mumbai, in which I was invited as a courtesy. I sat through it, and Mr F C Kohli, former head of TCS (Tata Consultancy Services) made a presentation – "The Future Vision of TERI' – and said that TERI would be able to get an income of about a crore of rupees from the corpus annually and what you should do is to have 12 professionals in the institute, and if you allow for a total cost of 3 lakh per professional including secretarial expenses and other expenses, that would be 36 lakh, and that leaves you about 64 lakh for spending on projects that can be carried out. And these 12 professionals will provide value to the projects that are going to be implemented, and will be able to supervise them, monitor them, and so on. I sat there quietly and I didn't say a word, but I said to myself: "Over my dead body; I am certainly not going to waste my life for a tiddly outfit of this nature where you just fund projects here and there and everywhere."

I am just mentioning to you that the vision of TERI at that point of time was that of a funding organization that would provide something like 60 lakh rupees a year for projects, and of course the corpus would have grown and I am sure the income would also have grown. I only want to emphasize the fact that a vision is not a one-time thing; a vision is something that has to grow, that has to be evolved, that has to be refined, and I think it must carry aspirations, it must carry the desires and the reverence that you attach to human endeavour overall. Even if you look at our financial assets today, TERI having been started with a corpus of 3.5 crore [35 million], which of course was a lot in today's value going back to 1974; if I were to put an estimate on what our physical resources are, they are certainly not less than 250 crore [2.5 *billion*], and that I think is a small part of our total assets. The biggest asset in a knowledge organization are the people in the organization."

I used to come around 11.00 a.m. and Dr Pachauri would dictate to me, mainly research papers, for almost two hours without a break, and then go out. It would take at least four hours to type the matter. The dictation was always very clear.

As one can see clearly, the idea of building up IHC was also a brainchild of Dr Pachauri. I still remember the weekend days when Dr Pachauri, Mr Vinay Jha, the then Director of IHC, and myself segregated each and every application for IHC membership. The first lot was screened and applicants chosen in TERI's Board Room on the 4th floor.

I joined TERI on a Monday, 5 October 1987. Initially I worked with Dr Sunil Khanna and Dr Alok Adholeya. My association with Dr Pachauri started when TERI organized an international conference, titled 'Role of Innovative Technologies and Approaches for India's Power Sector' (New Delhi, 24–26 April 1990). At the time, TERI had acquired a new machine for making slides, in which the camera was attached to a computer, and all the graphs and PowerPoint slides were clicked one by one through the computer. This task was given to me as several things had to be learnt handling the computer, the camera, graphs, etc. - within a very short time. Those involved in this conference had meetings with Dr Pachauri almost every day. In one of the meetings, he addressed me as, "How are things going, Dr Jayaraman?" Such was his attitude to encourage colleagues at the right time. I also had to work closely with him on another presentation, and then it was released as a book in 1992, titled 'Fuelish' Trends and Wise Choices: options for the future. The impact was such that I still remember this title so clearly.

I remember some great moments with Dr Pachauri. It was in 9 Jor Bagh in 1990, one Friday night around 8 p.m. Dr Pachauri came in and on entering the corridor, asked, "Is Jayaraman around?" I was working in another room and ran to say that I was. He hugged me and said, "I know you always work in the office like me. Can you come to office tomorrow at 10 in the morning?" In those times, since TERI was evolving very rapidly, most of us used to work late nights. Within a month, I was absorbed in Dr Pachauri's office. In 1997, I brought my wife and son for the Independence Day celebrations and I introduced my wife to him. He said to my wife, "I am the one who is keeping your husband away from you." He always used to call me on Sundays to come to office. I used to come around 11.00 a.m. and Dr Pachauri would dictate to me, mainly research papers, for almost two hours without a break, and then go out. It would take at least four hours to type the matter. The dictation was always very clear, so much so that even at times, unknowingly, I used to nod off and yet take down the dictation—but never did I miss even a single word. (Of course, Dr Pachauri would not notice that I had been dozing because I would be taking down the dictation with my head bent low!). His voice would be so clear that one could grasp everything so easily. Secretaries who had worked with him know very well the clear diction and uninterrupted dictation.

"We are not only an energy research institute; so the name Tata Energy Research Institute was somewhat limiting. We work on all kinds of natural resources, and we work on all kinds of other resources as well. The name The Energy and Resources Institute is a far more accurate reflection of who we are than the Tata Energy Research Institute."

Those days, when computers were not so common, we used to keep a list of names, addresses, telephone and fax numbers of several people as a typed and printed list. The names were in alphabetic order, and working with Dr Pachauri definitely increased one's 1Q. I had several names and phone numbers of important people by heart of those contacted frequently by Dr Pachauri—these were people from around the world.

Once I had some chest pain and mentioned as much to Dr Pachauri. It was a Sunday. He immediately called his doctor friend, Dr Abby, who was a cardiologist and got an appointment for me the very next day. When I went to the doctor, he said, "Knowing that you are working with Dr Pachauri, I know you would be as stressed as him. So don't worry, I will check you thoroughly and take care of your health." Fortunately, it was just a muscle pain and needed only a small amount of medication.

In 1992 my sister and her family visited Delhi. They arrived on the Tamil Nadu Express on a Sunday. I went to the New Delhi railway station and waited for them at the Paharganj exit whereas they chose the Ajmeri Gate exit. Since there was no mobile phone those days, they could not call me. So they waited for some time and then reached TERI since they only had the office address and not my home address. When they reached 9 Jor Bagh, they met Dr Pachauri, who was already in his office at about 8.00 a.m. and got my home address. Dr Pachauri in those times insisted that the addresses and telephone numbers of all colleagues be updated every month and a copy given to him. This trend continued for a very long time in TERI, which was found to be very useful for several of us when we want to call anybody officially or personally.

There was another incident, which shows his sterling qualities. Once my uncle and aunt from Chennai came to visit us and to see Delhi. They came on a Saturday and on that day Dr Pachauri wanted to take all of us, the colleagues working in his office, for lunch to Sagar Ratna in Defence Colony. I called him in the morning to say that I would be unable to join. He immediately replied, "oĸ, but I do not want to go without you. We can have the lunch on another day." Looking at Dr Pachauri's future commitments, I realized that it would not be fair on my part to change the date and told him that I would join for lunch, since my uncle and aunty in any case would be taking rest on that day. Then we all reached Sagar Ratna around 1.30 p.m. and had lunch. It took almost 45 minutes for us to finish the lunch and never in those 45 minutes did he talk anything related to work: It was all personal chit-chat and we all had a wonderful time. Unfortunately, because of his commitments, we could never go out with him for lunch again.

Several of my friends and others would ask me about my job. I used to tell them that I work with TERI. Immediately they would reply, "Oh, the Tata Institute." That was the name for TERI those days. It is quite interesting to see why the name Tata Energy Research Institute was changed to The Energy and Resources Institute. Once again, it is good to hear it from the horse's mouth! I quote the reason given by Dr Pachauri on 22 March 2003 in Gual Pahari at the annual TERI retreat while replying to a question raised by one of the colleagues about the change of name.

"Well, as you are aware, the fact is that every time we go anywhere or we talk to somebody and they ask you which organization you are from, you say that you are from the Tata Energy Research Institute. The perception is that we are part of the Tata Group of companies and it happens on several occasions that when we send a proposal to somebody, the response is, why should we fund a Tata organization. And nobody seems to know - at least a large number of people don't seem to know that we are an independent non-profit organization and that apart from getting initial seed capital from the Tatas, we really have not got any regular support. From time to time, when Mr Darbari Seth was still the chairman of some Tata companies, he helped us, gave us a grant. But if you look at the commitment of the Tata Group as a whole, it is really not there; it has been non-existent. We have not got any support from them and happily we have been able to grow; we have been able to develop without any regular support of that nature. Now it is also true that we are not only an energy research institute; so the name Tata Energy Research Institute was somewhat limiting. We work on all kinds of natural resources, and we work on all kinds of other resources as well. The name The Energy and Resources Institute is a far more accurate reflection of who we are than the Tata Energy Research Institute. Besides, TERI is now better known as TERI: we are keeping that brand name, just as IBM used to be International Business Machines, and ITC was Imperial Tobacco Company. Of course, for good reason they wanted to hide that fact and they called themselves ITC. But for us also keeping the TERI name is vitally important; yet it is important for us to change. Now some of you may have concerns whether we lost anything by dropping the Tata name. I assure you we have not. If you look at the example of the Indian Institute of Science, which is a Tata institute, it does not carry the Tata name. Yet it is a highly prestigious institution."

There are several instances that make me admire Dr Pachauri's thought processes. All of us are aware that one of TERI's flagship programme

was GREEN India 2047. I was working with him at that time when the first document was being finalized for presentation to high officials of the Government of India. The title was not firm then but he had said earlier that the acronym would be GREEN India 2047. (He had a preference for green: one had only to see the furniture in his room covered with green felt!) One evening around 6.30 he called me from his home and said, "Note down the full form for GREEN India – Growth with Resource Enhancement of Environment and Nature." I could never forget that title in my life! This is something that made me learn by heart several acronyms during the course of working with him and in TERI in general.

Finally, I would like to mention how he loved this TERI-IHC building. On 28 July 1994, the United States Secretary for Energy, Mrs Hazel R O'Leary, visited India and TERI also. That day Dr Pachauri had arranged for a reception and dinner in her honour at his home, 160 Golf Links. Hence he left office around 6.00 p.m. After almost an hour he called me from home and asked me, "Jayaram, is everything safe there at IHC?", because there had been an earthquake of intensity 4.0 on the Richter scale at that time. Although it is said that IHC is built to be earthquake proof, the tremors were so strong that one could feel the building shaking. Well, there were several earthquakes later in Delhi and IHC continues to stand tall! Kudos to the vision of people like Dr Pachauri!

> M JAYARAMAN Project Management Unit (1987–)

Leading by Example

I joined TERI in 1987 after working for over ten years in the government. All my friends and relations were against my leaving a secure government job and switching over to the private sector, that too on contract. I had another job offer also at the time, but a conversation with Dr Pachauri changed my mind. In fact, my interview with him felt more like a conversation and less like a job interview

Dr Pachauri would spot talent and entrust people with new responsibilities. I remember suggesting media outreach to him for TERI. He immediately asked me to start handling media relations. It was a new field for me but he gave me complete freedom to develop relations with media people; soon TERI's work started appearing in print and electronic media.

> In 1987, there were only 67 people in TERI, and the working environment was very different. The organization was small but growing with such noted scientists as Dr Ashok Gadgil, Dr Dilip Ahuja, Dr V Jagannathan, Dr M S Swaminathan, and Dr T N Khoshoo and the then chief of administration, Col. K K Puri, working under the dynamic leadership of Dr Pachauri. I was motivated to work hard and contribute to this budding organization. The organization's strong ethics such as honesty in financial dealing, conscious spending, and independent decision-making combined with high individual accountability inspired me tremendously.

> Dr Pachauri was highly encouraging of new ideas. He would spot talent and entrust people with new responsibilities. I remember suggesting media outreach to him for TERI. He immediately asked me to start handling media relations. It was a very new field for me but he gave me complete freedom to develop relations with media people; soon accounts of TERI's work started appearing in print and electronic media. With the expansion of media activities, Dr Pachauri brought a professional, Annapurna Vancheswaran, to manage the area. The organization was growing organically at the time with Dr Pachauri guiding the vision.

> Travel, especially international travel, was also a new area of work for me but the freedom and trust shown by Dr Pachauri and Col. Puri gave me the confidence to handle difficult situations and encouraged me to come up with new ideas for saving money for the organization. Dr Pachauri was very particular that we maintain the culture of an NGO and always emphasized austerity in our expenditure.

> During my 32 years of working in TERI, I found Dr Pachauri an exceptional leader. He was not only a good administrator and an effective manager but also a good human being. His doors were always open to all, whether a senior research professional or an office attendant. In meetings, he used to say that he might not be able to solve all problems but would

be happy to listen and discuss. He helped staff members solve even their personal problems. He did not think twice before sanctioning five lakh (half a million) rupees for the emergency treatment of a TERI employee. However, he was ruthless with dishonest people. He had zero tolerance for unethical behaviour and never hesitated to take harsh action if anyone was found guilty of it.

Dr Pachauri laid the foundation for the positive and productive work culture of TERI. Fast and speedy sanctions, genuine care for staff members, and continued encouragement of talented people became a norm for TERI under his leadership. He wanted all, especially senior staff in administrative services, to be available for duty 24/7. Dr Pachauri wanted to create a flat organization without binding people in inane rules and hierarchies.

I learnt so much about people skills from Dr Pachauri. He gave credit to people where due and made them feel valued. His memory was so sharp that he used to remember the name of every staff member from researchers to the attendants serving him tea. Everyone knew of the multiple hats he wore from serving as the chairman of IPCC to being a top climate scientist and leading TERI. And yet, no matter how busy he was, he would always find time for his first love, cricket.

I would never forget two key things I learnt from Dr Pachauri. First, he led by example. He was sincere, hard-working, and cared about people and he expected nothing less from his staff. Second, he placed trust in his subordinates and gave them freedom to grow. His confidence in my abilities helped me grow professionally and always ready to take on new challenges throughout my 32 years with the organization. I am confident that even today true TERIERS imbibe and carry these values wherever they go.

> SUDHEER KATOCH General Manager, Administrative Services (1987–)

As I Knew Him

To say that Dr Pachauri was a visionary is stating the obvious, a fact acknowledged globally. And TERI is a thriving example of that. However, to brand TERI as merely a think tank would be injustice to the way he conceptualized and nurtured TERI. What is a think tank? As defined in the Merriam-Webster dictionary, a think tank is 'an institute, corporation, or group organized to study a particular subject (such as a policy issue or a scientific problem) and provide information, ideas, and advice'. Collins English Dictionary says that a think tank is 'a group of experts who provide advice and ideas on political, social or economic issues'. Whichever way one looks at it, TERI is much more than a think tank and that is where Dr Pachauri's genius lies: setting up an institution rooted to the ground and yet deliberating on national and global challenges. Realizing very early that the real prosperity of a developing country such as India can only be based on all-inclusive rural development, TERI focused right from its beginning on multiple challenges facing rural economy. From helping develop microlevel rural energy plans to moving beyond academic debates around rural energy access, Dr Pachauri steered TERI and other like-minded entities to think in terms of actual delivery of rural energy and thus was born the 'Lighting a Million Lives' project, that which soon graduated to being the 'Lighting a Billion Lives (Labl)' project. And this is just one example.

Never in TERI was research for the sake of research or for publications alone. We were always exhorted to think of the end-users.

One could learn a great deal simply by observing Dr Pachauri's actions and paying attention to his words but those who had the opportunity to work closely under his guidance were fortunate indeed, I being one of them, having been influenced by such a rare mentorship for close to three decades. Naturally, this period of time saw me in a variety of roles, from a field-based researcher to coordinating activities of the renewable energy group to leading the energy technology division as well as a short stint at TERI University (now the TERI School of Advanced Studies). His expectations, as well as advice, kept evolving over time but there were a few core beliefs that never changed. Two of them relate to finance: financial integrity at every level and financial independence for TERI were two aspects where Dr Pachauri's stance was utterly uncompromising.

And from that fierce desire to guard TERI's financial self-sufficiency was born that term so unique to TERI: research entrepreneurship! It was so much inculcated in all of us that unlike researchers in other organizations, we actively solicited financial support to help fund our research ideas. Nothing like business development support for us researchers because we were (and remain) ideators, business developers, project managers, and implementors all rolled into one. Obviously it was not a typical, cushy position of a researcher but then in front of us was Dr Pachauri who was putting in the kind of efforts and time that were enough to embarrass us. He was there in the office before anyone of us and we never saw him leaving the office because we would leave much before him. His passion for work was hard to match. Yet, he accorded us so much freedom that helped us think freely and without any constraints. And he was always there to help you out if you wanted help, to guide you so that your idea did not remain only as an idea. Despite his busy schedule, he had time for all of us irrespective of hierarchy. When in a leadership position, I realized the enormous value he attached to one's views. Many a time he would have very strong views about something and equally compelling logic to back that but never even once I found him imposing his views on others. At the most he would provide his suggestions on the subject but then let you take the final call.

An offshoot of our financial independence were the relentless efforts put in to develop a portfolio of technologies, products, and services that, when monetized, could help shore up TERI's financial health. The results are for all to see: Oilzapper, mycorrhizae, biomass gasifiers, TEAM (TERI's enhanced acidification and methanation) biomethanation systems, Uttam Urja solar products and efficient cookstoves, tissue-cultured plants, and Supi Sugandh herbal products.

Moreover, not for us, never in TERI, research for the sake of research or for publications alone. We were always exhorted to think of the endusers and then develop an idea. The unsaid dictum was that our task is not finished until the research output reaches the targeted user. This, in turn, helped us develop a rigour, which otherwise would have been missed altogether and that is where lies the major difference between TERI and other organizations: an action-oriented and applied research approach as opposed to only academic research.

Dr Pachauri was not merely a person with a vision but, more important, someone who had the capability – and self-confidence – to turn that vision into reality. Dr Pachauri in many ways was much ahead of his time. The whole issue of climate change is a classic example where not only he flagged it when it had not yet become a fashionable topic to talk about but also worked tirelessly as an evangelist to mobilize global citizens to act. And the list is endless, whether it is renewable energy, energy efficiency in industry, green buildings, or even sustainable development.

I said earlier that one could learn a great deal merely by observing Dr Pachauri. The importance of being meticulous, of building relationships, developing and sustaining networks, the significance of every single word in a letter, or even the right posture—all seemingly mundane things that I learnt from him, some by observation, others the hard way! There are many things to remember, innumerable moments to cherish.

> AMIT KUMAR Senior Director, Social Transformation (1987–)

A Pragmatic Approach to High Standards

Dr Pachauri must have restrained himself: he merely thumped his desk with his copy of TERI's annual report, an advance copy that I had taken to him for approval, although it looked as though what he would have really liked to do was to throw it at me. Totally mystified by the outburst - for I had checked the copy for any obvious blunders before handing it over - I waited with bated breath. "Have you looked at the photo of the inaugural function of TERI North America", he hissed, "with which you have chosen to grace the cover of the annual report?" Angry or not, his choice of words was always impeccable, and came with grace notes when delivering sarcasms: "It was not tattered; believe me, I was there." I peered at the cover and realized the problem. The shiny banner, made of some synthetic material, reflected light well, and the flash, bouncing off unevenly because the banner must have been billowing in the wind, had indeed made it look a bit moth-eaten. As was common with such encounters - although rare - I walked away without a word, taking the copy with me. We at Publications Unit then went into a huddle like a team of football players and eventually came up with a solution: superimpose on the offending rectangle another one, created anew and sans the patches. We thus reprinted the cover, which turned out to be virtually indistinguishable from the original.

Dr Pachauri's insistence on the highest standards – whether avoiding slipshod use of articles or making sure that quotation marks are placed just so – was not all nit-picking. He was equally particular to pass on any praise that came his way to whomsoever that deserved it.

> As I write, I recall how Dr Pachauri had dealt with my outburst, the first of only two in my 15 years with TERI, when I went to see him with an advance copy of the proceedings of the international conference on global warming organized by TERI, the first-ever international event on the topic to be held in the developing world, when global warming was not a familiar phrase to many. That was one of his fortes: to spot the next topic to attract worldwide attention, and his foresight had always given TERI the first-mover advantage. Global warming (which later morphed into climate change) was the first, then it was air pollution, depleting stocks of freshwater, sustainable agriculture . . . But I digress. The proceedings volume was a bulky affair, with papers by world-renowned names, and we at Publications Unit had burned the midnight oil - RKP's favourite phrase – for months to publish it in record time. Dr Pachauri began leafing through it and asked me why I had thought it fit to skip the list of members of the international steering committee that had guided the conference. I was dumbfounded and said to myself, "Of all the text that makes up this volume, this list of committee members is the only thing he can think of?"

I then suggested to him, barely managing to conceal my anger, that we go to the TERI Library right away and look up any volume of conference proceedings, published by any reputable academic publisher, that features such a page. Dr Pachauri remained silent for a few minutes and said he'd speak to me later. The next day, I was summoned to his office. He got up, patted my shoulder, and said, "I knew you were upset with me yesterday, but here is something you should know." He then explained the facts of life to me, something to the effect that TERI was not merely a publisher of academic volumes but a self-sustaining NGO, and name-dropping was a necessity because it strengthened its credibility and helped to get funds. And while it was important that we publish to international standards, we needed to keep other considerations in mind as well.

Dr Pachauri's insistence on the highest standards – whether avoiding slipshod use of articles or making sure that quotation marks are placed just so – was not all nit-picking. He was equally particular to pass on any praise that came his way to whomsoever that deserved it. I recall a letter he once received from some bigwig in USA praising the deft editing of her article. He had the letter photocopied and passed on to me, with a 'Post-it' note affixed to the photocopy: scribbled on it, in his usual precise hand, was the phrase 'Well-deserved encomiums'. Many years after leaving TERI, when I wrote to let him know that I had aced one of the toughest examinations for editors (each of three independent examiners must award you at least 86 marks out of 100), adding that his pointing out some lapse in my use of articles had prompted me to study the topic in great detail must have helped me to pass the examination, he replied, "I am so glad that all your hard work and dedication is being recognised overseas."

This piece will be incomplete without revealing that it was Dr Pachauri who suggested that I try my hand at editing. I was keen on information and documentation and had written to him to ask whether TERI would offer me a job. He asked me to see him when I was in Delhi next, and we exchanged a couple of letters. He pointed out that although I was interested in that field, I had no formal qualifications. He did add, however, that I should get in touch if I was interested in working as an editor. As luck would have it, I was fortunate soon after to complete a 4-month intensive course in editing and publishing and informed him accordingly, whereupon he asked me to join TERI—and changed my life. I have never regretted the career switch I made and am indebted to him for ever.

The last I met him was in November 2019, at his place in Golf Links one evening. We chatted a bit and, for once, he agreed to consider my request that he write his memoires: on all earlier occasions, he had simply brushed off the suggestion, adding that he knew I was pulling his leg. But Fate had decreed otherwise, and the present volume is one attempt, be it ever so small, to make up for that loss.

> Yateendra Joshi Fellow (1988–1994, 1995–2005)

A Visionary Global Leader with Great Compassion

My first interaction with Dr R K Pachauri was very brief and interesting, outside the departure gate of Mumbai airport, and marked the close of the selection process for joining TERI-which changed my life forever. I was initially selected during a campus interview while I was pursuing a master's degree at the Indian Institute of Technology, Mumbai, but the letter informing me of my selection arrived after I had left Mumbai for Bengaluru, because my research work was to be carried out at the National Aeronautical Laboratory in Bengaluru. Communications then were not as quick as they are now, and almost a year went by before I could finally meet Dr Pachauri for the final round of selection. I was both amazed and impressed that a high-ranking person, the director of the Tata Energy Research Institute, had not only kept the communications going for a year but offered to schedule a meeting at the airport to select a new recruit for a junior post. My brief interaction with Dr Pachauri - I can clearly recall his long beard fluttering in the wind as we spoke - and his energetic and charismatic personality, confidence, empathy for someone like me, and his readiness to take on challenges must have persuaded me to take up the offer: although TERI was part of the coveted Tata brand, it was a small and emerging research group and that too in new area, namely renewable sources of energy.

I would see finely edited printouts on my table early morning, which had been given to Dr Pachauri way past the normal working hours the previous day. The text showed that he had worked through it line by line, making minute corrections, and not simply scribbling 'OK' or 'Go ahead'. Such feedback helped us learn and improve.

> I joined TERI in June 1988, then a small family-like group of fewer than a hundred people and spread over several residential buildings in Jor Bagh: the laboratories, the computer centre, and even a few cabins had been set up in what must have been kitchens and bathrooms-a new experience for me, a fresh graduate from the prestigious IIT joining a Tata enterprise. In the initial years, until we all moved to the present site, which is part of the India Habitat Centre complex, TERI was just like a big family with Dr Pachauri as its head. He used to interact with others as though they were family members rather than as the director of the organization; as a result, we all developed close, family-like ties. I had mentioned to Dr Pachauri at one point that Sangeeta, my wife, was a student of fine arts. A few years later, on one of the Independence Day celebrations, an exhibition of paintings was organized on the lawns of 7 Jor Bagh. At that time, he turned to me and asked, "Why not ask Sangeeta also to showcase her paintings here?" I was touched and also impressed and could not help wondering how he remembered such small details not only

about his staff but also their family members. And several years later still, at one of the get-togethers at which my wife was with me, he addressed her by name and asked her whether she had kept up with her passion for painting. He was a very down-to-earth person and interacted with every employee irrespective of their rank with the same concern even after he became a global figure. He built TERI up almost from scratch with his visionary approach, hard work, and never-say-never attitude, facing new challenges and turning problems into opportunities and stepping stones to scale greater heights—a spirit he also imbibed into his staff, who used to work for him and for his, and theirs, organization, along the path he showed them by example and dedication, scarcely giving a thought to such mundane concerns as cost-to-company or perks. That golden era of TERI, the Jor Bagh days, I would never forget and cherish forever.

Dr Pachauri was very hard-working; it was difficult, almost impossible, to keep pace with him. He also took quick decisions. Even now, I recall my amazement at seeing finely edited printouts on my table early morning, which had been given to him way past the normal working hours the previous day. The text showed that he had worked through it line by line, making minute corrections, and not simply scribbling ' $\sigma\kappa$ ' or 'Go ahead'. Such feedback helped us learn and improve. I wonder how Dr Pachauri, despite being the head of an institute, managed to find the time; work with such dedication and energy; and show such patience towards everyone including new recruits and attend to them as the head of a family.

Dr Pachauri was also very particular about the sincerity and integrity of TERI staff and never forced them to work but motivated them and showed his faith in each one of them. I remember a debate on keeping a register or a logbook to record the times of entry and exit, but he would always oppose such suggestions and insisted on self-discipline, sincerity, and dedication, which he believed should come from within and not imposed through such means. I felt he gave each project team the freedom to work according to what the project needed and hardly interfered in day-to-day execution, making people feel that it is their project. This was a wonderful feeling and motivated us to work passionately and relentlessly. Also, before moving to the IHC, he initiated decentralization by structural reforms in TERI, forming separate divisions, each headed by its director, and delegated responsibilities accordingly, which, I believe, helped TERI to grow very quickly to its present global status.

Dr Pachauri used to cultivate an atmosphere of self-discipline and proactive effort irrespective of the results and always believed that TERI had to be built on its own strength without depending on any external support including grants from the government. He would always emphasize in monthly staff meetings that if TERI had to maintain its unique position and continue to grow, it would do so on the strength of its independent and impartial views and innovative, path-breaking approaches without succumbing to any kind of pressure. I recollect an assignment, which involved gathering and analysing information to review a decade of work of a ministry. In gathering data from the officials of the ministry, we would often hear remarks to the effect that this assignment by the ministry is going to cost TERI dear and that whatever the outcome of the review, it is going to be a hornet's nest and a threat to the institute's future if not to its very existence. However, at one point Dr Pachauri locked all the team members inside the conference hall at 7 Jor Bagh, along with a dozen senior staff, and asked us to come up with a report based on factual analysis without any fear and promised his full backing so long as the report was impartial and factual. It was a particularly insightful experience for junior staff like me and encouraged us to work hard and with dedication.

Dr Pachauri was also a visionary, who could hear the buzz of the future. In the early 1990s, he formed a research group in TERI on global warming and another on population explosion when these topics were either unheard of or considered unimportant—and later occupied centre stage.

Dr Pachauri was also exceptionally skilled in establishing, maintaining, and strengthening relations. He would build a strong bond with people not only in TERI or in India but globally. For example, back when I was handling a long-term project in Sikkim, Dr Pachauri came in contact with the then chief minister of Sikkim, Pawan Kumar Chamling, and struck a strong rapport with him in no time. This led to the chief minister attending the next edition of DSDS, the Delhi Sustainable Development Summit, as one of the main guests and in the following year, organizing a special conference mainly to invite Dr Pachauri to Gangtok. Unfortunately, Dr Pachauri could not attend the conference because of an injury suffered at the last moment while playing a cricket match. (Cricket was yet another thing that he was passionate about throughout his life.) I am sure this skill of his played a major role in TERI attaining global importance within a short time.

All of this and so much more: a wonderful learning experience that I would cherish forever.

Sanjay Mande Fellow (1988–2009)

My Inspiration

Dr Pachauri was an alumnus of La Martinière College, Lucknow, which, like most British Indian Schools of the 19th century, was modelled upon Eton. The schools taught qualities of leadership, discipline, code of honour, and grit, among many others, to their students and needless to say, Dr Pachauri was endowed with these qualities. The following two anecdotes highlight these facets of his personality and character.

One could not figure out how someone who had travelled so much is on the field playing with all his might. Only a highly disciplined and gritty person can do this.

When I joined TERI in 1988, I had the good fortune of playing in TERI cricket team with Dr Pachauri. It was in 1990 that Mr V Gopinathan, Dr Pachauri's secretary, informed the cricket team members of a match to be played between TERI and Mr M R Scindia's team. Mr Gopinathan said that Dr Pachauri was scheduled to reach Delhi from Japan at 4.00 a.m. and the match was to commence at 9.00 a.m. the same day. He conveyed to the players that all should reach the venue before 8.30. To everyone's surprise, Dr Pachauri reached the venue before the TERI team. One could not figure out how someone who had travelled so much is on the field playing with all his might. Only a highly disciplined and gritty person can do this.

The next incident is about leading from the front. Once Dr Pachauri was fielding in the outfield and the batsman hit a powerful shot. The ball was going towards the boundary and Dr Pachauri ran to stop the ball. He realized that he won't be able to bend and stop it with his hand so he used his foot instead. There was a loud thud as the ball hit his ankle, but the player did not score a boundary. Despite a swollen ankle, Dr Pachauri continued to play after putting some ice on the wound. The next day we learnt that the ankle had been fractured. Dr Pachauri had to wear a plaster for six weeks but, as usual, was the first to reach TERI that day too.

Such was our Dr Pachauri, a true leader who led from the front and became a role model for many in TERI.

KAMLESHWAR P RATURI Consultant, Finance and Accounts Division (1988–2018)

My Guru, My Mentor, and a Great Human Being

My memorable journey, which lasted for over 14 years, started at the beginning of 1988, when I joined TERI. Prior to that, I had worked with the Council of Scientific and Industrial Research and the Indian Council of Agricultural Research, both governmental organizations. The bureaucratic set-up offered less freedom in terms of working style and I wasn't content working there, always looking for opportunities to switch jobs. My mentor, one Mr Biswas, the then Director, Central Secretariat Library, Ministry of Education, suggested that I look at TERI. I met Dr Pachauri for the first time when he interviewed me for a job, and I was quite nervous before meeting him. I was pleasantly surprised to find him a polite interviewer, and he made me comfortable during the course of the interview. At the outset, he said that while working here you have to be honest and hardworking, which would always pay you. After the initial meeting, I received a call after a few days for the final round of interview with Dr Pachauri. He offered me a job without verifying any of the references I had provided, and this was a sign of his trust in me and my capabilities.

Dr Pachauri was a hard taskmaster and you were always on your toes; at the same time, he used to give you the space to find your sense of direction as well.

A month later, I joined my new place of work, 7 Jor Bagh. Dr Pachauri's office used to be in the same building, on the ground floor. As time passed, I started becoming comfortable working in TERI because the work environment was friendly and conducive, and I felt I had finally found what I had been looking for. Dr Pachauri was a hard taskmaster and you were always on your toes; at the same time, he used to give you the space to find your sense of direction as well. As a leader, he was always ahead of his time and well versed with his field of work that was wide-ranging: from climate change to biotechnology to sustainable development and beyond. Dr Pachauri was a motivator for everyone who wanted to explore new research avenues.

During lunch breaks, many at TERI would leave their desks to have their lunch in small groups, and some would visit the nearby market. Around that time, Dr Pachauri used to make rounds of the premises, and switch off any lights not in use. On some days, he too would go to the market and find many of us there, eating *gol gappas* or lunch, etc. One day he spotted me relishing *gol gappas* and said: "Lunch break is over; please return to your desk and leave the payment to me because I too want to eat some."

Despite being the head of the institution, Dr Pachauri never lost his sense of humour. Once one of my colleagues had to see Dr Pachauri about a paper and she wrote that she had to see the 'old man'. Somehow, that note also went along with the paper to him, and he read and struck off the line, saying, "I am not old," and returned it to her, causing her to feel a little embarrassed, but nothing more than that.

My daughter was born the same year I joined TERI, and I remember Dr Pachauri congratulating me and saying that he had daughters himself and that daughters were better than sons. In 1992, when Babri Masjid was demolished, he called me and said he was sorry about the atmosphere at that time and that I shouldn't worry and I should feel free to ask for any help I needed.

Around 1994, I decided to pursue my graduate studies in the US, and when I secured admission at the University of Maryland, College Park, I met him and requested that study leave (sabbatical) be granted to me. The first thing he said was "You will not come back." I assured him that I would certainly come back. He said that he had heard that before and then jokingly added that I might find a girlfriend and stay back in the US.

I was granted leave and I left for the US to complete my studies. Dr Pachauri used to visit the US almost every month or even twice a month and because his daughter Shonali was also studying at UMCP, he would often drive down and meet us. He was always supportive and helpful in every way. After completing the course, I joined the World Bank, and I met him and gave him an application requesting that he cancel my remaining study leave and grant me leave without pay for a year. He called me over the breakfast the next day and, after going through my application, asked me, "Since when have you have become the decision-maker?" I was taken aback, but he assured me that he would take the decision himself. He returned my application to me and asked me to submit a modified version of it.

I came back from the US in 1998 and I re-joined TERI. In February 2000, TERI was organizing its silver jubilee, and the celebrations were to be inaugurated by Mr K R Narayanan, who was then the President of India. I had prepared a note including details about the inauguration, and the note was to be uploaded on TERI's website. Unfortunately, I got the date wrong—and the President's office happened to check the website that very day and spotted the mistake. Dr Pachauri got a call from the President's office about this oversight, which he traced to me and said, "I never expected this to happen from a person like you." He was very upset but that was all he said to me.

I left TERI in July 2001 to join the newly set-up satellite office of NEDO, the New Energy and Industrial Technology Development Organization, Japan, in New Delhi. Mr Makino, the then chairman of NEDO, was a great friend of Dr Pachauri and once had called him over for lunch. Dr Pachauri said to Mr Makino, "Please tell me if Dr Siddiqui is found wanting in his work in any way; I will give him a piece of my mind!" NEDO had a close working relationship with TERI and I continued my association with Dr Pachauri.

In early 2012, a short while after the demise of my wife – someone must have mentioned it to Dr Pachauri – I received an email from him. Other colleagues from TERI whom I had worked with were also copied on the email, so meticulous he was about relationships.

I'd say that Dr Pachauri adopted two guiding principles: pursue a number of objectives with single-minded passion and build high-quality teams. Both required ruthlessness.

Dr Pachauri was a great visionary who could think of unique ways to take ideas forward in the right direction but, despite heading the institution, never imposed his decisions on subordinates (he used to call them colleagues). Even if he had strong opinions about some matter, he would always discuss those concerns with the appropriate person and resolve matters with a sense of responsibility and sometimes with mutual consent. He brought in the topics of climate change, renewable energy, and biotechnological solutions well before these topics became part of public discourse.

Over the decades, TERI has emerged into a major research think tank active in multiple areas including energy and environment, industry, biotechnology, and policy analysis, and a great deal of credit for this stature goes to Dr Pachauri's networking abilities. TERI's reception area at the India Habitat Centre complex shows ample evidence of those skills, namely the many photographs with such eminent people as the former UN Secretary-General Ban ki-Moon, the former Japanese Prime Minister, and several other world leaders. Bill and Hillary Clinton had invited him to join their non-profit organization in an advisory capacity, and Dr Pachauri could get people like the Hollywood star Arnold Schwarzenegger and the former French Foreign Minister Laurent Fabius to participate in the Delhi Sustainable Development Summit, TERI's annual flagship event [now the World Sustainable Development Summit].

I would like to end by summarizing the many aspects of Dr Pachauri's versatile personality.

- Social entrepreneur: his contribution to TERI's 'glocal' model (global and local) is unique, for example the 'Lighting a Billion Lives' project
- Diplomat: he could bring governments, the industry, and grass-roots level organizations to share a common platform, for example, the DSDS
- Institutional builder: for example the TERI School of Advanced Studies
- Educationist: to bring the youth to the forefront and to prepare them to become the torchbearers for sustainable development, he started the TERI Prakruti Schools
- Visionary: his unique sense of pinpointing future topics of interest well in advance, which has often given TERI the first-mover advantage
- Global leader: he became a world authority on sustainable development

A M Siddiqui Fellow (1988–2001)

Three Decades in TERI with Dr Pachauri

After working for 15 years with the Indian Air Force, I got the opportunity to work with TERI in March 1988 in its transport department. Only a few months later, I received an appointment letter from the Swiss Embassy offering a salary three times that at TERI. This was a real temptation, especially in view of the family responsibilities I had at the time. I thought I must discuss the matter with the head of the institution, and I walked up to Dr Pachauri with the letter. He read it, simply tore it up, and assured me that I had a brighter future in TERI than anywhere else. The counsellor in him made me stay back with TERI. That was more than 30 years ago, and as assured by Dr Pachauri, I have grown from a driver to an assistant general manager. Such a steep leap upwards could have been possible only in a set-up led by a fantastic leader and a visionary like Dr Pachauri.

Such was Dr Pachauri's aura that it made a despondent mind bright and hopeful. He ensured that every employee felt a sense of belonging to TERI and to treat it not as an organization but as a large family.

> Here are a few incidents in my years with TERI that come to my mind incidents that make me feel that I always belong to TERI.

- 1 Just a year old in TERI, I was asked to drive Dr Pachauri to Jaipur for a conference. With my driving skills, I managed to make it to Jaipur a day earlier as was required, and he could check in into his hotel well in time. A couple of foreign delegates had already checked in, and Dr Pachauri wanted to arrange a small party for them. Organizing a party in a five-star hotel would have been expensive. After thinking this over, Dr Pachauri asked me to buy some drinks from outside, which could be served in his room: this way, he could save some money for TERI. This incident brought home to me to the value of hard-earned money and the need to put it to best use by being judicious.
- 2 The same year, a researcher was to travel to Almora for a field visit. She took a minibus from the cGO Complex in Delhi to Almora early in the morning and was to return by the same bus after two days, reaching the cGO Complex at 8.00 p.m. I was detailed to collect her. At that time, there was no way to communicate, and it was December: darkness sets in early and it gets very cold in Delhi. I reached the spot half an hour ahead, but the bus was delayed and by the time it arrived, it was 2.00 a.m. While I waited, her father inquired after her and was informed of the delay. The trust Dr Pachauri placed in all his staff made each one of us go the extra mile and to rise to the occasion. These values and practices continue in the way we function in TERI.
- **3** As we all celebrated Holi, I met with an accident and broke my leg. I was hospitalized for almost six months. Dr Pachauri asked after me and

made sure that my salary was credited on time. After 6 months, when I went to work to collect my salary, walking on crutches, Dr Pachauri was informed that I was back. He suggested to my boss that I be given the job of managing transport and maintenance from that day onwards. I was on leave without pay for about 60 days, but Dr Pachauri allowed the welfare fund to be used to help me look after my family and myself during those trying times. Dr Pachauri's insistence that I report for duty despite the crutches and that my leave be without pay seemed unfair to me at the time; however, once I resumed my responsibilities as transport supervisor, I remembered the assurance he had given me back in 1989 that a brighter future awaited me at TERI.

4 Around the same time, when I still had to use crutches, I noticed Dr Pachauri drive past in his car as I was making my way to the office from the bus stop. After a few weeks, when I was able to walk without the crutches, he told me that he had not offered me a lift that day on purpose, because he was keen that I recover quickly on my own and have the confidence to be independent. This incident made me realize how thoughtful Dr Pachauri was in many ways.

Such was Dr Pachauri's aura that it made a despondent mind bright and hopeful and start thinking positively. He ensured that every employee right from the housekeeping staff to the highest in the ladder felt a sense of belonging to TERI and to treat it not as an organization but as a large family. He always encouraged us with a big smile, even if he was passing through a turbulent phase. He always said that one should never let go of passion and hard work.

After 32 years with TERI, I feel so happy and content that I am part of TERI and that I was with Dr Pachauri, who moulded me into the man that I have become, passionate about whatever I do.

R Venkatesan Asst General Manager, Transport (1988–)

My Notable Mentor and Guide

I still remember TERI quite distinctly when I joined it: a small organization with a handful of staff working from various rented buildings in the posh Jor Bagh area of Delhi. Dr Pachauri always nurtured every employee through his personal interactions as well as staff meetings; maintained that each one of us must have self-confidence and intellectual self-assurance; and encouraged each one of us to be a 'research entrepreneur' in all research activities we undertake either independently or collectively within the group. Every person in TERI, from the highest to the lowest, clearly understood Dr Pachauri's vision and what TERI was trying to achieve under his able guidance. He left no stone unturned to help us build the confidence that we have and the level of prominence and recognition that TERI has attained with the hard work and dedication of all its people.

Dr Pachauri always believed that timeliness is critical to success and always reminded us that we need to be aggressive in expanding our efforts and also in widening our horizons to focus on all sources of renewable energy as a sustainable approach to development, particularly in rural areas of the developing world.

> Dr Pachauri always encouraged staff to 'think out-of-the-box' while writing research proposals and to 'burn the midnight oil' to publish research papers that were essential to TERI's success. During his yearly appraisal meetings, he personally guided every one to come out of our cocoons and strive to put in more effort to take TERI to greater heights. There was immense value in those messages and what were true learnings in those days hold true even today.

Dr Pachauri was a visionary in leadership and in action, deeply committed to develop clean-energy technology and solutions to address critical energy- and environment-related issues and that too much before time. He always believed that timeliness is critical to success. With the position that TERI was in, he always reminded us that we need to be aggressive in expanding our efforts and also in widening our horizons to focus on all sources of renewable energy as a sustainable approach to development, particularly in rural areas of the developing world. Dr Pachauri was instrumental in expanding TERI's renewable energy technology activities to global scale through partnerships and international collaborations. It is important to highlight a very special moment in my life: the visit of His Royal Highness Prince Charles to TERI Gram and the keen interest he showed in TERI's activities in renewable energy. This was a lifetime opportunity for me personally to interact with HRH Prince Charles and to explain our work. Dr Pachauri's constant guidance helped us to expand our work on biomass gasifiers to other countries including Ethiopia, Myanmar, Thailand, and Uganda.

Dr Pachauri had a very special affiliation with people of Myanmar at various levels and signed a long-term partnership with the Government of Myanmar to strengthen India–Myanmar relations in the fields of renewable energy and sustainable development by designing and implementing renewable-energy-based projects focused on decentralized energy systems. I was personally involved in, and managed, some of these projects under his direct guidance. I remember his personal meeting with Aung San Suu Kyi. Dr Pachauri was instrumental in rebuilding the Arya Samaj Temple in Maymyo near Mandalay, where his mother had stayed when she was very young. Dr Pachauri also donated funds to re-build the temple in his mother's memory and, along with his brother, Dr S K Pachauri, visited Mandalay and Maymyo in 2006.

In the last few years, he used to greet me by calling "Aao Baadshaho", which would instantly make me smile every time I entered his cabin and restored my belief that I had a very special place in his life.

I conclude by quoting Theodore Roosevelt: "We must all either wear out or rust out, every one of us. My choice is to wear out." This is exactly what Dr Pachauri practised and created TERI, a great institution.

> SUNIL DHINGRA Senior Fellow and Associate Director (1989–)

Oilzapper and Other Stories

Back in 2004, when I was promoted as Associate Director of the Environmental and Industrial Biotechnology Division in TERI, most of the research professionals had left and there was no one to support in the division. With few research projects in hand, it was a particularly challenging period for the survival of the division. Moreover, getting regular research grants from funding agencies was back-breaking work.

One day, when Dr Pachauri was on his routine morning round to all the laboratories, I somehow mustered confidence and shared my apprehensions with him. After listening to my problem, he told me to see him later in his office to discuss the matter in detail. I duly called on him the same evening and had a detailed discussion on the matter. Dr Pachauri was a man of global vision and an extensive network and suggested that we join hands with the ongc (Oil and Natural Gas Commission) and create a joint venture company. Without wasting time, he arranged a meeting with the chairman of ongc, and after several rounds of discussions the ongc board approved our proposal and thus was born the ongc term Biotech Ltd (otbl), in 2007, for large-scale use of Oilzapper and other technologies. Oilzapper is a curated sample of various bacteria that can eat up petroleum residues: the product is used in cleaning oil sludge.

The venture proved successful and OTBL has always been a selfsustained company since inception. Currently, the company has presence in Ahmedabad and Ankleshwar, Gujarat; in Mehsana, Haryana; and Duliajan, Jorhat, and Nazira, Assam. Projects have been successfully executed on bioremediation of oily sludge in India and abroad and on microbially enhanced oil recovery and prevention of paraffin deposition in oil well tubing.

Back in 2004, I used to commute using the autorickshaw. One evening I found no autorickshaw nearby and was walking down a lane in Jor Bagh to look for one when a car came to a halt next to me. Dr Pachauri was in the car and asked me where I was headed and offered me a lift to the nearest autorickshaw stand. On the way he enquired where I lived and how I commuted every day between home and workplace.

After a week, I saw a circular from Dr Pachauri sanctioning a car for all the directors, which really made my life not only comfortable but also much more productive. Dr Pachauri showed himself to be not only a man of discipline but a man filled with compassion for all his colleagues.

Dr Pachauri's in-depth knowledge and contribution to our nation and the world will always be treasured.

> BANWARI LAL Senior Fellow and Senior Director (1989–)

The Importance of Attention to Details

My tenure with TERI started towards the end of 1989. I had good number of years of interactions with Dr Pachauri. I would like to highlight five of his traits that attracted and impressed me most.

Once Dr Pachauri went to the extent of telling me that if I received a request even from him, I should reject it if it was not in the interest of TERI.

The first trait that attracted me was his utmost care in spelling the names of people. I will cite two instances to support this. The first instance was when the spelling of Mahatma Gandhi was wrongly printed in the list of holidays given in TERI diary for that year. He took it very seriously and came to me personally to express his displeasure. The second instance pertains to the spelling of my name. Not even once did he misspell my name whereas most of my colleagues even today do not spell my name correctly.

He always wanted judicious use of TERI's funds. Whenever I met him, he used to remind me that I was one of the gateways through which TERI's money was spent. Once he went to the extent of telling me that if I received a request even from him, I should reject it if it was not in the interest of TERI.

Dr Pachauri advocated that one should put extra effort when faced with difficulties. I recall many occasions on which this proved to be true. A programme was to be conducted in Mumbai. Strangely, the documents to be distributed in the programme landed with the customs as cargo consignment only two days before the programme. The relevant papers to clear the consignment came to me the next day evening. The next day early morning the bill of entry was filed in the customs to clear the consignment. The chances of getting the consignment cleared the same day were remote, as it normally took two working days to clear even an emergency cargo. One of the colleagues in the materials department went to the customs early in the morning along with a custom house agent and monitored each stage of custom clearance. To our relief, we could clear the consignment by the close of the day, and the person who was travelling to Mumbai for the programme could carry the material along with him.

In all my appraisal meetings with Dr Pachauri, he emphasized the need to keep adding to one's knowledge and skills. This motivated me to add many qualifications including MBA, CPSM and CSCM (certified professional in supply management and certified supply chain manager, both certifications from USA), an advanced diploma in International Purchasing and Supply Chain Management from ITC Geneva, Lead auditor certificates, etc. to my bachelor's degree in engineering that I had earned at the time of joining TERI.

Dr Pachauri used to remember even very small things in detail. During

the beginning of the 1990s, I invited him to give a lecture on environment in one of the conferences of IIMM, the Indian Institute of Materials Management. Unfortunately, he could not make it due to an urgent meeting on that day. Since then, in all my annual appraisal meetings with him he would always enquire about my association with the IIMM. He used to point out that these associations should help to derive mileage for TERI. Of course I could bring in knowledge and connections that helped TERI a lot. Fortunately, today I am one of the members of the board of studies of IIMM, which helps me to bring in latest developments in the field of materials management to TERI.

I am glad that I got the opportunity to work with him for more than 25 years. Under his leadership in TERI I became acquainted with many new areas to build my career. His dedicated leadership will be remembered for ever.

T G NANDAKUMAR General Manager, Materials (1989–)

The Dynamic Personality

I run short of words as I begin to write about Dr Pachauri; I do not know even where to start. As I have put in the title, he was a dynamic personality who could inspire everyone.

When I joined TERI, I was 22 and was not serious about the job. I joined as an attendant. My work was to clean the library including dusting and arranging books. At that time, TERI had offices in different buildings and whenever Dr Sahib would come to our building in the morning, he would greet everyone equally with the same tone. I never felt that I was merely an attendant in his presence: he would greet me the same way he would greet any higher official, and that would make my day.

Most people would write about Dr Pachauri's achievements, but I would like to write about his sense of humour. Yes, that is right. Whenever I met him to discuss any concern, he would give me particularly witty responses. That itself makes him a great personality: he never made his subordinates feel that they were at a lower level. He would joke with them and please them with his art of conversation.

TERI used to celebrate Independence Day (15 August) on a grand scale every year. Dr Pachauri would make it a point to participate in activities of all groups. He would mix freely, irrespective of people's designation or rank, meet and greet family members of TERIers, and make us feel that he was a friend and not the Director General.

> Of course, I got regular raises in due course after joining TERI. Once, in a monthly meeting with attendants in the presence of K K Puri, a former colonel and one who was the chief of administration in TERI, we were asked to express our concerns. I shared my concern with him and requested him to change my designation. I said that because of my designation as an office attendant, I might not get a good match when it came to seeking a life partner. Dr Pachauri smiled and said, "Today we change his designation, and he marries; soon his wife will ask us to make him a director: will we be able to do that?" To which I replied, "Yes sir, I would love to give you orders." The whole room burst out laughing, followed by Dr Pachauri telling me how it's always good to be ambitious and that he would love to see me rise to great heights.

On another occasion, when I was working as a library attendant, I had to report to many people and everyone wanted me to work only for them, not liking it if I spent more time attending to somebody else. I went to Dr Pachauri with a complaint that I received orders from 8–10 bosses and it was difficult for me to attend to all of them. I asked him what I should do as I cannot please everyone equally. He smiled again and said, "Om Prakash, you are lucky that you have so many bosses; look at me, I

do not have any boss and yet I have to listen to hundreds of people and contribute to my TERI family."

Many attendants requested Dr Pachauri that they be paid in advance (the salaries were always credited into our bank account on the last working day of the month). Dr Pachauri understood our concern and directed the administration to distribute Rs 1000/- to each of us as advance salary for Diwali celebrations.

> Dr Pachauri, even while scolding an employee, would make sure not to hurt that person. Once I was asked to deliver a letter of invitation to a government employee at Shram Shakti Bhavan for a conference. It was a couple of days before the Republic Day (26 January) and, because of security concerns, I was not allowed to go in and deliver the invitation in person. The Reception staff took the letter from me and assured me that it would be delivered to the right person. To my bad luck, the letter did not reach the officer, and he could not attend the conference where he was supposed to be a guest and his presence was particularly important for TERI as well as for the conference. Dr Pachauri was very upset that the invited person did not turn up, and demanded to know who had been sent to deliver the invitation. The matter was so serious that any director would have terminated my services for this lapse, but Dr Pachauri, being a unique personality that he was, ignored the matter at that time. Next day, he called me to his office and scolded me severely for my mistake. When I explained the whole episode to him, he calmed down and advised me to be careful in future in such matters.

The above-mentioned incident was a lesson for me. I was so scared of his scolding that evening that I developed a fever. On the other hand, I appreciated his control on his anger in front of other people including colleagues and outsiders and talking to me in person in private the next day. That demonstrated the quality of a gentleman.

Dr Pachauri would always take great care of his employees and would make it a point to help them in one way or another. An example of his kind heartedness always comes into my mind. He would always come to office a day prior to Diwali to light the lamp. At one time, Diwali was after the 25th of the month and we were nearly broke. When he came to light the lamp, most of the attendants requested him that they be paid in advance (the salaries were always credited into our bank account on the last working day of the month). Dr Pachauri understood our concern and directed the administration to distribute Rs 1000/- to each of us as advance salary for Diwali celebrations. Once again, he gave us a reason to appreciate his concern for his subordinates.

TERI used to celebrate Independence Day (15 August) on a grand scale every year. Dr Pachauri would make it a point to participate in activities of all groups. He would mix freely, irrespective of people's designation or rank, meet and greet family members of TERIERS, and make us feel that he was a friend and not the Director General. He would do the same at divisional retreats that were also held once a year. He never nursed his ego as a boss and never distanced himself from any of us.

In 2005, a project involved conducting a training programme in Afghanistan on tissue culture of plants. Owing to security situation in that country, none of the scientists was willing to go there. Dr Vibha Dhawan had suggested my name to Dr Pachauri and he happily approved it, despite knowing that I was not a qualified scientist. He believed in my talent and was sure I could deliver this training because I had gained enough experience while working at the Micropropagation Technology Park. He and Mr Sandeep Arora even joked with me, saying they were sending me to Afghanistan to visit my 'sasural' (my in-law's place), as my wife is from Afghanistan. On my return, Dr Pachauri appreciated my efforts and congratulated me personally for accomplishing the project.

In 2010, I was transferred to TERI's north-eastern station in Guwahati. I served there for a few months. Once, when I was in Delhi for some official work, I met Dr Pachauri and requested him to transfer me back to Delhi because my family needed me in Delhi. Being the Director General, he could have simply refused my request and ordered me to continue or quit, but he was so down to earth and humble that he apologized to me for not being able to help me as it was an administrative decision and that he could not interfere. This is how disciplined he was.

I left TERI a few years ago for personal reasons. After that, whenever I visited TERI, he always spoke to me warmly and asked after my wife and my son.

When I heard that Dr Pachauri was unwell, I was keen to see him at least once. I even went to his home in Golf Links a couple of times, but the guard did not allow me in and said Dr Pachauri was not meeting any outsiders. Most of the times, I would talk to Mr Amal Das, his driver, and find out from him whether Dr Pachauri was keeping well.

When I received the sad news of his passing away, I was inconsolable. Dr Pachauri was cremated on 14 February 2020, which happens to be my wedding anniversary. I cancelled my programme so that I could be present for the cremation. I could not think of celebrations on the day I had lost a dear boss and a mentor, who holds a respectable place in my heart—a place that is non-replaceable.

Words are not enough to describe that great personality and a dynamic human being. I have learnt a lot from Dr Pachauri, which includes being humble and kind. I hope I can adopt his qualities in my life. May his soul rest in peace.

> Ом Ргаказн Field Technician (1989–2010)

A True Renaissance Man

I had first met Dr Pachauri in 1986 at a conference in Delhi, long before I joined TERI. He was already quite well known, but not yet the legend he later became. That very brief interaction left an indelible impression on me, then just out of university. Subsequently I ended up in TERI and worked there for nearly a decade and witnessed, first hand, how a great institution was built with great vision, purposeful leadership, and consummate management skills. Obviously, it required the contribution of many other great professionals, but TERI would not have become a world-class institution without Dr Pachauri's stewardship—and I was privileged to be part of the management team at that time.

Dr Pachauri had an uncanny knack of spotting talent and encouraging it to its fullest extent. He didn't spend a lot of time to assess someone (positively or negatively) and could take decisions very quickly.

That he was a multi-faceted person nobody would question, but it was amazing to see how the new facets emerged with such regularity: leader, economist, scientist, motivator, mentor, communicator, writer, poet, cricketer. Most of all he was a visionary, able to see the emerging and future trends long before the topics became prominent, be it biotechnology or climate change, and to build programmes around them. That is what nurtured the institution's growth.

Dr Pachauri had an uncanny knack of spotting talent and encouraging it to its fullest extent. He didn't spend a lot of time to assess someone (positively or negatively) and could take decisions very quickly. I have been a huge beneficiary of his mentorship and was fortunate enough to spend my formative professional years under his leadership. The legions of climate, energy, and other experts who passed through TERI and now serve in premier organizations around the globe making stellar contributions are testimony to a great mentor and, in the end, may become one of his chief legacies.

His attention to detail was legendary. In the early days at IHC, I once had to walk all the way up to the fifth floor to get an earful for one small mistake in a draft of a letter – I had got the initial of a newly-appointed minister wrong – and why it was critical. That's a lesson I have never forgotten, and has always stood me in good stead. Also, his greatest quality as a boss was that he would never ever admonish you in front of others and would always defend you even if you weren't entirely in the right. Many a time he flatly refused requests from senior officials to alter (unfavourable) project reports, so long as he was convinced that the analysis was robust and the conclusions were objective.

Although dauntingly erudite and sophisticated, Dr Pachauri was not above giving in to invective occasionally and had an earthy sense of humour. His love for cricket knew no bounds; in 1992, when India was playing Australia (and was being thrashed), the umpire made a mistake that cost India a wicket at a crucial stage—he launched into a tirade, which ended with 'these choron ke aulad'!

After I left TERI and India, our meetings were mostly at global conferences – the last in Vienna in 2015 – and although the meetings would always be brief, he always showed the same warmth and interest in my progress. But even after 20 years of my leaving TERI, the organization and Dr Pachauri continue to evoke vivid memories and strong feelings, especially whenever old colleagues get together. Interestingly, although he was called many names, I never referred to him or even now can think of him as anything other than Dr Pachauri: he simply commanded that respect. He was a true renaissance man, and his contributions to sustainable development and climate action will be long remembered.

> Venkata Ramana Fellow (1989–1998)

A Role Model

TERI is what it is because of Dr Pachauri's hard work and dedication.

I joined TERI back in 1988. Initially, I was on probation for a year, after which I was confirmed into my position. It has been more than 30 years now. When I joined TERI, we used to function from a bungalow in Jor Bagh. Gradually, under the leadership of Dr Pachauri, we did expand from a staff of 40 in Jor Bagh to a strong family of 1200 at the India Habitat Centre.

For R K Pachauri, TERI was not just a company but always a closeknit family. He often used to ask his employees about their family and the well-being of its members. He always used to emphasize the importance of education in the upbringing of children. Dr Pachauri always supported us in every possible way, especially when it came to helping us out with our children's education. He was always a role model for us. The way he treated all his employees irrespective of our posts and positions speaks volumes.

I vividly remember the time I took 5 wickets in an important match, which we went on to win. He was so happy that he literally lifted me into the air.

When we shifted our office in Jor Bagh to our current address at the India Habitat Centre, our building was still under construction. Dr Pachauri set up his office on the 3rd floor, because the building was incomplete. Those two years were a very tough time. There were constant noise and disturbance but that never deterred him from his work. Once the entire building was complete, he shifted to his permanent office on the 5th floor. His work used to start very early in the morning, around 7.30 a.m. However, the office had no fixed closing time. On many days, we worked until late hours together, but Dr Pachauri never failed to ask us whether we had eaten. Many a time he would visit Quality Sweets in Jor Bagh to snack on *gol gappa* and *chaat* at lunchtime with colleagues.

I remember the time when we surprised him on his birthday by filling his entire room with decorations and balloons. He was overjoyed and personally thanked and hugged everyone. It feels like yesterday when I remember the time we spent with him.

Parallel to work, Dr Pachauri always made it a point to emphasize sports and fitness, especially his love for cricket. At IHC, we often used to play cricket with a tennis ball in the evening after office hours. He made it a habit to play cricket on weekends at TERI Gram. Many a time he used to arrive directly from the airport after a trip abroad to the cricket ground and play a match. It would be remiss not to mention that he was one of the best bowlers TERI team ever had, which is also seen in his bowling figures: more than 600 wickets to his credit.

All of the team members were like one big family. We had players in our

team from all levels of work in TERI but he never discriminated between his players. I still remember how he used to so effortlessly be with us that at times we used to forget how senior a member of our organization he was. This was his aura.

He was a completely different person on the field. While at work he was our boss, our director, on the field he was like a great friend, an elder brother, some would say. We had this ritual of fist and chest bumps anytime someone took a wicket. I vividly remember the time I took 5 wickets in an important match, which we went on to win. He was so happy that he literally lifted me into the air. I will cherish all these memories for the rest of my life. It was he who told me to play cricket for the team and God knows how much I cherish those times. I ended up playing cricket for TERI for around a decade.

Dr Pachauri never wanted any special treatment for being himself. He would always carry his briefcase and other conference paraphernalia on his own. I wonder how a man of such stature be so benign and humble.

It's because of Dr Pachauri that TERI has grown into a large tree from a small seed of his thought. All of us at TERI, along with our families, will continue to flourish under his vision and be thankful for everything he did for us.

> KAMAL SINGH RANA Senior Attendant (1989–)

A Charismatic Maverick Leader

Lovalty Had Kavita Johri not left her shawl at my place during my recuperation beckons: 1990 from spinal surgery, and had I not given it to Yateendra Joshi to return it to her - they were colleagues at TERI - I would have never joined TERI. The rest is history. At the end of my job interview, Dr Pachauri asked me if I had any queries. I replied, "There appears to be more women than men in TERI." (Something that had struck me as I walked through the corridors of 7 Jor Bagh.) Not an intelligent or intellectual question but a lame observation! With a mix of amusement and gravity, he said, "Well, women are more diligent and loyal." I was pleased and relieved; my trepidation at joining TERI evaporated; and I looked forward to working and learning. Dr Pachauri believed in gender equality, and he expected and evoked loyalty. **Trust prevails:** TERI's Publications Unit was ensconced at the far end of the building, a 1992 small room where three women just about managed to fit, and the sole male, our head, Yateen, relegated to the attached bathroom converted into a cabin. Under his patient tutelage and painstaking operations, we learnt and unlearnt the mysteries of editing and printing publications to meet the challenge of bringing TERI's publications into limelight. Dr Pachauri's fastidiousness about the quality of TERI's publications including his penchant for the national colours - green and orange - very often had us knocking his office door for final approvals. Very quickly, we discovered that any permutation and combination of his favourite colours could expedite approvals, and a disregard could spell doom! His keen eye never missed any word, and mortification was writ large on his face when he encountered even simple errors of grammar. One day, I was urgently summoned to his office. Fearing the worst, I was pleasantly surprised by his request: to edit a manuscript written by his father, who was a former professor of psychology, which was to be his birthday gift. I expressed my apprehension as I had scant knowledge of academic psychology but Dr Pachauri insisted that he had enough trust in me to deliver the goods. Buoyed with this confidence, the manuscript was edited and was ready for printing. And for once the cover design (with Yateen's help) did not have his beloved colours, but was acceptedgrudgingly, I suspect, to meet the tight deadline. Wandering Much as I enjoyed working in the Publications Unit, I yearned to travel mind: 1993 and explore new research-related avenues. My creativity had come to a standstill, and I seriously pondered over the possibility of a change in the area of work within the institute, primarily in rural energy. I was warned and counselled: such transfers across divisions were almost unheard of, and the boss would be unlikely to ever agree. Nevertheless, I took my chance

and conveyed my intentions during the appraisal of my performance

in 1992. I was expecting a withering response, but instead got a patient hearing. He simply said, "Come back after a year, if your perseverance still persists." Like a bad penny, I turned up after a year at his desk; he kept his word and honoured my request. I realized that Dr Pachauri was open to new ideas and willing to take risks for the institute's benefit. What I could not foresee then was his greater vision to expand TERI's ambit of influence, taking everyone along, including me.

North-east I was severely jolted from my niche in the Rural Energy Group, with watershed marching orders to set up TERI's new bastion in Guwahati, Assam. My term was to be for three years. I was loath to get out of my comfort zone, vears: away from family and friends. Although I hail from Assam, having been 1994-2003 brought up in Delhi my apprehensions were the same as those of any outsider, especially when insurgency was rife in the North-East then. But Dr Pachauri convinced me to look beyond the walls of the Delhi office, challenging me to a lifetime opportunity of creating and nurturing an establishment, of course keeping in mind TERI's mandate. I was a bit of a rebel, and negotiated a shorter stint and additional allowance for being exiled. Being fair, he agreed to all my pre-conditions and proposed a change in designation to allay my reservations.

My North-East posting proved to be a watershed in my professional and personal journey. The valuable lessons learnt, be it in office management (from chasing missing files for a landline connection to recruiting support staff) or the art of networking and negotiating, surveying remote villages along the Indo-Myanmar border or raising funds for TERI – the everhanging sword of Damocles! – led to my metamorphosis from a foot soldier into a leader. I did manage to crack if not break the glass ceiling. While it gave a sense of achievement to report TERI North-East's monthly progress to Dr Pachauri, I would yet edit every piece of correspondence several times lest I should be caught on the wrong foot for lapses in vocabulary and grammar.

Having missed out on weekends and holidays while on official field trips, and with some misgivings from peers, I (as a collective) risked belling the cat and raised the issue of compensatory leave during one of the Division or Group durbars with Dr Pachauri. This did not go as well as we had hoped for; instead, we received an earful on the benefits of extra work and the dire consequences of lassitude. Next morning, an email memo with orders to come to work on Saturdays landed on our desks! Thereafter, I was greeted with glares and accusing fingers for the catastrophe. A little later, I was counselled by Dr Pachauri: "Stand up only for yourself, not for others; union*baazi* is not part of TERI's culture." Point noted, I apologized and said I had no intention of questioning authority; it was merely a suggestion. After this incident, it was not surprising to see him striding into our section on many Saturdays to check attendance; if thin, he would remark, "Why, this place looks like a graveyard!"

The transformation of TERI North-East to a well-respected organization in the region by my younger ex-colleagues is a matter of pride even today,

and I unashamedly take the credit for playing a small part in that. By pushing us towards hard work and excellence, Dr Pachauri ensured that we learnt to take responsibility with accountability, encourage collaboration, and earn goodwill while maintaining high self-esteem. He could reprimand you in public yet apologize in private, critical of your work but magnanimous in extolling your virtues on unexpected occasions.

Dr Pachauri talked proudly about his children and his gaze softened as he spoke about the joys of being a recent grandfather. Our return trip was a quiet one, a revelation to me: Dr Pachauri was as human as the rest of us, a loving father, a caring husband, and a devoted son.

> I never knew Dr Pachauri personally; he was always approachable yet maintained a professional no-nonsense attitude. The only time I saw his guard down was during one of his visits to Assam. One late winter afternoon, I accompanied him on a boat trip to a temple on one of the islands of the Brahmaputra. I began to haggle with the boatman, who was quoting an unacceptable amount. Before I could show off my recently honed skills of negotiation, I was gently gestured by Dr Pachauri to close the deal on the boatman's terms. As we glided over the calm waters of the Brahmaputra, he remarked, "Don't waste your energy on trivial matters: save it for crucial times." I was tempted to protest – getting ripped off was a big deal for me - but chose to remain silent, mulling over what he had said. With the temple in sight he was curious about its history, while I filled him in with my limited knowledge but could not help questioning him about his religious beliefs. This triggered a discussion on religion, philosophy, life expectations, and, surprisingly, his family. He talked proudly about his children and his gaze softened as he spoke about the joys of being a recent grandfather. Our return trip was a quiet one, a revelation to me: Dr Pachauri was as human as the rest of us, a loving father, a caring husband, and a devoted son. As we disembarked, it was back to business again.

> In contrast to TERI research staff, most of the support staff had fewer opportunities to interact directly with Dr Pachauri. But Maya Devi, TERI-North-East's major-domo, is one of the few lucky ones who got to interact with him. For her, the Director General was an astral entity until her first meeting with him in Guwahati. His welcoming words and encouragement that followed in the subsequent years and the gentle enquiries into her personal welfare, including her family, overwhelmed her. Maya remains a staunch defender of TERI North-East, going about quietly, multi-tasking, silently grieving.

Back to myThe year 2003 marked the end of my 13 years in TERI—my last 9-to-5roots: 2003-job. I decided to return to my roots in Assam to carve an independent
path guided by the lessons learnt during my tenure. In 2019, during the
celebrations held in Guwahati to mark 25 years of TERI North-East, I was
extremely touched by Dr Ajay Mathur's public acknowledgement of my

contributions. In retrospect, I greatly appreciated Dr Pachauri's decision to send me into unchartered territory and let me discover my latent aptitudes.

I suspect old-timers like me will always harbour a soft spot for TERI, thanks to the camaraderie fostered by Dr Pachauri, an intrinsic part of his legacy. Friendships with colleagues forged over lunchtime strolls to Chocolate Wheel (a bakery in Jor Bagh; alas, no more) and sharing of rooms (to save project monies!) during field visits still endure. Although I shun the lights of big cities now, whenever I get a chance I visit the old turf and am welcomed as a long-lost kin (even the visitor's badge is waived off) with smiles, laughter, and an offer to share lunch. I am indeed fortunate to enjoy such a privilege. My time spent in TERI constitutes some of the best years of my professional career, and I reckon many may agree with me readily or reluctantly.

To dislodge Dr Pachauri from one's memory is almost impossible, as he influenced all those who knew him professionally or personally. He will be remembered always: with admiration, with respect, and with reverence for his sardonic wit—happily, sadly, with love, with envy, grudgingly or otherwise. I do not wish to grieve for him but only recall the good memories. After all, grieving and obituaries are for the comfort of the living, not the dead.

NANDITA HAZARIKA Fellow and Area Convener TERI North-East (1990–2003)

Making the Improbable Plausible

It was 1990 and I had returned to the capital after almost eight years of exile during which I choose a soulmate, earned my bachelor's degree, attained motherhood, and was working for one of the country's leading business magazines. Owing to my husband's changing his job, I had to move from Chennai to Delhi. My employers, on my request, transferred me to Delhi. Back in Delhi, I was looking for a change, to do something different and away from the routine.

I chanced on one of the annual reports of TERI (then The Tata Energy Research Institute) obtained through a friend who worked there and was immediately struck by the mission statement of the institute. I asked for a meeting through a simple handwritten letter and to my utter surprise, I was promptly asked to come over to the office. I met with the administrative head, who scanned my papers and in the next 15 minutes I was sitting in the presence of this bearded person with piercing eyes. After about ten minutes of queries and sizing me up, he asked me when I would be able to join and without waiting for an answer, he said he would like me to be in office on 31 May to meet with Mr Willy Brandt, former chancellor of Germany. That was Dr R K Pachauri and the pace of his decisions and actions remained relentless for the next 25 years.

A week later, Dr Pachauri arrived with a bottle of French wine and kept it on my table and simply said, "Here's for proving me wrong!"

Early April 1995: Dr Pachauri walks up to my cabin and before I could stand up, waves me back to my seat, pulls a chair opposite me, and with his usual thoughtful look asks me to prepare for a major announcement on the Earth Day (22 April). He shares his idea of initiating a major two-year study on the exploitation of India's natural resources to be presented to the Government of India in August 1997, when independent India would turn fifty. While the study was seminal and compelling, TERI needed money to pay for the professional time of all the research staff who were to be engaged over the next two years. "A conservative estimate is around a crore of rupees; I want you to work with me in raising this support," said Dr Pachauri. "Do we have a tentative plan?" I asked. "Yes, we will seek support from the government and some multilateral funding agencies." I stood up shaking my head in disapproval and asked, "Should not the support be from industry, as this study will be of value to it?" Dr Pachauri was silent for a minute and shot back with a glint in his eyes, "Share a strategy before you leave for the day." It was 3.00 p.m. then. One among his many attributes was to maintain a flat structure in the organization so as to garner the thoughts and voices, particularly of the young. Having dug my own grave, and with no avenues of backing out, I started reaching out to corporate entities in earnest. I reached out to a corporate house based

in south India and shared the objectives of the study. They bought the idea and we had the first corporate in our fold. "How and what made you reach out to a south-based company?" quipped Dr Pachauri with an appreciative smile, which vanished when I said, "I believe they have a higher moral conscience!" Shooing me came the rebuttal "One swallow doesn't make a summer." Dr Pachauri indulged in banter and exchanged opinions with both senior and younger colleagues. He almost always managed to have the last word. The study (GREEN India 2047), yet another example of Dr Pachauri's vision in 1997, was a thundering success with an overwhelming response from the corporate sector. That was Dr Pachauri making the improbable, plausible.

Dr Pachauri would always spend a couple of minutes meeting and chatting with all the office staff of senior officials and ministers including those serving tea. Again, it comes as no surprise that he knew all of them by name.

> Dr Pachauri behaved more like a colleague than a boss and always had an open mind. I remember an argument I had with him over a request for support from a government department for our publication, TEDDY. He clearly stated that I was wasting my time. I refused to be deterred. In the end, I managed the support and everything was normal. A week later, Dr Pachauri arrived with a bottle of French wine and kept it on my table and simply said, "Here's for proving me wrong!"

> While Dr Pachauri was known for his professional strictness for goodquality research, he was also known for his zero tolerance for spelling and grammatical errors. He would edit the matter and mark his corrections neatly and legibly in pencil. Everyone read their drafts several times before sending them up to him and there would be a quite celebration if the note came back without any pencil marks.

> Dr Pachauri was termed a workaholic and expected his colleagues to be the same. But he was closely connected with the families of staff. He was accessible irrespective of rank to each and every one in TERI. Independence Day was a family day, a day filled with sports, games, and entertainment by TERI colleagues and their family members. Dr Pachauri made it a point to meet with every family member and most astonishing to us was that he knew each of them by name and would connect with them quite easily.

> My journey of a quarter century with Dr Pachauri, which continues at TERI, has been both extraordinary and gratifying and he had the knack of teaching us on the job. I had the opportunity to work on several unique projects and programmes he envisioned. The Delhi Sustainable Development Summit, now the World Sustainable Development Summit, the foremost platform on sustainability, is one of them. I accompanied him to many of the meetings with senior officials and ministers in the fifteen years of the summit and he would always spend a couple of minutes meeting and chatting with all the office staff of these senior officials and

ministers including those serving tea. Again, it comes as no surprise that he knew all of them by name.

Barely two years since joining TERI, my husband wanted to return to Chennai. With my resignation in hand I mustered all the courage to meet Dr Pachauri but in the next 20 minutes I was made to realize that I too needed to assess my professional trajectory. Dr Pachauri has influenced many lives within TERI and outside and empowered them and I certainly was one among them and will cherish my association with him as long as I live. In the early days, one of his statements "Never give up" – brief yet profound – has stayed with me through all these years.

> Annapurna Vancheswaran Senior Director (1990–)

A Compassionate Yet Hard Taskmaster

Over the course of my career, I have written several reports, articles, and notes on some very difficult and complex subjects. But none of that comes even close to the challenge of summing up my thoughts about Dr Pachauri in a few hundred words. Anyone who has ever known and worked with him would understand what I am trying to say. I am not sure if I can do justice but let me try to highlight some of his more subtle qualities based on my personal experience, which I think made him what he was-way beyond an institution builder, a great leader, and a guiding spirit for a vast number of individuals.

Dr Pachauri would have specific and pointed queries for staff. These could range from the status of a multi-million-dollar proposal to a small sum that TERI was owed but had been delayed inordinately.

> It was a sultry evening in Manila. I had gone there along with Dr Pachauri for an assignment for the Asian Development Bank. As I was trying to figure out what to do, the phone rang. Dr Pachauri wanted me to meet him in the hotel lobby and offered to take me to a place that serves good fish. As promised, the dinner was excellent, and he took great care to ensure that my Bengali craving for fish was well satiated. As we came out of the restaurant, he asked whether I would like to have an ice cream. The only ice cream outlet I could figure out was a McDonald's take-away with a serpentine queue of teenagers. I hesitated, looking at the crowd, but by that time, he was already in that queue. As I stood to one side watching this distinctive-looking individual with a leather bag wrapped around his wrist jostling with a bunch of unruly and noisy kids and then finally the triumphant look on his face as he walked out proudly holding his cone, I suddenly saw this new facet of his personality: the child underneath that tough personality. I rue the fact that I did not have a phone or a camera to capture that moment but I feel lucky to have witnessed this playful and lighter side of Dr Pachauri.

> Being forgetful myself, I always admired the elephantine memory of Dr Pachauri. An excellent example was his routine round of the TERI building, which I used to observe keenly as he would slowly make his way to my first-floor corner cabin. He would greet everyone and although outwardly it seemed as an opportunity to bond more closely with individual staff members, he would also have very specific and pointed queries for most of the staff. These could range from the status of a multimillion-dollar proposal that someone was coordinating to a mere fifty thousand rupees outstanding remittance that was delayed inordinately. With hundreds of projects happening across various floors and divisions within TERI, he was the only person other than the Project Management Cell who knew exactly not only the status of each and every project and

who was responsible for it but also what remedial actions, if any, were needed.

Dr Pachauri's ability to strike a rapport with individuals irrespective of their background and position was amazing. There are numerous examples but the one that I remember most is his encounter with a glass industry entrepreneur in Firozabad. I was with Dr Pachauri in Agra for a meeting and decided to take him to Firozabad, where we were involved in a particularly innovative project of helping the bangle-making furnaces to switch from coal to natural gas. The entrepreneur of the factory where we were setting up the demonstration unit was a man with a golden heart but rough and abrasive in his dealings. I thoroughly coached this entrepreneur not to indulge in loose talk but was unsure of my plans and was hoping that the visit would pass off peacefully. All was going according to the script when suddenly the entrepreneur, in his unique and characteristic style and English accent, asked Dr Pachauri, "Is it not a barong that you are wearing?" [A barong is an embroidered long-sleeved formal shirt for men and a national dress of the Philippines.] The visit from then on completely changed its colour and tempo and was of course out of my hands. Dr Pachauri, who was from Uttar Pradesh himself, started interacting in chaste Hindi with the entrepreneur and soon they carried on as if they were long-lost friends. Ever since that visit, whenever I met that entrepreneur, he never missed asking after Dr Pachauri and it was clear that in that two-hour visit, Dr Pachauri had left a lasting impression on this tough individual.

Dr Pachauri was a person who led by setting an example himself. Despite being so busy, if you sent him a note for input or feedback, it would always come back to you the same day with a detailed review and even with errors of grammar and spelling corrected. He was a hard taskmaster and quite candid in his feedback during meetings, which people who have worked with him know and often dreaded. But he had a soft and compassionate side to his personality. When my mother died, I never imagined that a person so extremely busy and preoccupied would come all the way to my small apartment in Patparganj to stand with me during my time of grief.

In the year that I left TERI, Dr Pachauri started giving annual appraisal feedback to all the directors. That handwritten note on a plain A4 paper is one of my most prized possessions because I consider that as the best certificate of professional competence. I left TERI on 6 November 2003 and could never enter TERI again. I think deep inside, I feared encountering him. He had been so nice to me all along I didn't know how to face him. Now that he is no more, I guess I would still not be able to enter TERI because I feel that every stone in the TERI building breathes of him and owes itself to Dr Pachauri.

Somnath Bhattacharjee Senior Fellow (1991–2003)

A True Inspiration for My Professional Growth

Before joining TERI, I had heard of Dr R K Pachauri in 1990, when I was working on my master's thesis ('Energy crisis: natural gas, a viable option for India's transport sector') at the Centre for Environmental Planning and Technology (CEPT), in Ahmedabad. After graduating from CEPT, I joined TERI in 1991, worked as a young professional for 7 years (in industrial energy and energy–environment interface groups), and left in 1998 to pursue higher studies in environmental engineering in the United States.

Today, I am an established professional, offering engineering services and doing business both in India and USA. I proudly attribute my professional growth and success to the foundation laid during my tenure at TERI and the inspiration derived from Dr Pachauri's successful organizational leadership.

Dr Pachauri was internationally known for his strength in building and organizing institutions. During my tenure at TERI, the professional strength grew from about 100 in 1991 to over 500 in 1998. The growth I have seen was more horizontal, with great emphasis on professional growth. While working under Dr Pachauri and a few other senior professionals at TERI (including the then deans) on various projects, I learnt the fundamental skills to excel professionally: proposal development, literature search and continuing to learn from projects, diligent project planning and execution, and seamless teamwork. The professional and organizational development approaches practised by Dr Pachauri as the head of TERI (monthly meetings, performance reviews, open-door policy, working with multidisciplinary teams, and professional networking) were also of great help in advancing my engineering career.

Dr Pachauri never disciplined us; rather, he mentored us. He never delegated tasks; rather, he delegated authority, enabling us to figure out what to do, and was concerned about doing what was right.

> I always admired Dr Pachauri's enthusiasm, hard work, attention to detail, and punctuality. He had a unique combination of educational qualifications – a doctorate in industrial engineering and another in economics – and professional affiliations—and very clear and beautiful handwriting. His passion for excellence grew TERI into a top-notch research organization and think tank and established TERI's presence in many countries. He always encouraged professional growth and led us by example. He was easily accessible and approachable to young professionals in TERI. In October 1993, when I was about to visit USA, for the first time in my life, to attend a programme in Washington, DC, he advised me on how I should prepare for the visit – how to dress, be professional in my interactions, represent TERI, and keep notes of my trip – all the advice I follow even now when on a business trip. When I was working on

organizing an international conference ('Managing Environmental Impacts of Water Resources Development', Kathmandu, 26–27 June 1996) directly under Dr Pachauri's supervision, he not only encouraged me to take a lead in planning for the conference but also made sure that I was on the right track by reviewing my progress and even correcting my letters of invitation to participants. I continue to prepare drafts of my communications and reports carefully and review and edit them thoroughly before sending them out, just as I did during my TERI days, a practice that has won me special recognition for my professionalism from my clients, most of them being entrepreneurs.

I was highly motivated by Dr Pachauri's dedication, passion, and vision for professional and organizational growth. He was not only my boss but a leader who inspired and influenced my professional life. He never disciplined us; rather, he mentored us. He never delegated tasks; rather, he delegated authority, enabling us to figure out what to do, and was concerned about doing what was right. He never put himself above the team in any project; rather, he always remained as part of the project team.

Although it is now more than two decades since I left TERI, I have remained a TERI alumnus and continue to be inspired by Dr Pachauri's global achievements and recognition. Even today, I religiously practise the fundamental skills I learnt during my tenure in TERI: dedication to work, vision for professional growth, striving for excellence in engineering, and staying productive every workday. I will cherish Dr Pachauri's memory as a role model for the rest of my life in achieving my professional goals.

> d s r k srinivas Research Associate (1991–1998)

A Man for All Seasons

Seven years back, at the age of 80, I retired from TERI, and am deeply honoured to have been invited to contribute to a book in memory of Dr R K Pachauri. This is a very laudable project and has my full support. I know that many of the authors who have been asked to contribute are better equipped than me to cover the multifarious achievements of Dr Pachauri, on both the domestic and the international stage. Instead, I offer some insights into his multi-faceted personality and abilities, based on hearsay, written material, and my personal interaction with him. A couple are light-hearted and are mentioned as we are celebrating various aspects of his life.

A year after the Nobel Prize was awarded to the IPCC, Dr Pachauri visited Flynn, then retired in Bangalore, to acknowledge Flynn's contribution to his education and sought his blessings.

Time management I joined TERI in 1992 after 35 years in the petroleum industry, first with Burmah-Shell and, after it was nationalized, Bharat Petroleum, retiring as Director, Marketing. I wanted to move to Delhi, my hometown, after 27 years in Mumbai. I had heard of TERI and applied for an opportunity to be of service to the organization. After a few days, I was asked if I could meet Dr Pachauri in Mumbai. I thought it would be in the Tata Chemicals office of which Mr Darbari Seth was the chairman and also the founder of TERI. Instead, the interview took place in the lobby of the Centaur Hotel located in the precincts of what was then a much smaller airport. Dr Pachauri had flown down that morning from Delhi and had to catch another flight!

Years later he gave a talk on time management at one of the research professionals meeting in TERI.

Respect for a teacher At La Martinière College, Lucknow, Dr Pachauri's maths teacher was Arthur Flynn. He was a strict disciplinarian and found in Dr Pachauri a keen student. Flynn used to set him homework for the summer holidays, which was both interesting and challenging. Dr Pachauri fell in love with maths, which later stood him in good stead when he earned his doctorates in engineering and economics. A year after the Nobel Prize was awarded to the IPCC, Dr Pachauri visited Flynn, then retired in Bangalore, to acknowledge Flynn's contribution to his education and sought his blessings.

Negotiating skills These skills were inborn in Dr Pachauri. A friend of mine, who lives in Delhi, attended a day school in Nainital, where he was a classmate of Dr Pachauri. They were about 6 or 7 years old, would bring packed lunch to school, and eat together. My friend, whose mother was German, used to give him ham sandwiches, while Dr Pachauri's lunch consisted of paratha and *subzi*. My friend would occasionally catch Dr Pachauri casting an envious eye on his lunch. Quiet negotiations took place and a swap agreement was reached!

These skills paid rich dividends when Dr Pachauri was chairing the IPCC.

Prodigious memory Not only could Dr Pachauri multi-task, but he also had an excellent memory. Once, we both were at Cambridge Associates in Boston for some project work. A young researcher, at very short notice, made an excellent presentation on India's power sector. Years later, Dr Pachauri mentioned the quality of that presentation at one of the research professionals meetings, while I had almost forgotten about it. This is just one example, but I am sure there are many others which attest to this gift of his.

Freedom of expression In 1989, Dr Pachauri and Dr Ardekani, Deputy Foreign Minister of Iran, came up with an out-of-the-box idea of an underground pipeline from Iran via Pakistan to India, which would feed gas to both the countries. Dr Pachauri took a very keen interest in its promotion. It became known as the IPI pipeline proposal and was also dubbed the 'Peace Pipeline', implying that it would bring India and Pakistan closer because of the common stake in the project. As I had worked earlier in the petroleum industry, I too was attracted to the idea. However, in getting into the details, I found that several issues would need to be resolved, such as pricing of gas, transit fees, security of the pipeline, trade agreements, and geopolitical factors, some of which could prove intractable. Also, liquefied natural gas was increasingly becoming an attractive alternative, which could be imported without any cross-border issues. I presented my views in newspapers and petroleum journals. Not only did Dr Pachauri allow me to freely express my views but also facilitated a presentation to India's minister for petroleum at the time. To cut a long story short, the Government if India was never really enthused with the idea and, after some time, abandoned it.

Love of acronyms Dr Pachauri could speak extempore and write extensively without a break. He loved coining acronyms. Thus, the renewable energy building in Gual Pahari became known as the RETREAT, for Resource Efficient TERI Retreat for Environmental Awareness and Training. A major project titled 'Directions, Innovations, and Strategies for Harnessing Action' became known as DISHA. When TERI delinked itself from the house of Tatas he did not bat an eyelid. He just changed the name from the Tata Energy Research Institute to The Energy and Resources Institute, so that the acronym remained unchanged. Also, the new name was more apt, taking into account TERI's expanding horizons.

Curiosity and fun Once I was chatting casually with Dr Pachauri when he mentioned that years earlier, he had gone to Mecca during the Haj

pilgrimage! I thought he was joking but he said he was driven by curiosity and had dressed appropriately for the visit. Just for a lark, on a couple of occasions during the early days in IHC, he would quickly go around the office dressed as an Arab wearing dark glasses, leaving everyone mystified.

A big heart Sometime in 1999 I hesitatingly approached Dr Pachauri as to whether I could hold a 3-day exhibition of my watercolour paintings in the ground floor seminar room. I explained that it would need some changes: spotlights near the ceiling and a railing around the walls to hang the framed paintings. He readily agreed. I held another exhibition in 2003. On both occasions, he invited a VIP to inaugurate the exhibition.

In 2012, I told him that I was writing a book, to be titled *The Splendour* of Lodi Road, which would feature my paintings of each monument on Lodi Road, accompanied by their history and architectural details. I asked him whether TERI would support the idea, with TERI Press doing the formatting and printing of the book. Again, he readily agreed and asked, "Ravi, how many copies do you think should be printed?" I replied, "Patchy, may be 500 or so", to which he said, "Make it 1000." He also wrote for the book 'An Appreciation' of the author, which, if I may say so, was highly exaggerated. TERI Press did an excellent job in producing the book, of which any author would have been very happy.

In conclusion, when I look back on Dr Pachauri's association with TERI, I marvel at what he could accomplish and the driving vision that motivated him during the journey: from leaving a comfortable and coveted job with the Indian Railways, pursuing academic excellence abroad, returning to India, and taking a big leap of faith when Mr Darbari Seth suggested that he head an energy institute to be set up in Delhi. The rest, as they say, is history.

I would earnestly request all those who work in TERI to keep his rich legacy alive and enrich it in his memory in a manner that would have made Dr Pachauri feel very proud.

RAVI K BATRA Distinguished Fellow (1992–2013)

Empowering Others

"Leaders become great, not because of their power but because of their ability to empower others." Dr Pachauri epitomized every word of this quote by John C Maxwell. Dr Pachauri's leadership and empowerment skills have touched many lives; he mentored and transformed young minds; and he will continue to live forever through his work and the people who are empowered to carry forward his vision. Evolution of jobs and careers around sustainability, energy efficiency, and climate change can be attributed to Dr Pachauri's unique vision of generating knowledge, creating awareness, and scientific thinking in these areas.

All letters that Dr Pachauri sent out had a handwritten salutation and his personal touch. Even on the most stressful and busy days, he would clear his mailbox and send responses with precision and careful attention to detail.

> I have been one of the fortunate ones to have been guided by him for a long tenure. My tryst with TERI began as a junior researcher, with a passion for innovative thinking and ability to put in hard work. I recall my interview with him. I was very tense, but he made me feel at ease and I was offered the position of a Research Associate. I was possibly one of first and very few professionals with a degree in architecture to have joined TERI in the 1990s. Connection between architecture and environment or energy efficiency was unexplored then.

> Dr Pachauri guided me through all my endeavours and empowered me to lead an area of work that has emerged as a forerunner in the arena of sustainable development. Green buildings, Energy-efficient buildings, were terminologies much less researched and understood in the early 1990s when I joined TERI. It was due to Dr Pachauri's leadership and visionary thinking that this emerging area gained significant prominence and traction from industry. Eventually TERI had a full-fledged division, namely Sustainable Habitat, doing extensive work from research to policy studies and from consulting to green certification. I was privileged to lead it for many years.

> Every leader has qualities that are unique and these qualities are the ones that differentiate leaders from others. A razor-sharp memory, ability to multi-task and navigate across diverse areas with equal ease and agility, depth of knowledge, attention to detail, remembering everyone he met by name (with correct spelling!), timeliness, humility, empathy, and the ability to put in hard work—Dr Pachauri had set enviable examples in all these qualities. I recall an incident that occurred many years ago. I was working on a project funded by the European Commission and a letter had to be sent to the Chief Secretary of a state in India under Dr Pachauri's signature. I had to prepare a draft. The bureaucrat's surname was Goyal but in my draft it was spelt Goel. I learnt the lesson hard way but I have never

misspelt a surname after that! All letters that he sent out had a handwritten salutation and his personal touch. Even on the most stressful and busy days, he would clear his mailbox and send responses with precision and careful attention to detail. He always said that unless you burn the midnight oil, you will fall behind. This passion for work gave him endless energy and the ability to work harder.

He was ahead of his times and could anticipate future needs and plan to meet them. When we were planning the Retreat building in Gual Pahari, it was his vision to design it as a near-net-zero energy building with passive architecture, efficient systems, and earth air tunnels and complement it with renewable energy systems. He was ready to try new concepts and invest in new technologies. RETREAT was one of the first projects in India to have a building-integrated photovoltaic system, the first of its kind at that time, and was inaugurated – remotely – by the then Prime Minister Atal Bihari Vajpayee. The building and its design still inspire many students and professionals to choose the path of sustainable construction and design.

So much so that all buildings of TERI in Bengaluru, Guwahati, Gual Pahari, Mukteshwar, and elsewhere were designed to green standards. Dr Pachauri believed in 'walking the talk'. He had a great vision on acquisition of land assets and it was his hard work and collaboration with the right people that helped TERI to acquire land in prominent locations. The Darbari Seth Block in IHC, New Delhi, is an example of his foresightedness, and TERI was able to move to IHC from operating out of multiple rented premises to an elite and green address.

In the late 1990s, interest in and importance of green buildings began to grow. The buildings sector was shown to be contributing significant amounts of emissions of greenhouse gases and consuming substantial resources and was recognized as a major contributor to environmental degradation. Buildings also take up a significant place in our lives and we work, live, sleep, and spend almost 90% of our time in buildings. Green buildings not only save the environment but are good for us as they provide a healthier environment to live and work in.

As a senior researcher in TERI, I was fortunate to work on the first green-certified building in India. LEED, from the US Green Building Center, was the only and globally recognized rating in the late 1990s that provided a framework for evaluating and certifying green buildings. India has a very strong legacy and history of passive and low-energy buildings and local practices around construction of homes using local materials. However, the benefits of these techniques were not quantifiable at that time. Dr Pachauri realized the potential of the concept of certifying green buildings and the need for an indigenous rating system for India, imbibing Indian values, concepts, and technologies incorporating frugal innovations in buildings, passive architecture, use of local materials, etc. He conceptualized 'GRIHA', a concept my team and I were fortunate to give shape to, and was instrumental in elevating GRIHA to being the national rating programme for green buildings in India, a feat that is uniquely commendable.

(*Griha*, Sanskrit for abode, is short for green rating for integrated habitat assessment.) Dr Pachauri was always proud of his team and it made us proud too.

I have moved on from TERI and am responsible for the development of several rating programs in the US Green Building Council. My experience in developing GRIHA has given me the requisite experience, and I cannot thank Dr Pachauri enough.

My work palate and areas of influence have expanded manifold as I work on a global platform now, but I am proud to say that my 23 years of association with Dr Pachauri and TERI has helped me immensely in my new position and role.

I will be failing in my tribute to the great leader and human being if I don't touch upon his humane side. TERI has always been very women friendly and has had several prominent women leaders leading multiple divisions. There was no discrimination and we never felt marginalized. Talent, hard work, and ability to deliver high-quality research were the key factors that were considered in recognizing leadership. Dr Pachauri was a hard taskmaster, but also a father figure to us. He cared deeply about the safety of colleagues, particularly women colleagues. It was an organizational policy to have women colleagues returning late at night or travelling during early morning hours to catch a train or a flight to be escorted home by office-appointed drivers. This is a rare policy, and I can vouch for it.

TERI was Dr Pachauri's favourite child, and he was very much attached to TERI. He dedicated all his energy, resources, and efforts to take TERI to great heights. TERI evolved to be a global think tank and a highly respected organization under his able leadership. I was one of the very few TERIERS who were in touch with him in the last four years of his life, which he spent away from TERI, in isolation, away from his soul, away from his favourite child. He was in deep pain, but remained positive and was eager to bounce back.

He suffered but didn't break down, and I was in awe of his strength and personality. His health failed in his final days but he had tremendous willpower, and we all prayed for his recovery. But God wanted to have him by the side, and Dr Pachauri went away silently.

I will miss his warmth, his guidance, his wisdom, and his affection forever but he will always have a special place in my heart. "Thank you, Sir, for sharing your endless knowledge, your faith, and belief in me and for your love and affection for me and my family. I hope to live up to your expectations and continue to strive for a greener and healthier world. Bless us forever."

> MILI MAJUMDAR Senior Director, Sustainable Habitat Division (1992– 2016)

A Man Full of Knowledge and Perfection

Although many know him as RKP, Pachauri, and even Patchy, for me he was always Dr Pachauri, a man full of knowledge, a great leader, an astute administrator, and much more . . . His departure has created a void that will never be filled in.

From Jor Bagh Many memories to pen down. My memory takes me back to my first to інс meeting with Dr Pachauri at 9 Jor Bagh in December 1992 for my final round of interviews. I still remember his asking me why I wanted to join TERI and my reply to him that my father wanted me to join and his laugh at my answer. I was in my final year of a bachelor's degree, and he advised me to complete my graduation and also to pursue higher studies. These encouraging words inspired me, and I joined TERI on 16 December 1992, although I did not find the office at 9 Jor Bagh particularly attractive. Sometime in 1993/94, we were taken for a site visit to the IHC and all of us were quite excited about the move to the new premises with new infrastructure. I worked with TERI for more than 26 years and even now I miss both TERI and my friends in TERI. Dr Pachauri had given all of us equal opportunities to work as a team, to build strong bonds with one another, and we grew up as a family, sharing both happy times and bad times.

Punctuality, Punctuality and discipline were always on the top of the agenda. Anyone discipline, coming in even a few minutes late would be greeted with a stiff "Good perfection Afternoon!" Being on the same floor as Dr Pachauri, many times I had to play hide and seek to avoid that frosty greeting. Top on the agenda of any meeting, whether of researchers or of administrative staff or a divisional meeting, would be punctuality. Utmost importance was also given to publishing more and more research papers in journals and articles in magazines, both national and international. Dr Pachauri also encouraged each one of us to upgrade our skills so as to work more effectively and efficiently and to outperform ourselves in every field. Many training programmes were conducted on time management, team building, etc. so as to build a strong institution. Dr Pachauri also forced each one of us to add to our qualifications, resulting in many doctorates in TERI. His main aim was to work hard as a team to achieve TERI's goals. Dr Pachauri always wanted perfection: even minor mistakes would be marked and corrected so that you did not repeat them in future.

Motivation toMany internal awards were introduced within TERI, such as Rising Stars,achieve TERI'sPat on the Back, and the Roll of Honour to motivate employees both oldgoalsand new. I too was once awarded 'Pat on the Back' for introducing a
new system in TERI, namely customer relations management, for which
I was fully trained so that I could use the tool efficiently. In fact, I was

encouraged to train the secretarial staff in CRM, which gave me a lot of confidence.

TERI celebrates Independence Day every year, and children of TERI staff are encouraged to be part of the celebrations. Children who participate actively also receive small prizes. My daughter always looked forward to these celebrations.

Love for his attire – formal wear for routine weekdays, a formal suit with the TERI tie for meetings and conferences, a white T-shirt and white track pants for cricket on Patchy grounds, the traditional kurta-pyjama and a colourful turban for TERI'S Independence Day celebrations, a large hat and black sunglasses for TERI'S retreats—that's how he would dress up.

My kids and I met Dr Pachauri last on 19 November 2019. As always, he was friendly to my kids and I never thought it would be the last time we would meet, never to meet again. I will cherish these memories for as long as I live. Miss you a lot, Dr Pachauri!

M Radнika Manager (1992–2018)

An Inspiration to Many

The year was 1992 when I first entered TERI. I was just a fresh, young graduate. I had no idea what to expect of a boss. The image of a boss who is unapproachable, patronizing, and distant was painted by almost everyone I knew. It took me quite a while to accept the total opposite. I remember when I first met Dr Pachauri for my interview in 7 Jor Bagh: he looked like a man of intellect and wit, wearing a simple, traditional kurta-pyjama, who initiated the conversation by extending his hand. His handshake was firm and strong.

A memory still clear as day to me was Dr Pachauri's visits to MTP in the late afternoons before the party, where he would make his patent rum punch. Dr Pachauri was always willing to listen and never short of wise advice and opinions.

> I was appointed in the operations division of the Tissue Culture Pilot Plant, which later became the Micropropagation Technology Park. As time went by, I began to know him better and learnt what he valued most: people. To him, his employees were family. He used to make it clear that everyone plays an important role. He did his best to pull everyone together to build the company as a team and make everyone feel a sense of the ownership of the company. It's not an easy task. The saying 'work is like a marriage' has some truth to it. There have to be elements of respect, trust, commitment, and reasonable expectations; when it doesn't work out, people quit.

> Dr Pachauri was very good at encouraging initiatives and cultivating team work. The annual new year's party at MTP was such an event, eagerly awaited by all. A memory still clear as day to me was Dr Pachauri's visits to MTP in the late afternoons before the party, where he would make his patent rum punch. Dr Pachauri was always willing to listen and never short of wise advice and opinions. I still remember requesting him to bring back the TERI group retreats, which had been stopped for a few years. Within just a few months of my request, he had arranged a trip to Damdama Lake without any hesitation. There would also be many other occasions, like the 15th of August celebrations, which would be accompanied by exciting performances and games but I really only ever had my eye on the 'dhokla'.

> In my 10th year at TERI, I was offered and accepted a job in the US. My experience within 9 months of working there showed me that nothing could compare to the excellent work culture in TERI. I recalled his words to me: "It's OK to leave and see the world. But you are always welcome to return." I was reappointed in TERI the very next day of quitting my job in San Diego. Dr Pachauri has been a role model to many and his presence has always been highly encouraging for each one of us. I never knew that my last visit to him at his home in December 2019 would be our last goodbye.

Sometimes, proper words of acknowledgement are hard to find to

express our debt to someone as great as him. His contributions are irreplaceable; his dedication, immeasurable; his guidance, invaluable. And his absence is unacceptable but he taught us to face the future with confidence. For the past 17 years, I have visited TERI every year and have always had the desire to return someday and retire from the same place I started my career in—TERI.

> AJAY SOOD Supervisor, Production (1992–2003)

Well Bowled!

Dr R K Pachauri—the name evokes strong emotions depending on what frame of his you have in your mind. Speaking for myself, I have experienced fear, happiness, fatherly love and affection, and anger too on rare occasions in 18 years of working with him. But the one constant feeling is that of immense respect, right from the day I first met him, which was on a college cricket ground in 1992.

My adulation for Dr Pachauri remained and continued to rise even after I left TERI, in 2007. I keep wondering even today how he managed to build an organization from scratch to what it is today.

It was on the cricket ground that one could see the child in Dr Pachauri.

In this context, I would say that it was not Mr Darbari Seth, the founder chairman of TERI, who alone had the Midas touch; Dr Pachauri had it too, and in great measure. There are many tangible proofs of that. Among that list, cricket and his contribution to the game are second to none! The TERI Oval and the TERI Cup bear testimony to his unending love for the game. In fact, it was on the cricket ground that one could see the child in Dr Pachauri. Cricketers in TERI are lucky to have seen that child many times over and I for one fell in love with that child from day one. And for ever!

The passion with which Dr Pachauri played the game was infectious. Those who have played the game at the highest level keep telling youngsters to enjoy the game. As a cricketer who had played the game competitively at club and university levels, I remember my seniors in the teams that I played for telling me to enjoy the game, but for the life of me, I could never understand its real import—until I saw Dr Pachauri practically demonstrating it on the field, each time and every time.

I should like to narrate a small anecdote about the first TERI Cup. The story involved Dr Pachauri, his trusted Man Friday, Col. Puri, who was the chief of administration at TERI then, and a few cricketers.

TERI's 'sacred'Way back in the early and mid-1990s, there were hardly any cricket**money and the**tournaments for companies. It was in 1994 that we started the first TERI**TERI Cup**Cup, with only four teams in the fray. Perhaps it was the first such
tournament for corporate houses at that time: in 2019, I am told, the
number of teams participating in the TERI Cup had to be capped at 36 or
thereabouts. This overwhelming response to the TERI Cup today is simply
amazing despite the proliferation of similar cricketing events for corporate
organizations in the National Capital Region in recent years. May the TERI
Cup continue for ever in loving memory of its architect, Dr Pachauri.

The first TERI Cup, however, was quite special for a few cricketers in TERI, including me, as it taught us many things.

Dr Pachauri gave us the task of planning and preparing a budget for organizing the first TERI Cup. 'Us' here refers to the cricket-crazy guys in TERI (Pradeep Kumar, T Ramesh, T P Sankar, and a couple of others, including me). He gave us a broad direction that we must manage the whole tournament with the resources we generate from it. Perhaps he was reminding us that TERI's money was sacred.

The operational freedom Dr Pachauri gave us despite goofing up on a few things here and there made us really better at a few things later on.

Nodding our heads in agreement and thrilled about organizing a tournament, we, amateurs, prepared a budget that we truly thought would take care of everything. When the budget was shown to him, the rental outgo for the grounds caught his attention as that ate up almost 75% of the total expenditure. (It was this that might have triggered Dr Pachauri's plan to develop a beautiful cricket ground in Gual Pahari later on.)

Coming back to the story, Dr Pachauri asked us to submit the budget sheet to Col. Puri and get the necessary advance amount for booking the ground and for other essentials. So far, so good.

As the tournament progressed, unforeseen expenditure cropped up and we ran short of money to the tune of roughly Rs 12,500/-. The amount was huge for us at that time. We pleaded with Col. Puri to release the additional amount. But the terror that he was to many, he refused to budge and virtually 'dismissed' us from his cabin 'military' style.

With pressure mounting to raise money, someone in our group came up with the idea that each of us should take some money as salary advance from TERI and make up the shortfall. The idea sounded good to us, but the thought of going back to Col. Puri with this request kept us back.

Eventually, we decided to 'surrender' to Dr Pachauri and met him with a list of things that made up the additional Rs 12,500/- that we needed. He understood the problem, took the paper from us, signed on it, and scribbled a note to the effect that the amount be sanctioned. Knowing fully well that we had made blunders in planning and execution, Dr Pachauri gently advised us to be careful the next time.

Now, with much more confidence, we met Col. Puri and gave him the paper, hoping that the matter would end on a happy note. Alas! That was not to be. "The money earned by the research staff of TERI is sacred, and not for you guys to blow it up on cricket", pat came the response from Col. Puri. He didn't stop there but added, "Tell Dr Pachauri to donate Rs 12,500/- to TERI from his personal account." Well, we were thus caught between the devil and the deep blue sea.

We went back to Dr Pachauri and told him of Col. Puri's stand, fully prepared for an outburst from Dr Pachauri. On the contrary, he gave us a big smile – I still remember that 'loaded' smile as if he had won something somewhere or that TERI was going in the right direction – and promptly took out his chequebook and wrote out a cheque for the required sum, payable to TERI. This incident taught us something about budgeting but, more important, made us realize that we must use money wisely.

Looking back, the operational freedom that he gave us despite goofing up on a few things here and there made us really better at a few things later on. We went on to organize much bigger tournaments, but always with the 'sacred' money generated through cricket!

My last meetingLet me end these recollections by narrating the most recent interactionwiththat I had with Dr Pachauri. It was sometime in the beginning of 2019 thatDr PachauriI happened to be in Delhi. After hearing that he was unwell, I sent him a
message on WhatsApp, expressing my desire to meet him. As always, he
replied promptly, asking me to come round to his home at about 8 a.m. two
days later, which was a Sunday. That morning, he called me to ask whether
I could come to TERI Oval instead, because he was going to play a match
in the first half of the day. Reassured that he was hale and hearty, I went to
the ground, TERI Oval. I saw him bowling after almost a decade and saw
that child in him yet again.

After bowling his quota of four overs on the trot, he came back to the pavilion to rest. The warmth of his hug did make my eyes swell a bit. He led me to the breakfast table and we ate something together, talking all the while. Then a most unusual thing happened. He suddenly asked me to pad up, as he wanted to bowl to me in the nets, which was on the other side of the ground. I did bat for a dozen balls or so. As we strolled back to the pavilion chatting about a few things, including my family, my mind was busy sifting and sorting the best moments with him over the years.

Strange as it may seem, both my first meeting and the last meeting with Dr Pachauri were on a cricket ground! At the core, perhaps that's where our hearts lay. I will carry that image of Dr Pachauri in whites for the rest of my life.

I conclude with the following lines of John Keats, which capture what I had always wanted to tell him.

I love you the more in that I believe you have liked me for my own sake and for nothing else.

K P EASHWAR Fellow and Area Convener, TERI Press (1993–2007)

The Leader, Pioneer, and Trailblazer I Knew

One sunny afternoon more than 25 years ago, I entered Dr Pachauri's office to be interviewed for a post in TERI'S Publications Unit. To be brutally honest I had no clue about either TERI'S activities or the mind-boggling world of scientific publishing. He looked at me searchingly over his trademark spectacles as if sensing my uneasiness and asked me just one question, "How do you think you can add value to TERI?"

That question stirred life-guiding responses in me and inspires me to this day! And it was just one of Dr Pachauri's many questions that marked important milestones in my professional and personal life.

Dr Pachauri would suddenly push us ahead and toss us into unchartered waters and would step back and wait to see whether we were engulfed by the inky waters or emerged triumphant.

> I became part of a 50-odd TERI team and was soon introduced to and embraced by the warm and yet fiercely competitive energies that flowed through TERI. We learnt to craft success in spite of meagre resources, acquired top-of-the-craft skills, worked under exceptional and yet selfless mentors, and made lifelong friends—driven, nourished, and fostered by Dr Pachauri himself. He led by example, worked tirelessly, and motivated individual effort and team success, relentlessly creating and coercing outof-the-box actions and strategies to make TERI a force to reckon with.

Dr Pachauri was very conscious of the all-encompassing need for excellence in every field, be it designing a biogas plant or setting up a micropropagation plant, advising policymakers or organizing an international event, creating and disseminating information or just dotting the *i*'s or crossing the *t*'s—or to coin acronyms!

I still remember him complaining at a staff meeting that he was disappointed to see very few at work during weekends. Responding to our raised eyebrows, he added, "I returned from Japan last week. There I visited a firm on a Sunday and at least 70% of the staff were at work. That's why Japan is where it is in the global arena."

In all fairness, every member of TERI's staff worked hard to keep up with him. We walked behind him, often side by side, as he recognized talent and hard work irrespective of age or experience. He would suddenly push us ahead and toss us into unchartered waters and would step back and wait to see whether we were engulfed by the inky waters or emerged triumphant, thus adding to our own self-confidence and to TERI's success.

After many a transatlantic flight, he headed straight for his office and made a series of calls to follow up on issues he thought needed immediate attention. And even if they didn't, for him it was all in a day's work. Or he would reach the cricket field if it was a weekend to join the TERI cricket team and bowl and bat through the day.

Being an avid cricket fan, I would volunteer to help out with organizational details and realize regularly that I had bitten off much more than I could chew even as a bystander! "*To kya hua* [so what]?" he would growl at me in his deep timbre if I attempted to leave early or to excuse myself, "Your work as a spectator and a volunteer is not over yet. Don't shirk your responsibilities."

Dr Pachauri was reluctant to offer praise. Just a year after I had joined and after our team had successfully published one of the biggest editions of TERI's data directory, TEDDY, in record back-breaking time, he told us, "Good job. But this is just the tip of the iceberg. Don't get complacent."

But he would surprise us by dropping in unannounced on our innumerable late nights at work, carrying hot samosas or by rallying us around and taking us for piping hot tea, spicy noodles, or tangy treats to rev up our spirits! Not to a fancy hotel though but to the local street market—what counted was the company and not the place.

Wasting resources or time was his pet peeve. He would threaten to go on a hunger strike if he saw that paper consumption was going up. He would go on his rounds at least twice a day to check if anyone was playing truant. This was more striking on the morning of every 1 January to ensure there was no collateral damage after the New Year's Eve parties in spite of having dropped in on several even during wee hours of the morning. (I speak from experience!)

Negotiating hard whether it was to save on even small printing costs or major infrastructure expenses, he believed and insisted that every penny counts. But where it mattered, Dr Pachauri never thought twice—from instituting rare compensatory benefits for staff to equipping TERI with state-of-the-art technology, from hosting lavish high-level conferences to homely Independence Day gatherings, or even from reimbursing transport costs on weekends to providing safe car rides to women staff after 7 p.m.

It was soon time for me to seek an answer to another question. The day I returned to TERI after getting married, Dr Pachauri congratulated me warmly and then added almost as an afterthought, "So does this mean you are going to change your maiden name now? Very unfair on your father: he does not cease to have a role in your life."

I still have my father's name as my middle name.

Of course, Dr Pachauri wielded the whip when necessary to ensure that we gave our best. I have been at the receiving end many a time, often reduced to tears. I used to dread the early morning phone calls dripping with ice, caustic feedback either public or private, angry rejection scrawls on requests and proposals and even editorial corrections in red ink! Our hearts would sink when we were summoned to his office and we would try to gauge his mood by the faces of those who emerged from his office as we waited. But after many an outburst, if he realized we were right or had a satisfactory explanation, he would hear us out and accept our justifications.

In 1997, when TERI was hosting one of its biggest international events, I failed to notice a typo on the cover of the proceedings to be released on the inaugural day. I thought that was the end of my TERI sojourn. The entire

coordinating committee had put in months of gruelling work and weary eyes had not noticed the error in the proofs.

As I stood trembling before him with the preliminary copies, he again asked me just one question, "Can you set this right?"

Set it right we did! In the wrap-up session after the conference, Dr Pachauri turned to me and said, "It's all right; now you will make sure this never happens again."

A few years later, I decided to move to the Middle East to join my husband who had made a career move. I sat across the table in Dr Pachauri's office and informed him of my decision. There came another question: "You are at the best stage of your professional career; aren't you sacrificing your dreams?"

The question created confusion and raised doubts within me. But I soon made peace with myself and handed in my letter of resignation. Apart from his scribbled acceptance on the letter, I was never called to take on any task or even summoned to his office as I served my mandatory three-month notice period. A week before my last day, a tiny slip of paper landed on my desk: it was a fax message from Dr Pachauri, who was in the us at that time, asking me to meet him the day he returned.

When I did, he threw another question at me: "Will you be able to set up TERI's presence in the Middle East? I know you can but do *you*?"

TERI'S Middle East saga had several layers: initial years of information gathering in a region where environmental and sustainability issues were still at a nascent stage; establishing networks and linkages to inspire a look-East scenario; and creating a level playing field for Asian expertise.

It took time but I was egged on by either crisp emails filled with ideas or inspiration from Dr Pachauri or by acerbic ones that questioned whether I was doing enough! But interspersed would be queries about my family, particularly my son, with whom he shared interesting conversations.

After his acceptance of the Nobel Prize on behalf of the IPCC and becoming the first chairman of the Zayed Future Energy Prize here in the United Arab Emirates, it was a blur of phone calls, invitations, lectures, and discussions! His flying visits to the region would have exhausting schedules and back-to-back high-profile meetings. It was my years of multi-tasking that Dr Pachauri insisted on and encouraged in TERI, Delhi, which stood me in good stead.

When I finally decided to move on, it was a statement and not a question. At Abu Dhabi airport as I dropped him off, he said, "Stay focused and keep that spirit raging: use it well and keep in touch!"

Dr Pachauri's burning desire to take TERI to unrivalled heights made him climb every mountain and cross every stream. There are several stories that each of us has to share but what lives on will be his legacy in our memories—as a leader, a pioneer, and a trailblazer!

> MEENA JANARDHAN Fellow, TERI Gulf Centre, United Arab Emirates (1993–2012)

My Mentor

I have vivid memories of my interaction with Dr Pachauri spanning around 24 years of my career in TERI. I found him a benevolent autocrat at work. He was magnanimous to his staff but at the same time a hard taskmaster. I can say with confidence that I have been strongly influenced in my professional life by him. Dr Pachauri was indeed an inspiring and a true leader. I recall my first interaction with Dr Pachauri, which occurred within three days of my joining TERI, in 1993. As a new appointee, I was sitting in the library in Jor Bagh when he suddenly appeared and called me by my name. I cowered to see the Director General but he began discussing my work on *Brassica*. That experience left an everlasting impression of a great leader in my mind who cared for every person in the organization. He was accessible to all and always gave everyone patient hearing.

As a hard taskmaster, he had a sharp eye for detail. He used to say that success is a lot of small things done well. If we had to show a draft to Dr Pachauri for approval, we used to check it multiple times and yet he would always improve upon it. In 1995, when Dr Pachauri launched an ambitious project, namely Green India 2047, I was assigned the part related to biodiversity. As part of that project, we organized a workshop, and I went to show him the programme. He made a few improvements and then suddenly he smiled and retorted, "When did this person do her PhD?" I looked at the programme carefully and realized that I had conferred the title *Dr* on a renowned panellist unknowingly. I cross-checked and then corrected my mistake by replacing the title *Dr* with *Ms*.

Dr Pachauri was always immaculately dressed and had a towering personality. He was a straight talker without any airs and inhibitions. He was the Director General of TERI but was considered a father figure for the entire staff.

Dr Pachauri was a caring professional. One day I received a call around 4.00 p.m. from Dr Pachauri's office for an urgent meeting. Dr Pachauri had been invited to give expert opinion before a Joint Parliament Committee set up for the Coca-Cola pesticide case. The agenda of our meeting was to discuss the matter and provide a draft response by next morning. The next day, we came up with a draft and, after discussions, were asked to finalize it. At the same time, I received a call from home informing me that my father was no more. I had to leave Delhi for home right away. I left a note to Dr Pachauri, explaining the urgency. He promptly called me and offered his condolences and later sent me a very nicely worded condolence message—the sort one would expect from a father figure. I will never forget his kind words of consolation.

Dr Pachauri was passionate about technology development by TERI. He had great confidence in his scientists and the technologies developed by them. When I was awarded the DBT- CREST Fellowship to visit the University of California at Davis for one year, he was delighted to know about the award of this prestigious fellowship. However, he asked me to avail of this fellowship next year as my biopesticide technology was ready for commercialization and needed my attention. I tried to convince him that it may be a lost opportunity but he advised me to defer my fellowship. On his unwavering insistence, I deferred my fellowship for a year. I didn't realize his motive at that time but later I realized that successful technology development and its commercialization was far better than a fellowship. I went on to gain recognition and more fellowships later in my professional career on account of my work on the commercialization of technology.

There were many such instances that have left his mark on my psyche. Dr Pachauri surprised everybody. He was always immaculately dressed and had a towering personality. He was a straight talker without any airs and inhibitions. He was the Director General of TERI but was considered a father figure for the entire staff. He used to always think big and trained his staff to do the same. I had never seen him relaxing. On his return from any international trip, he would come directly to his office from the airport. He was accommodating but strict. I can say with full conviction that he has been a mentor to me and many of my contemporary scientists. Dr Pachauri has left an indelible mark on many lives, including mine.

> NUTAN KAUSHIK Senior Fellow (1993–2017)

A Man of Foresight and Sharp Sight

Dr Pachauri was a man of many facets. We all, as TERIERS who have spent our lifetime in TERI, will always remember him as a great institution builder. To this effect, amongst many of his qualities, one trait that he possessed was his foresight and the ability to develop and nurture long-term links for the benefit of TERI. The best example of this is the relationship he helped forge with SDC, the Swiss Agency for Development and Cooperation, during the mid 1990s: SDC had established a global programme in 1991 to support developing countries in implementing measures aimed at protecting the global environment, and the SMES (small and medium enterprises) sector was identified as one of the sectors for India. Dr Pachauri saw an opportunity for TERI to step into this relatively new field, and TERI entered into a partnership with SDC to find solutions to problems related to energy and the environment that confronted Indian SMES. This partnership has continued for more than 25 years, and today TERI is one of the leading organizations working in this field.

Dr Pachauri always made it a point to remain in touch with what is happening on the ground in this partnership. I was fortunate to have worked in this programme all these years, and he made it a point to regularly ask me about progress in this partnership, which he had helped forge during the formative years. He was a great believer in maintaining and nurturing relationships. Even during his hectic travels, he made every effort to maintain links with SDC teams in both Berne and New Delhi, even if it meant having a small farewell or a welcome get-together in the evenings on the badminton court in TERI!

I do believe it was this quality of fostering relationships, coupled with foresight and networking ability, that helped TERI reach where it is today.

The other trait of Dr Pachauri that I will always admire is his sharp instinct and ability to notice even minor errors. I always used to read any document to be sent to him at least three or four times – be it a two-line email or a detailed report – to ensure that there were no mistakes. In TERI, all international travel needed his approval and every TERI researcher intending to travel abroad had to send an email or a note in this regard. On one occasion in 2010, I had to travel to Colombia and hence sent him a two-line email seeking his approval. Within a couple of hours, I got the usual handwritten 'OK' but with a line added underneath: Are you going to 'Columbia' or 'Colombia'? I Googled the names right away and realized my error. The country is Colombia in South America with the Spanish spelling whereas the cities in USA use the English spelling with 'u'. His uncanny ability to spot the slightest of errors, and his attention to ensuring accuracy in every small thing, was unparalleled. I will never forget the spelling of Colombia in my life.

> GIRISH SETHI Senior Director (1993–)

Men Who Ruled India but Preferred to Work with RKP

The title draws on a classic by Philip Mason, a civil servant who chronicled the life and times of the district officer from the 17th century to the first half of the 20th century. Oddly reminiscent of the Indian Civil Service (ICS), only men from the Indian Administrative Service (IAS) have come to serve in TERI. The IAS 'TERIERS' – as that category of TERI alumni are known – who served TERI in the days of Dr Pachauri belong to two buckets. Twenty of them served on deputation whereas the rest joined after retiring from the IAS—with one honourable exception, namely Shyamal Sarkar, who had two deputation stints, 1998–2003 and 2005–2007, before returning to TERI as Senior Director after he retired from the IAS in 2014. This essay, in the Masonic style, is about the extraordinary partnership between the IAS officers on deputation, TERI, and Dr RKP—the last two being virtually indistinguishable.

What explains Dr RKP's attachment to getting IAS officers on deputation? A cynical explanation is that TERI benefits from a symbiotic relationship with the 'twice-born IAS', a 'deep' web within the government. The transactional aspect is overplayed. I experienced no such implicit pressure. Neither did those I interviewed feel that a quid pro quo defined their relationship with TERI.

The networked printers always worked, no one individually cached copy paper, and the office remained open 24/7 with sensor-controlled lights, as if in perpetual readiness for Dr RKP's prowls around the office, often straight after an international flight in the wee hours or before leaving for one.

To the contrary, there is unanimous acclaim for the open-minded and collaborative TERI culture, for being welcomed and consciously drawn into productive teamwork of TERI professionals striving to socialize the 'twice-born' to the new, flat, green world they had stepped into.

Rakesh Kacker (2000–2003), who retired as Secretary, Food Processing, and then became Director of the India habitat Centre, laughingly recalls Sujata Gupta, TERI's lead climate change modeler (now with the Asian Development Bank) sitting him down to patiently explain the mechanics of climate change. Ever the pucca, teach-proof, IAs officer, he was not impressed and advised her to find something better to do because interest in the climate gobbledygook was unlikely to last! Rakesh knew Dr RKP from the high-powered committee of the Ministry of Power where Rakesh had worked. Subsequently, as Joint Secretary in the Ministry of Power, he was nudged by his former Joint Secretary, the late Prabir Sengupta – who himself joined TERI while in service (and again after he retired from government service) – to spend time at TERI. TERI did a good job of converting Rakesh to the green cause. After leaving TERI he became Member Secretary of Indian Wind Energy Association, while Ajay Mathur, a TERI stalwart, was President, Suzlon, a premium wind energy developer.

TERI was a catchment area for IAS officers returning from overseas studies. Even in the mid 1990s, TERI had digital infrastructure and office facilities comparable with those in international institutions—a huge compliment to Dr RKP's vision, the agility and ability of the administrative architecture he instituted, and the excellence of TERI'S IT support team.

All of this ensured that networked printers always worked, no one individually cached copy paper, and the office remained open 24/7 with sensor-controlled lights, as if in perpetual readiness for Dr RKP's prowls around the office, often straight after an international flight in the wee hours or before leaving for one.

Shyamal Sarkar, a gentle academic with deep interests in regulation and public policy, feels at home in TERI, to which he was guided on returning after finishing his doctoral work at Stony Brook in the US by Prodipto Ghosh, Additional Secretary in the Prime Minister's Office and then Secretary, Environment, Government of India, who himself joined TERI after retirement and continues today as a Distinguished Fellow.

Support for TERI as an institution of excellence – long before this nomenclature was adopted by the government – is wide ranging, including support from politicians across parties.

Shyamal recalls the late Jyoti Basu, the venerable chief minister of West Bengal, countering bureaucratic objections to Shymal's deputation to TERI by saying that he would learn things at TERI which would be useful for the state government. This was prescient. After finishing his stint with TERI, Shyamal served as the Member Secretary of the West Bengal Pollution Control Board, where he used to full effect the skills he had imbibed while in TERI.

Rajeev Kher, who retired as Secretary, Ministry of Commerce, was in TERI from 2003 to 2006 and expresses similar sentiments. His switch from being Joint Secretary in the Ministry of Environment and Forests (MOEF) to TERI was seamless.

Coincidentally, the MOEF, with Prodipto Ghosh at its helm as Secretary, was formulating the National Environmental Policy. It was inevitable that Rajeev would be associated with the top-flight professionals who were assisting the MOEF: Leena Srivastava, one of the 'original TERI cohorts', who went on to become the vice chancellor of the TERI School of Advanced Studies and is now the Deputy Director General of the International Institute for Advanced Systems Analysis, Vienna; Ligia Noronha, a long-time TERIER and at present the Director, Economy Division, the United Nations Environment Programme; Preety Bhandari, now a Director at the Asian Development Bank; and Ranjan Bose, now with the World Bank. Rajeev recalls Dr RKP as a skilled interlocutor with legendary convening power who could nudge governments towards good decisions. He credits Dr RKP with extraordinary leadership skills and the ability to deal with people at their level, a trait which endeared him to many. O P Agarwal, who was in TERI through 2000, endorses Dr RKP's 'people orientation' and recalls that Dr RKP had acknowledged that the credit for those skills goes to Dale Carnegie's 1936 bestseller, *How to Win Friends and Influence People*. O P Agarwal came to TERI straight after his master's from the Massachusetts Institute of Technology (MIT) in transportation technology and policy. Soon thereafter, he was cleared for appointment as Joint Secretary. For IAs officers, this is akin to getting one's foot through the door and onto the fast track to eventually becoming Secretary—a much yearned for milestone. To OP's everlasting gratitude, Dr RKP, rather than being irritated or feeling short-changed, urged him to accept the offer, adding he could always come back. This magnanimity converted OP into a die-hard 'ambassador' for TERI. He is currently the Country Representative for the World Resources Institute in India.

I discovered a flat, young organization, buzzing with professional, blue-skies innovation. One staffer cheerfully used a spare toilet as office space, sitting on the pot with his computer on a small table before him!

Ajoy Acharya (2004–2007) had worked with four prime ministers – Rajiv Gandhi, V P Singh, Chandra Shekhar, and P V Narasimha Rao – before he went to Harvard University as a Mason Fellow for his master's in public policy. He was steered to TERI by Ajay Shankar, Additional Secretary in the Ministry of Power. Ajay retired as Secretary, Department of Industry, served as Member Secretary of the National Manufacturing Competitiveness Commission, and is currently with TERI as a Distinguished Fellow. Ajoy found the environs of TERI very congenial. He is an intensely private person as opposed to the extrovertish and expansive Dr RKP. And yet he found a kindred soul in him – informal, sans any trace of officialdom, and completely without rancour unless gravely provoked by stupidity, dishonesty, deceit, or indiscipline. Dr RKP set red lines which employees crossed at their peril. He once insisted on firing a young researcher caught surfing porn on the office net.

Dr RKP inspired and demanded loyalty. In return, colleagues were assured that they had his backing—a rare thing amongst bosses back then and even rarer now.

Asha Ram Sihag, who retired as Secretary, Heavy Industry, says his association with TERI was preordained. On graduating from the Indian Institute of Technology, he simultaneously sat for the UPSC examinations and interviewed with Dr RKP in the Jeevan Tara Building, a floor of which was lent to TERI by Tata Chemicals, courtesy Darbari Seth, chairman of Tata Chemicals and the founder of Tata Energy Research Institute, as it was called in 1983. Bright as a button, Asha Ram qualified for both TERI and the IAS. Spoilt for choice, he was unsure which option to exercise! An unusual dilemma, which illustrates the high institutional standing of TERI. Dr RKP, an engineer himself, was impressed by Sihag's obvious sincerity, advised him to join the IAS since TERI would always be open to him. Asha Ram came to TERI two decades later, on deputation (2000–04), and worked on the then emerging issues in telecom regulation.

A no-nonsense manager, Dr Monga grabbed Dr RKP's affection by turning down a politically well-connected applicant for the North-East Centre that he was curating.

My own introduction to TERI came in 1990 from a chance invitation to lunch at TERI's congested Jor Bagh office from Pradeep Monga, my 'batch mate' in the IAS. I discovered a flat, young organization, buzzing with professional, blue-skies innovation. One staffer cheerfully used a spare toilet as office space, sitting on the pot with his computer on a small table before him!

Pradeep was the IAS pioneer in TERI (1990 to 1992). A science major, who had earlier served in the Indian Forest Service, he found that he and TERI were made for each other. A no-nonsense manager, he grabbed Dr RKP's affection by turning down a politically well-connected applicant for the North-East Centre that he was curating. Dr RKP enquired if he knew who he was turning down. Pradeep replied that he never went beyond the professional profile of a candidate. And so began a lasting relationship. Pradeep is currently Deputy Executive Secretary of the UN Convention to Combat Desertification.

Twenty IAS officers have served in TERI on deputation since 1990. I was one of three from my batch. This outsize representation of the 1980 batch is either a comment on the heightened professional salience of the energy– environment space, post the Rio Earth Summit in 1992, or the dwindling charms of the 'twice-born' service since, or both.

For me, TERI was heaven – a sliver of global excellence – and a pleasant escape from the deadening routine of the Uttar Pradesh Secretariat, where I found myself as Special Secretary after completing a master's in Economic Policy from Columbia University. My interest then lay in public finance, not the environment. I was an oddball in a scientific environment, which resonated to the nuances of the climate science or the intricacies of tissue culture and growing oil-eating bugs in laboratories, presided over by the redoubtable Vibha Dhawan.

Dr RKP lodged me in the power reforms division under the benevolent tutelage of Leena Srivastava, where I spent three glorious years alongside the irrepressible Gaurav Bhatiani, an engineer and now Director, RTI International, India and Harmanjit Singh Nagi, another power engineer, now Director of the India operations of EDF, the giant French electricity utility.

Ajay Mathur, the czar of the TERI'S Renewable and Rural Technology Division, pitying my predicament, associated me with projects on the financing of wind power – then on the upswing – alongside a brilliant financial analyst, Ashish Narain, who subsequently worked in the World Bank and International Finance Corporation and is now a Principal Economist with the Asian Development Bank. Ajay left the confines of TERI in 2000 to become President, Suzlon Energy; headed climate change practice at the World Bank; and was Director General of the Bureau of Energy Efficiency for a decade before succeeding Dr RKP as Director General, TERI. A 'thinking' engineer, he has a flair for curating innovative solutions to persistent public policy challenges.

I was sorry to leave when my tenure ended. In a curious coincidence but most likely due to Dr RKP's nudge, Professor S L Rao, the first chairperson of the newly formed Central Electricity Regulatory Commission – and a Distinguished Fellow at TERI – took me on as Secretary of the commission. The power sector stayed with me not least because so little had changed since those heady days in 1998, when Odisha was extolled as the model for rapid national reform.

My association with Dr RKP continued through the dark days when he gamely battled controversy and charges brought against him by a staffer. Our chats, once he had resigned from the IPCC and TERI, were of the what-next kind. He enthused about working with the young and the underprivileged but clung to the familiar in using global scale as the mechanism of intervention.

His lament was that he just did not have the time to build another TERI to which he had lost his heart—a partially requited love story of the epic kind. There will never, ever, be another quite like him.

SANJEEV S AHLUWALIA Senior Fellow (1995–1998)

Dr Pachauri and the Growth of TERI

I joined TERI in 1995 when it was still in Jor Bagh but soon shifted to its present location in the India Habitat Centre. However, TERI has grown over time and as its head of administration, I had the wonderful opportunity of seeing its growth. New centres were opened in different parts of India. In Delhi, there was not enough space for TERI even at the IHC, let alone for the TERI University, and additional office space was arranged in Defence Colony.

Another essential element in the ethos that Dr Pachauri built for TERI was the principle of no compromise on quality in selecting people for induction into the organization. He never budged even an inch to please anyone for inducting a belowpar candidate or where a position had to be created simply to accommodate the recommendation.

> Observing the organization grow steadily while being part of it gives a beautiful feeling and a sense of satisfaction that we often see in a child growing into an adult. The essential elements of such growth can be clearly visible as attributes of the architect. Just as a building requires cement and mortar to hold bricks together, so does an institution require an ethos that binds the organization and enables it to grow. The attributes repeatedly shown by Dr Pachauri had a direct bearing in the blossoming of TERI into an organization of international repute from a minuscule set-up of fewer than a dozen researchers and negligible financial and infrastructural resources. I will dwell upon some of these in the following paragraphs.

> Most impressive had been the concept of zero tolerance of misappropriation in financial matters. A number of cases could be enumerated but a few would suffice to provide a glimpse of the executional aspect of this concept. These cases ranged from employees at the lowest to the highest levels involving amounts from few hundred rupees to few lakhs of rupees. In a case of fudging medical bills for reimbursement of a very small sum, the employee had to face an inquiry duly supported by the concerned doctor. In another, a senior researcher undertook a project directly in his personal capacity with a client without involving TERI and pocketed the fee for the job. In yet another, an employee had to face action by the police for misappropriating funds over a period of time and eventually he had to undergo a jail sentence. In these and many other cases except the last one, the employees had to quit despite the amount involved being small. The effect was obvious and clearly noticeable in all activities of the organization and became a norm. Dr Pachauri never budged an inch despite many amongst us pleading for lesser punishment. He considered this aspect essential for generating an environment of trust. It continued to be an integral component of the organizational culture. This was balanced by his concern and compassion for employees facing personal problems.

Another essential element in the ethos that Dr Pachauri built for TERI was the principle of no compromise on quality in selecting people for induction into the organization. Recommendations from the staff were considered but selection was purely on merit. Every candidate without exception was finally cleared by him. He never budged even an inch to please anyone for inducting a below-par candidate or where a position had to be created simply to accommodate the recommendation. In one such case, a very senior functionary of the government threatened Dr Pachauri of serious consequences after Dr Pachauri had rejected a candidate because the person was unsuitable for the position. Projects from that ministry dried up completely for a very long time but the institute weathered the situation and carried on, trying new approaches, and emerged the stronger after the troubled period.

The greatest advantage of this approach could be seen in TERI attracting and maintaining the largest pool of scientists of international repute with an equally large number of former employees holding top and challenging positions in reputed companies and organizations.

Dr Pachauri also took keen interest in each employee. Annual reviews were conducted, and he met each employee personally. He encouraged employees to take study leave and advance their skills. This continued even as the organization grew and it made increasing demands on his time.

This policy was strengthened by his insistence on diversifying the institute's sources of income and thus preserving its independence. Financial stability has played a major role in building the institute to match international standards. This was achieved by embarking upon multidisciplinary mega projects and innovative projects as a policy. Some of the areas in which TERI continued to excel included a solar pond in Gujarat, a centre for tissue culture, biofuels, mycorrhizae, bioremediation, smart buildings, energy audits, gasifiers and such like besides many international projects in policy and regulatory matters.

Having laid a strong foundation, the institute propelled itself to higher levels of success by continually reinventing itself to fulfil the dreams of its mentor.

I am sure that inherent strengths of TERI will continue to support it in its future growth.

M M Josнi Distinguished Fellow (1995–)

An Ode to Dr Pachauri

Tata Energy Research Institute was a huge attraction for me, and I was lucky to have started my career in TERI in October 1995 under the leadership of Dr R K Pachauri. I started working at the TCPP (Tissue Culture Pilot Plant) under the guidance of Dr Vibha Dhawan in my initial years with TERI. However, in April 1996, owing to some personal reasons, I decided to move back to Guwahati, and I informed Dr Pachauri of the decision. He said he had a plan for me, which he would inform me in a day or two. I readily accepted Dr Pachauri's advice and decided to await his decision. I was totally surprised - and ecstatic at the same time - when he informed me that I would be transferred to TERI'S Guwahati office. He also advised me to work sincerely to develop the office and to widen the scope of our work in the north-eastern region of India. During the 1990s, very few national-level research institutions had their presence in the region, and it was only a visionary of Dr Pachauri's stature who foresaw the need for research and transferring any technology based on that research to the field in a region with a fragile ecosystem and the need to develop a sustainable plan for, and approach to, the development of the region.

Dr Pachauri sensed a void in scientific temperament and approach especially in biotechnology and natural resource management that required capacity building for knowledge development. He planned to set up a centre that would be connected to south-east Asian countries.

> Dr Pachauri always had a special attachment to the north-eastern region, which was rare those days. It was the futuristic vision of Dr Pachauri's that led to the setting up of the TERI North-Eastern Regional Centre in 1994 for region-centric research focused on energy, agricultural biotechnology, and the biodiversity and microflora of the region. One of the biggest initiatives taken under Dr Pachauri's leadership was setting up tissue culture facilities to produce quality planting material, an initiative that contributed greatly to the availability of quality planting material, which was, and continues to be, inadequate for establishing large-scale plantations or commercial agriculture. It was Dr Pachauri's personal contacts with Ashok Saikia, who was then the Agriculture Production Commissioner for Assam, that led to TERI being provided a piece of land by the state government to set up a unit to produce quality planting material through micropropagation.

> Since then, TERI'S North-Eastern Regional Centre has been transformed into a major centre for biotechnological research and implementation of projects related to natural resource management for the entire region. Under the initiative taken by Dr Pachauri along with colleagues at the regional centre, Dr Manmohan Singh, who was at that time the prime minister of India, made available to TERI some funds from MPLADS

(Members of Parliament Local Area Development Scheme) to set up a permanent office and a campus in Guwahati on the land provided by the Government of Assam.

Dr Pachauri sensed a void in scientific temperament and approach especially in biotechnology and natural resource management that required capacity building for knowledge development. He planned to set up a centre that would be connected to south-east Asian countries to make it a world-class institute. The Government of Assam has plans to connect India's north-eastern region to these countries as part of its 'Act East' policy.

Dr Pachauri's vision is now being reflected in the policies of the central government for the region. Personally, I had always been aware of, and inspired by, that vision and his attachment to the region. He had ambitious plans, which he would often discuss with me, one among those being to set up a world-class university and community training centres in rural areas—and my aim is to strive to fulfil at least some of his unrealized dreams to make him eternally happy.

Dr Pachauri dedicated his entire life to the future of humankind through his tenacious work on climate change on the global stage and by developing TERI into an institution of international repute. We missed his vast knowledge and visionary approach during the last few years of his life. Dr Pachauri's passing away is a huge loss to the scientific community of the country.

> DIPANKAR SAHARIA Senior Fellow and Director (1995–)

The Perfectionist

I am indeed honoured to have been asked to contribute to the volume commemorating the memory of Padma Vibhushan Dr R K Pachauri, whom I regard as the most respected leader I have ever come across in my life until today, a great mentor to me personally, a distinguished boss . . . I can go on.

I am a small-town guy who came to Delhi for employment as an ordinary secretary and worked in Usha Shriram Hotels Division before joining TERI. It is only because of Dr Pachauri's blessings and guidance that I came up in life and went on to become Associate Vice President in Rabobank's Private Equity arm in India, where I worked until late 2019. I started my own advisory firm, 4S Advisory, in January 2020. When I wrote my first message to Dr Pachauri after starting the firm, on 15 January 2020, seeking his blessings, I immediately received his response: "You have my very best wishes. I am sure you would be very successful."

I was called for an interview at TERI on Friday, 13 December 1996, and met M M Joshi (MMJ), the then chief of administrative services. MMJ shortlisted me and I was to meet Dr Pachauri for his final go-ahead. Since Dr Pachauri was busy that day, and the next, and I could not meet him. MMJ suggested that I meet him the day after (a Sunday) on the TERI cricket ground at 9 a.m.

The next morning, on the cricket ground, I saw Dr Pachauri in full whites, padded up and practising. MMJ introduced me and Dr Pachauri spoke to me very nicely for about five minutes. When he got to know that I belonged to Andhra Pradesh, he told me about his days with ASCI, the Administrative Staff College of India, Hyderabad, and how he liked biryani, etc. He added that he would talk to MMJ about my joining. Being a cricket fan, like every other Indian, I sat through and thoroughly enjoyed the corporate match and was pleasantly surprised to see Dr Pachauri picking up a couple of wickets and the way he was fielding like a teenage cricketer. I started idolizing him from that very day. Fortunately, I got a thumbs-up from Dr Pachauri and I joined TERI's administrative and the IT departments the next day, 16 December 1996.

In a week's travel, Dr Pachauri would cover five countries. Many a time, he would go straight to the cricket ground from the airport to play corporate cricket matches and then worked at least a couple of hours in his office before heading for home.

> One fortunate day, MMJ called and told me that I would be working as Dr Pachauri's personal secretary for two weeks since one of his assistants was on leave. Although excited to get an opportunity to work with him, at the same time I was also scared. I said to MMJ, "Sir, why don't you send someone else in my place since I do not have adequate experience to work

with stalwarts like Dr Pachauri?" However, MMJ gave me courage and said Dr Pachauri knows how to get his work done from his colleagues and that I should go and work with him and that I would learn a lot from him.

I was nervous but I gathered courage and went to his office, where I met M Jayaraman, who is a great human being and has become a friend for life. Jayaraman was a great support and comfort and with his help I began working with Dr Pachauri. Initially, I used to make some silly mistakes while presenting the drafts of his dictations, and would apologize to Dr Pachauri for my tardy work. But he was never angry and would encourage me, saying "Satish, everybody makes mistakes, but please make sure that a mistake is not repeated and one should not commit silly mistakes." He suggested that I read the drafts thoroughly before presenting them to him. Dr Pachauri seemed to like my work, and I continued working with him for close to nine years before leaving TERI on 31 March 2005. I learnt many lessons while working in his office, foremost among them being impeccable punctuality, sincerity, and honesty. Never in my life did I lie to him: neither in official matters nor in personal matters. That was the confidence he developed in me while I worked with him.

Although each day that I worked with him is unforgettable, I would like to mention some incidents that really changed my life altogether.

Dr Pachauri always honoured his commitments. I have never seen such a disciplined and committed person; although very busy, with multiple commitments, he was never late for any of his meetings.

I was really stunned to see Dr Pachauri in office the day his father, Dr Atma Ram Pachauri, passed away. Dr Pachauri came back to office after the cremation and continued working.

In a week's travel, he used to cover five countries. Many a time, he would go straight to the cricket ground from the airport to play corporate cricket matches and then worked at least a couple of hours in his office before heading for home. Dr Pachauri was such a hard-working person. When I was a bachelor, I used to come to office around 8 a.m.; by then Dr Pachauri would be already in his office. I used to leave around 10 p.m. Sometimes, during late 1990s, he used to drop me half way home to make it easier for me to get an autorickshaw. Since Dr Pachauri used to work for 18–20 hours a day even at that age, I tried my best to emulate him, but never managed to go beyond 12–14 hours a day.

During my time in TERI, in arranging all Dr Pachauri's appointments, I had the privilege of coordinating with the staff of Bill Clinton, Al Gore, Jacques Chirac, Vladimir Putin, and many other world leaders and, in India, with the staff of the President of India; PMO, the Prime Minister's Office; and that of many union ministers. I also had the privilege of meeting many distinguished people along with Dr Pachauri, such as Manmohan Singh, Atal Bihari Vajpayee, Madhavrao Scindia, Jaswant Singh, and Suresh Prabhu.

I thoroughly enjoyed working with Dr Pachauri; after leaving TERI, I really missed working with him. He was a perfectionist.

Leaving TERI was not an easy decision for me. I had joined as a

secretarial assistant and rose to being Executive Coordinator to the Director General, a designation specially created for me by Dr Pachauri. When I informed Dr Pachauri of a job offer I had received from the Swatch Group and said that I was planning to move on, he did not like the idea. But being the great man that he was, he wished me all good things in life and said, "Satish, TERI's doors are always open to you, and do let me know whenever you need any help."

I was grateful to Dr Pachauri, Ajay Mathur, and Leena Srivastava, who allowed me to use their names as references on my cv. While leaving the Swatch Group for Rabobank in just four months, I remember that the human resources department of Rabobank called me to say Dr Pachauri had given very good feedback about me—I was thrilled and honoured to know that.

Even after leaving TERI, I kept in touch with Dr Pachauri and used to meet him as often as possible, at least five to six times a year. He was always happy to know of my progress. I would always tell him that all good things in my career came about because I tried to adopt his punctuality, honesty, dedication, and commitment and that I owed my career growth to him.

I never missed wishing him personally on his birthday, 20 August, unless he was travelling. I still cannot believe he is no more. However, his thoughts will remain in my heart forever. I would like to thank team TERI for giving me this opportunity to share my thoughts.

> SATISH KUMAR JAKKULA Executive Coordinator to Director General (1996–2005)

A Pioneer for Next-Generation Leaders

Dr R K Pachauri, as I fondly recall, was the most enthusiastic, determined, and impeccable person I have ever met in my life. The very sight of him would energize every person around him as his persona was inspirational.

During my university days, I had read a lot about Dr Pachauri and his achievements. He was instrumental in introducing a course on energy systems at the university level during the late 1980s in India. As a student of energy systems myself, it was my dream – and that of many of my fellow students – to join and serve the Tata Energy Research Institute. It was not an easy task to get an opportunity to join TERI as the screening process was rigorous, which involved three rounds of interviews and a final interaction with the man himself, where I was asked to give an insight about my experience as a fresher in the government sector for a year. His gentle questioning style and motivational words inspired me to join TERI. His selection of candidates for the institution was very special and unique and many of us would wonder about his methodology to select each of us.

After completion of the study, the multinational gas company coordinator informed us that our contact had been shared by Dr R K Pachauri on a flight while they were seated next to each other.

> Less than a decade of joining TERI, he hand-picked me to lead a team of over ten members, in spite of me being the youngest of all. This was because of his confidence and the trust placed in me and his ability to experiment with teams led by young people. Dr R K Pachauri was a believer in providing equal opportunities to colleagues. One such occasion was when I was asked to present at the UN University in Japan as his representative because he had other commitments at the time. I got this dream opportunity to share the stage with three Nobel laureates, which was indeed a lifetime experience for a youngster.

Despite his busy schedule, Dr Pachauri made it a point to visit the Bengaluru office at least twice a year and also made sure that he would meet all the staff members personally and address us to keep our motivation high. This gesture of his appealed to all of us. He did not believe in hierarchy and always made sure to connect to each and every colleague over a phone call when we were in faraway places, especially during overseas projects, to keep our spirits high. This gave us immense confidence to deliver projects, and he was a sounding board to seek ideas and advice on critical issues.

Once the chairman of the Tata group wrote a letter to Dr Pachauri seeking his intervention pertaining to large, energy-intensive industries in a government matter of drafting the National Action Plan on Climate Change. Dr Pachauri immediately called a meeting of all senior staff and took our feedback on representing these issues. In another such incident, the chief of a US-based distillery met Dr Pachauri in his office and happened to mention to him a study we had conducted a few years before: TERI's technical intervention was instrumental in convincing the chief's R&D team that the claim made by the Indian company about excess energy consumption was justified, although it meant that the parent company then had to pay the Indian company much more.

Although the matter had been settled years ago, Dr Pachauri was curious enough to ask us for a copy of the report because he was keen to know how we had successfully overturned the objections raised by a Us research team—and was happy that we had been able to do so. Another unique study on reduction of emissions from offshore platforms was executed by us with great challenge and after completion of the study, the multinational gas company coordinator informed us that our contact had been shared by Dr R K Pachauri on a flight while they were seated next to each other. Dr Pachauri used every occasion to generate opportunities and business for TERI as he was passionate about the institute and had immense confidence that his colleagues would deliver on his promises.

Dr Pachauri was highly patriotic and was on a mission to serve society at large. He would always encourage us to take up foreign assignments and to 'fly the TERI flag across the borders'. At the same time, he kept Indian ambassadors to the respective countries informed about our (TERI staff) visits and encouraged us to have fruitful discussions with the ambassadors. He took pride in TERI staff acting as Indian ambassadors to other countries and showcasing India's contribution to solve global issues. Dr Pachauri always assisted small countries through bilateral and multilateral funds. Guyana was one such nation (Indian diaspora) where Dr Pachauri actively secured funds from Norway to implement the low-carbon development strategy, which sought to protect and maintain forests in an effort to reduce global carbon emissions. He was well known among a large group of people in such a small country. Dr Pachauri also served as the chairman of the Iwokrama International Centre for Rainforest Conservation and Development in Guyana. We also demonstrated various technologies related to energy efficiency and renewable energy in Guyana. On one occasion, during the course of the project, Dr Pachauri visited the sites and complimented us by saying "My decades of dream to support Guyana have been fulfilled as they are our own people".

We have always admired Dr Pachauri's work culture whether it be his punctuality, quick response to communications from colleagues, encouraging us towards result-oriented approach, or always according first priority to the institution. Across the globe, one will always find TERI professionals in institutions that work on energy, environment, and climate change—thanks to Dr Pachauri's vision and approach to transforming each one of us into a leader!

> G R NARSIMHA RAO Senior Fellow and Director, TERI Bengaluru (1996-)

The Prescient Technologist

After earning a doctorate and while working with a private firm, I was looking for a position with research focus. To my luck, one of my friends informed me that TERI was looking for an expert in GIS (geographic information systems), which was in tune with what I had been looking for. Soon after I sent in my application, I was called for an interview. My first encounter with Dr R K Pachauri, like any other fresher joining TERI, was during my interaction with him after a grilling interview by other researchers and experts in information technology. It was an informal interaction, in which Dr Pachauri not only enquired about the scope of GIS but also explained its possible application in research being undertaken by TERI. Throughout the interaction I never felt that I was attending an interview; It was a casual interaction - rather an exquisite conversation - with Dr Pachauri, covering different aspects of environmental problems that dogged India at the time and the role of GIS in investigating them. He ensured that the interviewee was at ease. In the first interaction itself, I was delighted by Dr P's (after joining TERI, I came to know that colleagues at TERI often referred to him like that) grip on the applications of GIS and geospatial technology, which was only an emerging information technology at that time. I was amazed by his ability to foresee the impending technological advancement in the field of geomatics. In fact, at that time (mid 1990s) very few institutions in India had full-fledged GIS facilities.

Another quality of Dr P that attracted me was his ability, in fact his unique talent, to remember people with their full name. He also had the rare capability to pronounce correctly – both linguistically and phonetically – the names of people not only from different parts of India but from different continents and linguistic realms. As I write this, I remember how he corrected my pronunciation of the name of one of the vice chairpersons of IPCC.

Dr P also had the foresight to identify forthcoming environmental problems that would need international attention and cooperation. Around the turn of the century, I had prepared a concept note to study land degradation and desertification in India and sought his comments. He agreed with the concept and recognized its importance. At the same time, he suggested that I turn my attention to climate change and related issues. It was a turning point in my academic carrier. Even now I continue to carry out teaching and research on climate change and related vulnerabilities.

Dr P was also instrumental in driving me to academics and the university system. It was my fortune that he encouraged me to join the TERI School of Advanced Studies (TERI SAS) and I was the first faculty to join TERI SAS. TERI SAS was deemed to be a university by the University Grants Commission, and Dr P was very keen to start a full-fledged university, offering diverse applied courses that can meet India's research needs. It is for this reason that TERI SAS exists today, offering courses in those fields of study and research hardly found elsewhere in conventional universities in India. Dr P was upset with me when I informed him of my decision to leave TERI SAS to join the Jawaharlal Nehru University. My last meeting with Dr P was in the lift, in TERI's office in the India Habitat Centre, more than a decade after resigning from TERI. He talked to me very warmly enquiring about my current research and teaching assignments.

> S SREEKESH Fellow, TERI (1996–2003) and Associate Professor, TERI SAS (2003–2005)

Institution Builder Par Excellence

I had limited interactions with Dr Pachauri during my initial years in TERI because my work involved extensive travel. Soon after joining TERI, I was assigned to a high-profile power-sector project in Odisha and was often out to Bhubaneswar for weeks. There were no mobile phones or Zoom meetings those days and even downloading emails was possible in Bhubaneswar only when we were at the hotel. Thus, I got a chance to see him occasionally, during his morning rounds, when I was in the Delhi office. Those interactions were limited, given the paucity of time, and he would generally ask a question or offer a quick word of encouragement before moving on. He was, however, fully briefed on the project, given its importance.

I did not realize at that time, but Dr Pachauri had a plan in mind for me. I started receiving books, papers, and reports on power sector reform and regulation from his office with several comments, asking for my opinion; I was invited to meetings with international experts and was asked to be on a panel discussion on TV and to speak at an international conference. Dr Pachauri realized my passion for the subject and systematically worked towards providing resources and exposure to accelerate my development and growth.

> One would also see Dr Pachauri during the annual appraisal interviews, but those interactions were also brief, generally lasting 15–20 minutes. In my third year at TERI, during the annual review, he suddenly asked me if I was ready to lead the TERI office in Washington, DC. Dr Leena had given me a heads up on this opportunity sometime back, but I did not expect it to feature in the annual review. Hence, I was somewhat unprepared to respond coherently. Dr Pachauri sensed my discomfort and encouraged me by saying that it was a good opportunity, but it was entirely my decision. He added that my decision will be respected, whichever way it went. That was reassuring enough to enable me to collect my thoughts and inform him that I had decided long ago, since my IIT days, not to emigrate. Further, my educational background was well suited to working on power-sector projects, I was learning a lot, and enjoying my work. I also mentioned that power sector regulation was an emerging sector and given our work, TERI was well positioned to emerge as a natural leader.

I think he was a bit surprised by my detailed explanation of why I did not want to pursue the offer, but recovered quickly to ask me another question I was not prepared for. He asked, "How will your work change if you are made a Fellow?" I must confess that being a bit naïve at that point in life, I quickly responded by saying that it will mean securing more projects and funding for TERI. He smiled, agreeing to it, but queried about my interest in publications and pursuing a PhD. I did not realize at that time, but it became apparent later that he had a plan in mind for me. Soon after that discussion, I started receiving books, papers, and reports on power sector reform and regulation from his office with several comments, asking for my opinion. He made a point to ask me a question on the developments in the sector during his morning rounds. I was increasingly invited to meetings when international experts came to meet him or with other senior colleagues. Sometime later, I was asked to be on a panel discussion on New Delhi TV and sent to deliver a presentation at an international conference. All of this to say that Dr Pachauri realized my passion for the subject in a short conversation and systematically worked towards providing resources and exposure to accelerate my development and growth.

One thing led to another and in a few months, I was one of the youngest Fellows in the history of TERI. As my manager and mentor, Dr Leena Srivastava had an important role in making all of this happen by encouraging, supporting, and challenging me on everyday basis. This incident also highlights Dr Pachauri's ability to delegate work and trust his team. I was not alone and believe that many others have had similar experience in TERI. Hence, it is not surprising to find TERI alumni in leading positions in the energy and environment sector in India and beyond. Being a TERI alumnus is thus a badge of honour, because it enabled me not only to develop intellectually but also to create an extensive network of friends and colleagues in the sector. We all remain eternally indebted to Dr Pachauri for developing TERI as an excellent platform and providing an opportunity to young professionals starting their careers, creating an environment of trust and intellectual honesty, and allowing them to pursue their passion.

> Gaurav Bhatiani Fellow (1997–2002)

Reflections

They all stood in front of his funeral pyre; the smoke rose to the sky. There were grief-stricken faces all around; a deep, meditative silence except the chants and occasional crackling of the burning splinters. Each looked away from the rest. Perhaps in that poignant moment, most were re-living their individual journeys, reflecting on the history of their own lives, personal aspects entwined with professional universe. That is most usually the case. Most reminisced how their lives had been transformed into growth and great achievements through association with the institution and the person who had built that institution. The feelings of reverence and gratitude seemed mixed, all the same, with a strong sense of gloom and doom. The irony of the unceremonious departure of a soul who taught and showed millions of people how perfect realities can be concretized from dreams and ambitions; and how with sheer focus, discipline, and toil, one can transmute inexperience, ignorance, and reticence into luminous confidence, eminence, and excellence. He built institutions, and he built lives; he provided opportunities for livelihoods, and enabled individuals to become their best selves. It was important to accept and reconcile to the loss of the towering figure who held it all up for so long, and the legend he left behind will remain unforgettable. Deep existential questions plagued minds too. Will it ever be the same again? Can the glory of a bygone era be ever restored? The sadness and pessimism prevailed, for each knew the answer to this question in their hearts of heart. An era had indeed ended.

Through his grand vision, Dr Pachauri redefined the approach to research and learning and modernized it through digital integration even in the early 1990s.

My memories and impressions of Dr Pachauri stem not from direct association but from an indirect one. For most parts, I was the bystander at the end of the line of command. He judged me for my calibre and potential at numerous stages and phases of my academic career from a distance. But I observed him very closely and very intently too, as juniors mostly do. The subordinates usually have more time and attention to judge minutely the relevance of their leaders and this is not always reciprocal. He had a grand style, a perfectionist with attention to detail, a hard taskmaster who spoke in firm and commanding tones. He believed only in excellence, meaningful and impactful work, tolerating nothing less than that. He stood tall and looked after all, taking extra care of the weakest in the link. Dr Pachauri was constantly knitting a mega family. The family became an institute, the institute spawned many more institutes, and he steadily added more members with a vision of taking them all to greater heights of success and purpose. Today I am a professor at the TERI School of Advanced studies, an institution deemed to be a university. If I am appreciated for any qualities as an academician or a researcher, or even as a human being, in

all likelihood those were unconsciously imbibed from the academic culture of TERI that I am fortunate to be part of. This culture was established by Dr Pachauri sensibly, selectively, and sensitively.

Staff at all levels were encouraged to expand their skills and proficiencies through training programmes that were routinely organized. Dr Pachauri made time for all; he mentored and pushed us to become leaders in our respective fields.

> I began my research career when I joined TERI for a doctoral programme in biotechnology. My first stint with Dr Pachauri was in 1997 during a tough and rigorous group interview that I faced for the post of a Research Associate (Trainee). The arrangement of working in TERI projects and registering for doctoral research in another university was a gap that was planned to be closed soon enough; the idea of another knowledge institute, a university, which could award degrees and contribute to both creation and dissemination of knowledge, was already conceptualized in Dr Pachauri's mind. The candidates were summoned to his office and he interacted with us in the most formal manner, following every decorum and maintaining a calm but nevertheless authoritative demeanour. He judged us plausibly through our responses. His words were measured; his gestures, kind. The questions he posed revealed his deep knowledge of the field of life sciences and biotechnology, much to our surprise. The flow of information through systems and a mindfully designed organizational structure at TERI was extremely robust. Through his grand vision, Dr Pachauri redefined the approach to research and learning and modernized it through digital integration even in the early 1990s. TERI took pride in possessing one of the finest libraries in New Delhi, which I had consulted even as a master's student. Much later, I helped my peers from other institutes to gain access to some extremely modern ways of searching research resources. The IT infrastructure in TERI was enviable. Dr Pachauri was swift in understanding the importance of digitally networked office space. Desktops and email ids were assigned to every professional to create efficiencies for employees. This was extremely rare in 1997. Back then, however, a 24-year-old young person from a traditional system of Delhi University was enamoured equally by the attractive ambience of the India Habitat Centre, the beautifully designed office interiors, presence of eminent personalities, international environment, comfort of air-conditioned spaces, lively well-lit cubicles, formally dressed busy people, and sheer energy. In the initial rounds of interview by Dr Malathi Lakshmikumaran (my PhD supervisor, now at L&S) and Dr Vibha Dhawan (Distinguished Fellow and Senior Director at TERI), expectations were conveyed clearly. The message was clear: to be a true professional, take responsibility and act, and remain disciplined and self-governed. Tenets of the TERI Code of Ethics were perhaps seeded in my mind. There was a third round of interview with the Director General

of TERI, Dr Pachauri. It is worth mentioning that selection processes at TERI were extremely stringent. Even the junior-most researchers like me were selected after three rounds of interviews. Dr Pachauri was personally involved in the selection of staff and scrutinized minutely the potential and calibre of candidates. He was known to have the insight to hand-pick the best.

The culture that Dr Pachauri created through discussions and consultations was unique. Punctuality was non-negotiable. He expected strict adherence to office timings. There used to be monthly staff meetings, wherein he shared growth projections for each area. Newcomers were given a warm welcome. Equally warm were the farewells to those who moved to other institutes and organizations. The idea was to always nurture and maintain ties. Newcomers were oriented to TERI culture through a carefully designed induction programme. The various areas and divisions of TERI were cross-linked imaginatively to promote collaborations. Staff at all levels were encouraged to expand their skills and proficiencies through training programmes that were routinely organized. Dr Pachauri made time for all; he mentored and pushed us to become leaders in our respective fields. One quality of Dr Pachauri that I wish to share was his ability to remember people by names. I have seen very few leaders who give equal importance to all staff members irrespective of the ranks they hold. I reckon he understood it deeply that human resources are the most precious of all and are to be carefully nurtured. On 1 January, 9:30 a.m., year after year, he would personally greet each and every staff and wish them a happy new year. I still remember the strong and firm handshake.

I witnessed Dr Pachauri lead TERI to a meteoric rise. TERI became recognized as an institute of global repute-from the Green India initiative to establishing large-scale research facilities and campuses all over the world. A school was born and so was a university. He organized grand international conferences, conclaves, and meets to advance the cause of sustainability and of averting the climate crises. Today people talk about climate change, but Dr Pachauri recognized this global imminent crisis at least 25 years ago and worked hard to generate awareness in society of the need to alter lifestyles. As he won laurels and awards, he would share with pride all his achievements. In 2002, I completed my doctoral journey and proceeded for my postdoctoral research at Max Planck Institute, Germany. Later, I was selected again, first as an Associate Fellow at TERI and then as Assistant Professor at the TERI School of Advanced studies, where I continue to work at present. It was a matter of immense pride to be hired back into the institution that had fostered my growth as a student. As an employee, I continued to witness the dizzy heights that TERI had attained. Dr Pachauri had taken over as the chairman, IPCC. The institute became a bastion of research on climate science and sustainable development. Globally, TERI was recognized for its world-class research. This period was also marked by giant achievements. The Nobel Peace Prize was conferred on the IPCC in 2007. I still remember the adrenaline gush when the

announcement came and Dr Pachauri rushed out of his office to share his joy. Just how many people in the world get to experience such profound victories? I witnessed them all as a silent spectator.

I have known no other person in my entire life who was chased, with equal fervour, by greatest fortunes and misfortunes that human mind can conceive. His glory and success were struck with malevolence like a bolt from the blue. It was perhaps a death-like blow, fiercer than mortal death, and there were ruins. I think he stood tall fearlessly and endured with grit and honour for five long years. In this entire period, I could never quite summon up the moral courage to relay my gratitude to him for having shaped my life and making me who I am today. I was perhaps weak and lacked the strength of character to convey with conviction my feelings. He never quite got to know that the bystander had literally grown under his wings and was so grateful. Perhaps he will know now.

Thank you, Dr Pachauri, for giving meaning, direction, and a sense of purpose to my life.

ANANDITA SINGH Professor, TERI School of Advanced Studies (2006–)

Putting People First

"The role of the leader is to create an environment where each person can reach their full potential," said Dr Pachauri while speaking to TERI's middle management – Area Conveners as they are known in TERI – as part of a leadership training programme. He went on to add, "I'm committed to the outcome we can achieve as a team. I'm focused on the shared purpose, and urge all of you to focus your attention on which role is to be given to which person and how work actually gets done." He advised us that we alone cannot undertake all tasks: the key is to delegate and not just delegate but empower each person to do the best work that they can do. Dr Pachauri emphasized that the team should learn and grow so it can have a greater impact not only in the organization but on society at large. I admired his quality of keeping his ear to the ground for opportunities to connect people across the organization and encourage and empower them in different ways.

Dr Pachauri used to stop by for random chats in the corridors or at colleagues' desks to hear what individuals at all levels happened to be working on (the key quality was that he actually listened, and then remembered everything that had been spoken earlier and then follow up). He used to send out a monthly note on TERI intranet and address colleagues during monthly staff meetings. He would take out the time to meet each and every individual during the yearly appraisal. He made it a point to make himself available to talk about the long-term vision of the organization. He never missed any opportunity to send the highlights of various team achievements. These were a few of his ways to empower his team.

Dr Pachauri brought many people with different views and different skills in TERI so that TERI team could deliver its best work.

I was always encouraged by his quality of allowing people to know and contribute to TERI's journey, which fostered commitment and equipped people to make better decisions. Dr Pachauri always talked about bringing in talent and growing talent as a key component of a job. He brought many people with different views and different skills in TERI so that TERI team could deliver its best work. I have seen him attempting to explain the problem or work through potential solutions to make sure that every one was on the same page. By tailoring his approach to each team and to each project, Dr Pachauri delivered bottom-line results and happy employees. It was a win–win!

Dr Pachauri helped his teams to thrive. He not only thought about innovations and being the first to launch an idea but also thought about the future of the idea and how each and every TERIER can contribute to TERI's success. He was constantly trying to find the most impactful projects and upgrade people's skills. I can never forget the brilliant ideas and motivation that he provided at the Seventh International Conference on Mycorrhiza that we organized in January 2013.

The culture of the organization definitely attracts and shapes people and leaders. Dr Pachauri created and fostered the TERI culture that is vibrant, positive, and goal-oriented and puts people first. He valued each person as an individual. He was committed to making sure that all of his team felt included—I've tried to bring that mindset into my own management style.

REENA SINGH Fellow and Associate Director (1997–)

Learning by Doing

Writing about Dr Pachauri makes me nostalgic, and I recall the wonderful seven years I spent in TERI and TERI University. I had known TERI for quite some time through a respected forester, A N Chaturvedi. However, a coincidental and fortunate meeting with Dr Pachauri in 1996 changed the course of my life in many ways. One thing led to another and I joined TERI in early 1997 on deputation from the government.

Dr Pachauri was passionate about modernization of education and the need for our universities to innovate and adopt the very latest research in teaching.

Coming from a more traditional reporting structure, the first thing that struck me was the matrix management reporting structure that Dr Pachauri had fostered in the institute. The flexible approach to communication and management that the system provided not only encouraged individual capabilities but also helped the organization respond collectively to external demands and meet the high expectations from TERI.

As a true leader, Dr Pachauri led from the front. He was not only well versed with the work of different divisions within TERI but he also took on multiple responsibilities, such as the chair of IPCC as well as membership of various high-level committees. When he was not travelling, he would make a round of TERI. On a number of occasions, he would walk into the meeting room and join our discussions related to the development of projects or programmes and provide particularly insightful suggestions. I was always amazed at the level of his grasp of various diverse subjects and his ability to quickly understand, analyse, and make meaningful contributions.

He would also walk into our offices while taking a round of the building. On numerous occasions, he would come into my office, discuss several issues, offer his advice and encouragement, and sign any papers requiring his approval. This to me is a hallmark of a good administrator and a leader. It not only helps leaders to feel the pulse of the organization but also endears them to their staff.

We undertook a massive project on agroforestry in Uttar Pradesh with financial support from the World Bank. The project was unique and multidisciplinary and came out with some useful long-term projections on the financial benefits to farmers of planting various tree species along with field crops. The report was highly appreciated by the state forest as well as agriculture departments across the country and was used in formulating several policy interventions. Dr Pachauri asked me to share the reports widely with senior ministry officials as well as other donors. He was a firm believer in strengthening TERI's credibility and outreach in order to attract high-level support from the Government of India as well as governments and donor agencies across the world.

Dr Pachauri was passionate about modernization of education and the need for our universities to innovate and adopt the very latest research in teaching. Being an institution builder, he set up the TERI School of Advanced Studies of which I had the honour to be the first vice chancellor. I served that institution for three years. Through his vast contacts, Dr Pachauri quickly built relationships with several well-known foreign universities to the benefit of the nascent TERI School of Advanced Studies.

I learnt a lot from Dr Pachauri's management style. His forward-looking, strategic thinking and visionary approach to organizational development, coupled with a humane attitude, is a lesson for all who aspire to be good leaders.

On several occasions, we had different opinions on some issues. We would argue, discuss, debate, and try to convince each other of one's viewpoint. However, once we agreed on a course of action, even if it was not what Dr Pachauri agreed with, he would support it to the hilt in any subsequent discussions. With his hallmark smile he would say, "*Achha, mai aapki baat maan leta hoon.*" [All right; I accept your point.] He never let me feel that only his word should be final.

Dr Pachauri was not only a remarkable professional with uncanny administrative acumen but also a thorough gentleman. He was caring towards colleagues and their families and was genuinely interested in their well-being. When the term of my deputation ended and I had to go back to my state cadre, the first thing he asked me was how I would manage with the disruption of my son's schooling with this transfer. He knew the names of my children, showed interest in their education, and always enquired about their well-being whenever we spoke or met.

Another trait of Dr Pachauri, which my wife and I fondly remember, is his confidence and trust in others as well as his passion to continue to contribute towards the well-being of the environment and humankind. When we met him sometime towards the end of 2019, he was full of confidence and trust in himself and others.

I started this article by saying that my life changed in many ways after meeting Dr Pachauri and subsequently joining TERI and then the TERI School of Advanced Studies. First, I learnt a lot from Dr Pachauri's management style. His forward-looking, strategic thinking and visionary approach to organizational development, coupled with a humane attitude, is a lesson for all who aspire to be good leaders. These learnings have greatly helped me in advancing my career.

Secondly, his penchant for innovation, to continuously evolve and adapt with time, has been another aspect of his visionary approach that has always stayed etched in my mind. In the early days of setting up of the TERI School of Advanced Studies, he would always say that our decisions need to be informed in a way that allow us to see into the future needs of the institution as well as the people it serves. This reminds me of a conference in Sri Lanka to which TERI was invited. The theme of the conference was the sustainability of non-governmental research institutions and the invited participants were asked to present case studies of the organizations they represented. The conference discussed how institutions need to continuously evolve and innovate to remain relevant. I presented the case of TERI as an institution that has been innovating and maintaining its relevance throughout the period of its growth and development.

Finally, I would say that one rarely gets to meet, much less to work with, a person as versatile and endearing as Dr Pachauri. He taught leadership values by his example. I am sure many other colleagues, like me, would have benefitted by working with a legend that was Dr Pachauri.

> T P SINGH Vice Chancellor, TERI School of Advanced Studies (1997–2004)

Lessons in Social Entrepreneurship

Pachauri was a man with a vision and contributed significantly to shaping the global dialogue on climate change, breaking through the obduracy of certain vested interests such as the fuel lobby. It is important to recognize and carry forward the good that he did in the field of environment and climate change, for, as Shakespeare has said, "The evil that men do lives after them, the good is oft interred with their bones." This book will, no doubt, help to look at Pachauri in a holistic manner.

Much has been written about Pachauri, who, as the chair of the IPCC, led its deliberations suavely, with patience and integrity, and facilitated climate change being recognized as a major issue. However, I am not looking at Pachauri the environmentalist and a torchbearer of climate change: I am looking at him as a friend and a colleague.

Pachauri was a social entrepreneur and an institution builder in the tradition of Dr Kurien, Vikram Sarabhai, Ela Bhatt, Vijay Mahajan, and others. If a social entrepreneur is someone who finds an innovative business solution to address a social need, and does this out of sheer altruism rather than personal interest, then Pachauri eminently qualifies as one. He always thought a few steps ahead of others and in each situation identified what needed to be done in the best interest of the country. Even while he was in the much pampered and prestigious Jamalpur institute of the Indian Railways, his interests were in the area of environment and climate. He had the vision to transform the organization founded by Darbari Seth to collate and analyse data on energy into a global institute of research on energy issues, and a think tank of eminence. Pachauri also had a native capacity to realize this vision, overcoming or sidestepping political and administrative problems and jealousies.

Recognizing that research and teaching should go hand in hand, Pachauri established the TERI School of Advanced Studies in 1998 to focus on sustainability policy and practice in different sectors. Many of the courses it runs are unique in the world and sought after by students globally. A branch of the TERI School has been set up in Hyderabad. Through the body of thinking that he built through TERI and the School and the practices and policies that he advocated he tried to ensure that the world survives for the next generation. He believed that environmental education should start from early childhood and even set up a school, Bhagirathi, in Gual Pahari, to instil environmental consciousness in tiny tots.

Participants – Prime Ministers past and present, academics, Nobel laureates – in the Delhi Sustainable Development Summit, TERI's annual event, have recognized the spread of interests that Pachauri created in TERI and have endorsed the need to take forward these summits to generate fresh thinking and dialogue on climate change and related issues. Many of them sought individual appointments with him to work out strategies. These meetings would last from early morning until late night. I retired from the IAS in 1997 as Secretary, Surface Transport, the Government of India, and joined a lucrative consultancy group. Soon after, Pachauri invited me to lunch at the India Habitat Centre. He persuaded me to spend two hours twice a week to build a transport division in TERI to research on sustainable transport policy and practice. This soon grew into full-time work, which, although financially not as rewarding as consultancy, gave me a great deal of intellectual and emotional satisfaction. The next 22 years of my life were spent in TERI. I had the complete freedom to identify areas that needed further research and publish on them, as well as initiate dialogues, sometimes on behalf of the government. I was also able to interact with groups with similar interests across the world.

Pachauri encouraged me to set up a division on regulatory studies in TERI and also teach a course on regulation in the TERI School of Advanced Studies. An invite from him was adequate to persuade Dr Stephen Littlechild, the first infrastructure regulator in the world, to release a booklet, *A Framework for Independent Regulation in India*, that Dr Sarkar and I wrote.

Working in TERI gave me the opportunity to mentor and monitor young researchers. Some of them went on to pursue postgraduate research or teaching in premier universities around the world. Many of these young colleagues are now leading transport divisions in multinational and multilateral organizations.

In my experience, Pachauri's conduct as director was democratic, which is unusual for such large organizations. He was a good listener and let others, especially younger colleagues, put across their points of view before a final decision was reached. The fact that TERI is a flat organization where people are called by their first names and respected for the work they do, not their designation, is a legacy worth highlighting.

Pachauri was a foodie and immensely enjoyed different cuisines. His tastes ran from the expensive to the humble – he often frequented a *chaat* vendor in Jor Bagh market or Chidambaram's in Khanna market. He was also a fashionista who wore well-tailored sherwanis for formal events as well as colourful hats and fancy shirts for informal TERI events with no concern for what others might think. I envied his insouciant sense of style but was too timid to emulate him.

I last met Pachauri for coffee at his home about two months before he passed away. Like any two old colleagues, we discussed our common health problems but never did I feel that he would leave us so soon. That discussion was as though we were still actively working together and focusing on how to make climate change central to policy. I wouldn't be surprised if he has begun to establish a TERI equivalent wherever he is now sojourning.

> S SUNDAR Emeritus Distinguished Fellow (1997–)

All in All

I joined TERI in February 1997, when it was still the Tata Energy Research Institute. We had already moved to our new and elegant office building within the India Habitat Centre. The first time I met Dr Pachauri was when he interviewed me for the job. He was courteous and put me at ease very quickly. He had a very powerful personality and I considered myself lucky to be working in an organization of which he was the leader.

Change of office name TERI had been started by the Tatas and that is why the institute bore the Tata name. One of the things that Dr Pachauri had done was to diversify the sources of income for TERI. That way he felt that the institute would be financially secure. Also, it would ensure a measure of independence for the institute. After the death of Darbari Seth, the founder of TERI and the chairman of TERI from inception, the question arose of what the institute's relationship would be with the Tatas. While some relationship remained, TERI's dependence on the Tatas for financial support had come down. A new chairman – Dr Arcot Ramachandran – had been selected who was not from the house of Tatas but was a distinguished scientist. In 2001, we decided to change the name of TERI and drop the Tata name. The institute's name was changed to The Energy and Resources Institute but the acronym remained unchanged—a clever move by Dr Pachauri, because by then TERI had become a brand well known across the world. It was indeed a bold step that he took.

Flagship projects In 2001, we organized the first Delhi Sustainable Development Summit. After the success of this event was demonstrated, Dr Pachauri decided to make this an annual event. This became TERI's flagship event, well recognized by countries on all continents, and proved to be a great success. Issues related to the environment and climate change were discussed every year at the event with a galaxy of distinguished speakers from across the globe. Participation in the event grew by leaps and bounds. Soon the India Habitat Centre, where the event started, became too small and we had to shift it to the Taj Hotel.

If DSDS was his flagship event, 'Lighting a Billion Lives' was his flagship project, which too received enormous support all over the world and we were able to bring lighting to the houses of many poor families especially in Asia and Africa. [Note: for more information on Labl, see the contribution by Dr Akanksha Chaurey.]

Fitness and sports Dr Pachauri was a keen cricketer. Apart from that, he recognized the importance of being physically fit and set up a fitness centre as part of the premises. Dr Pachauri encouraged all staff members to make use of the fitness centre and stay fit. He also encouraged sports activities in TERI. TERI not only had its cricket team but also table tennis, football, and badminton teams, although cricket was Dr Pachauri's first

love. [Note: Dr Pachauri's love for cricket is described in greater detail in the contributions by Venkat Sundaram and Eashwar.]

Patience Once, during lunchtime, I was speaking on telephone to a transporter. Dr Pachauri came down to the ground floor because he wanted to speak to me. The call was a long one, and I noticed him only after the call was over—and all along he had been waiting patiently. He came in, enquired about some matter, and left. I felt terrible for having made him wait for so long, but he did not seem to mind that at all. His patience and humility left a lasting impression on me.

Humane outlook In April 2011, I was suddenly taken ill and had to be hospitalized and was placed in an intensive care unit. Dr Pachauri was abroad at the time. M M Joshi, the chief of administration at TERI, informed him over telephone of my condition. Dr Pachauri immediately sanctioned the required amount – it was a very large sum – and requested Joshi to provide necessary help. I would always be grateful to Dr Pachauri for this timely help.

Hard work TERI was Dr Pachauri's family. He used to work for TERI round the clock, sleeping for barely 4–5 hours. He had great vision and put in long hours to translate that vision to reality. It is because of these qualities that TERI has grown and become an institution recognized and respected internationally.

I learnt from Dr Pachauri the virtues of hard work, patience, fitness, timely completion of work, courage, and integrity.

K S VASAN Deputy Manager, Administrative Services (1997–)

Working at a Frenetic Pace

Dr Pachauri once said to me, "It is important to work at a frenetic pace, not at a frantic pace." I can well imagine that the quip must have been during one of the many research workshops that I went on to organize while at TERI and I must have been distressed at yet another speaker cancelling at the last minute! Whoever said that it's stress that reveals a person's true mettle hadn't met Dr Pachauri. It was during the first 'International Conference on Infrastructure Regulation', in February 1999, and some of us young researchers were milling about the reception area of TERI at the end of a long, intense day of presentations and rapporteuring sessions, that Dr Pachauri walked in with the chairperson of the National Regulatory Research Institute, animatedly chatting, and stopped. He singled out a newly joined colleague to introduce to the distinguished visitor, referring to her as one of India's brightest minds in electricity regulation. That's what made working with Dr Pachauri special; he had his eye on you all the time and there was never a moment where your work was not acknowledged in his mind, filed away for that moment when, out of the blue, you'd be completely overwhelmed by a passing compliment from him on your work.

A chance meeting with a local stakeholder on a flight to Darjeeling piqued Dr Pachauri's interest in Darjeeling Himalayan Railway, a UNESCO Heritage Site, which was still struggling to ply and remain relevant in the 21st century. He asked me to design a project for the development of the Darjeeling hill area in all its aspects.

> These passing remarks though had to be earned—with volumes of sweat and sometimes tears. He kept long hours and expected you to do the same! And not just few times in a year when a number of events and project deliverables coincided but at all times, thus building oneself and the institution he had so lovingly nurtured. Meetings and reviews as early as 6 a.m. or as late as 10 p.m. were not unusual and, in my experience, everyone across the entire organization at each level and division made it to each one of these—everyone wanted to emulate the work ethic that Dr Pachauri so ably demonstrated so effortlessly every day. Of course, he would also make sure that TERIERS, especially women colleagues, were safely escorted back home when he called on them to be available at all hours: that concern was always visible!

In the 10-odd years I spent in TERI, I learnt several skills, both workrelated and life skills, from Dr Pachauri. These have been invaluable for my development as a researcher in addition to helping me to become a better person, hopefully. This is in addition to the very many opportunities that came my way while I was at TERI with him in charge, such as supporting my admission into the doctoral programme at ETH Zurich, encouraging me to write my first book under the TERI Press umbrella, and forcing me to think and work on a wide range of issues from road construction technology to regulator reforms in the water sector in India. One of these initiatives that stands out, especially given TERI's own research mandate, was the support we provided to the preservation of the Darjeeling Himalayan Railway.

A chance meeting with a local stakeholder on a flight to Darjeeling piqued Dr Pachauri's interest in this remarkable piece of history that, despite being recognized as a UNESCO Heritage Site, was still struggling to ply and remain relevant in the 21st century. Railways were also close to his heart, having started his career as an engineer with Indian Railways. He asked me to design a project for the development of the Darjeeling hill area in all its aspects, an issue at the forefront of political discourse in West Bengal at the turn of the century. A five-member strong project team from TERI toiled hard through the course of a year to design strategies for sustainable urban development, forest management, and transport infrastructure. With the stakeholder interest we had built, we gradually were able to build in greater local support for the languishing local heritage as a means for generating interest in the development of the entire region. The respect and admiration that Dr Pachauri already enjoyed in the region was dramatically enhanced in recognition of the vision he had, anchoring the development of the environmentally and economically challenged region on the heritage of the people there. And I learnt a valuable lesson in building stakeholder ownership that no textbook or classroom could reveal.

In my nearly decade-long association with Dr Pachauri, I have grown immensely in my professional life and travelled through several personal highs and lows. His own career and life also saw remarkable highs during this period. I had lost touch with him over the last few years, but kept abreast of his activities through common colleagues and friends and the wide press coverage he seemed to always get. Even in this absence, his presence in my consciousness has been one of the permanent features of my life.

> KAUSHIK DEB Fellow (1998–2010)

Dr Pachauri and Independent Regulation

In line with international developments, India braced herself with independent regulation in network industries in infrastructure sectors in the early 1990s. Dr R K Pachauri realized the importance of this development and geared TERI to take a lead. He set up a new division to develop capacity in this important area. We were fortunate to have with us S Sundar, who, as Secretary, Ministry of Surface Transport, was instrumental in introducing independent regulation in the ports sector. Dr Pachauri decided to hold an international conference, titled 'Transition to a liberalized environment: issues and challenges', in early 1999; invited Professor Littlechild, a former electricity regulator in the UK, to inaugurate the conference; and requested all the regulators in South Asia to participate. Professor Littlechild was credited with successfully introducing independent regulation in the UK, and his presence proved to be a big draw. No one had any idea how to go about introducing regulation, and Prof. Littlechild's practical inputs on how exactly he did that in the UK proved a very powerful attraction. The conference was a huge success. Dr Pachauri was instrumental in getting key resource persons such as Sundar and Prof. Littlechild and thus in giving a big boost to the difficult task of providing leadership in the newly emerging area of independent regulation in India. To give readers an idea of the tremendous challenge that Dr Pachauri took on, I briefly describe the problem that existed then in the areas of independent regulation and economic regulation.

Dr Pachauri's vision was that international expertise in economic regulation should be immediately accessed and Indian expertise developed in tandem. He saw clearly, and early enough, that India needed an institution that could provide a lead—and choose TERI to provide it.

> As a concept, independent regulation – to be precise, economic regulation – was new in India in the 1990s. The infrastructure services mostly in network industries were owned by the state and delivered by public-service providers. This was true in the case of telecommunications, electricity, ports, civil aviation, water, oil and gas, etc. Thus, for example in the case of electricity, all the subsectors such as generation, transmission, and distribution used to be delivered by public-service providers. For the first time in the 1990s, the government felt the need to introduce private players in delivering services in network industries in infrastructure sectors. Thus there arose a need to have a level playing field in the provision of services, particularly in the monopoly segments of the industry, leaving the other areas to competition. Take the case of the telecom industry: Bharat Sanchar Nigam Ltd and Mahanagar Telephone Nigam Ltd had the monopoly to provide services in the telecom industry; no other players used to operate in any of the various segments of

that industry. BSNL, being owned by the government as a monopoly service provider, used to fix prices of telecom services on its own using opaque procedures. In the 1990s, there were no other players. In 1997, the government introduced competition in telecom services by opening up the sector and constituted an institution, namely TRAI, the Telecom Regulatory Authority of India, to regulate services in the sector, provide a level playing field, and prevent monopoly pricing. Similar was the case in the electricity sector. Independent regulation in this sector was introduced through an act of parliament in 1998, and saw the emergence of regulatory institutions at the central level and at the state level. Odisha was the first state to set up a regulatory institution in the electricity sector, namely the Odisha Electricity Regulatory Commission; other states followed suit thereafter. Odisha also experimented with privatizing electricity distribution, although it did not succeed. However, the experiment did provide useful lessons, and this helped Delhi in its enormously successful privatization of electricity distribution. These regulatory institutions lacked the capacity to administer the sector, especially in fixing tariffs, which were earlier fixed by the government, being the owner of the public service providers. Now there were private players in addition to public-service providers. Technical issues in determining the prices for various infrastructure services in network industries were dealt with by independent regulators. The regulators are independent in the sense that the government adopts a hands-off approach. To advise these institutions, practically no expertise was available in India: the network industries faced a vacuum in obtaining help from outside. There were no research institutions or technical institutes in the 1990s in India that explored such matters.

Independent regulation was thus a new and emerging field in India towards the end of the 1990s. Dr R K Pachauri understood the nuances of independent regulation. He felt that TERI can fill the gap in providing technical help to these Indian regulatory institutions. His vision was that international expertise working in economic regulation should be immediately accessed and Indian expertise should be developed in tandem. As indicated above, Dr Pachauri saw clearly, and early enough, that the country needed an institution that could provide a lead-and choose TERI to provide that lead. I joined TERI in September 1998, and was chosen by Dr Pachauri to accomplish his vision. He realized the need for a sustained approach to the subject. With the help of the World Bank (led by Clive Harris), a forum, namely SAFIR, short for the South Asia Forum for Infrastructure Regulators, was formed, with TERI being its registered office. Dr Pachauri created a new division within TERI, the Division of Regulatory Studies, and I served it from 1999 to 2003, first as Area Convener and then, during 2005-07, as its director. Dr Pachauri was able to rope in all infrastructure regulators in India, Sri Lanka, Bangladesh, Pakistan, Nepal, and Bhutan to join the forum. SAFIR was a big success and TERI, under the leadership of Dr Pachauri, took the lead in filling up the vacuum in providing technical expertise on regulatory capacity. Within TERI, areas such as Regulatory Policy and Energy Regulation

were created with committed colleagues. SAFIR owes its success in South Asia to Dr Pachauri's leadership. Apart from SAFIR, Dr Pachauri took keen interest in independent regulation and always found time to provide guidance and established TERI's early leadership in this vital area of governance.

SAFIR gave me a regular access to Dr Pachauri during my tenure in TERI (1998–2003 and 2005–07), and my learning in infrastructure sectors at the initial stages was all due to him. Dr Pachauri's positive approach on the subject was unimaginable. He realized that economic regulation in infrastructure sectors, which India adopted in the 1990s, was the right approach to move forward. His vision was that India should take a lead in South Asia and TERI should provide such leadership. India has immensely benefited by his advice on economic regulation in infrastructure sectors and I was very lucky to have been associated with him during this time.

> S K SARKAR Distinguished Fellow (1998–)

How's That!

When I was informed that a book on Dr R K Pachauri was being seriously considered, and asked whether I would pen some thoughts, I was caught in a dilemma. Nostalgia on the one hand and emotions on the other kept pulling me in different directions. To write a balanced piece on a personality who influenced hundreds across a wide spectrum of domains around the world, who was often willing to tread where angel feared to walk, would require circumspection, introspection, and gumption in equal measure.

Dr RKP, as I always addressed him, and I became colleagues when I joined him in his crusade for sustainable development in 1998, and thus started two decades of close interaction and a period of much learning for me. Legends generally wear their badge of eminence with a fair measure of humility but Dr RKP was a friend, philosopher, and guide.

Dr Pachauri was meticulous in his work, and often cajoled and coaxed his colleagues to challenge themselves and not accept the status quo. This, raising of the bar, was often followed by mentoring and coaching.

> Of his wide experience and professional zeal, I am sure there are others much more competent to elaborate his passion for the various causes that he highlighted and espoused. I do recall some interesting snippets in my brief stint of three years of working with him. While I fondly recall many incidents, they do reflect the mindset and the wide grasp of this man. It is Dr RKP the man that I will mostly dwell on here in an attempt to bring out one or more facets of this multifaceted individual, who inspired many by his deeds.

> An early incident that I recall occurred when I entered the lift in Darbari Seth Block one morning, and joining me was none other than the man himself. He recounted a joke he had heard at a social get-together the previous evening, and both of us guffawed as the lift stopped on the 5th floor.

On exiting the lift, he noticed a group of colleagues having coffee and exchanging tales. He pulled them up for wasting time and being casual. Suddenly, his visage changed, the frivolity disappeared, and his mind probably shifted gear to the business ahead. In a flash, he was in a transformed state, almost in a zone of his own. This trait, to switch gears effortlessly, is the hallmark of a very experienced campaigner and often difficult to decipher or interpret.

Dr RKP had a unique ability to relate to his colleagues and appreciate their concerns and ambitions. He was meticulous in his work, and often cajoled and coaxed his colleagues to challenge themselves and not accept the status quo. This, raising of the bar, was often followed by mentoring and coaching, which he enjoyed doing. He often recalled how he pushed someone to reach levels that they believed were way beyond their capabilities.

Dr RKP was a very keen sportsman and our common passion for cricket often had us playing the game, creating infrastructure, and involving ourselves in research to improve cricket grounds and pitches. This was particularly fortuitous, as at that time the BCCI, the Board of Control for Cricket in India, appointed me Chief Curator, effectively placing all cricket-related infrastructure in my hands. It was a huge responsibility and when I informed Dr RKP of this development, he immediately stood up and congratulated me. I mentioned to him that I was keen on seeking his inputs to change the face of our stadiums and make them the envy of the world. I asked for his help and inputs, to which he readily agreed and that started a whole new ball game between us.

Among the gifts was a cricket bat signed by Sunil Gavaskar, who inscribed it as follows: "Cricket's loss but sciences' gain—to Dr RKP with love."

"Cricket is the only thing that keeps me sane in this mad world," he said more than once, and when I first visited the playing field in Gual Pahari and saw its potential, I knew that I had my task cut out. I had occasion then to visit Bengaluru and when I visited the state cricket stadium and inspected the ground, I met G Kasturirangan, a former test cricketer and at the time the curator of Chinnaswamy stadium. While discussing grasses, he mentioned that he had cloned a hybrid Bermuda variety that was very robust, tough, and recovered quickly from wear and tear.

On my return to Delhi I discussed this with Dr RKP and he immediately suggested that we try it out at the TERI grounds, which we did: the results were impressive, and now most grounds in India have introduced that hybrid Bermuda grass on pitches and outfields—Dr RKP's dynamism is helping Indian cricket today.

On match days, when we were playing corporate cricket, we often travelled together and while he enjoyed his cigar, we listened to soothing music and talked of many issues and incidents. He would talk of his early days in Jamalpur, his education in Lucknow, and his abiding interest in cricket. We would plan events, such as the official opening of the venue by the former India captain Bishen Singh Bedi or a new tournament to commemorate the memory of the late Dattu Phadkar, who had been Dr Pachauri's coach. We drew up a long list of guests including Dattu Phadkar's daughter and another former test cricketer, Bapu Nadkarni. In between all this, we held several events and invited many eminent Indian and state players.

Dr RKP was always competitive on the field and took pride in his achievements. A few team mates kept a record of his achievements and when he neared a milestone – his taking 500 wickets, if memory serves me right – I suggested that we celebrate it. At first he dismissed the idea, saying "This is Mickey Mouse corporate cricket" but when I retorted that the wickets he took were not gifted by the opposition but earned, he reluctantly agreed and eventually we had a memorable get-together. Several test and Delhi stars graced the occasion, besides national leaders. The chief guest was Sham Bhatia, from Dubai. Sham is a legend in Dubai and has set up a world-famous cricket museum that has to be seen to be believed. Sham brought several copies of his book and a cricket bat signed by Sunil Gavaskar, who had inscribed it as follows: "Cricket's loss but sciences' gain—to Dr RKP with love."

Dr Pachauri always kept himself abreast with developments on the field until the end of his days. Whether it was match fixing or the reverse swing, Tendulkar or Dravid, England or Australia, one-day cricket or test matches, he always had a view and was willing to discuss the finer points. I remember when the ground at TERI was being inspected by the BCCI for suitability as a venue for first-class cricket, I took the inspecting officer to meet Dr RKP in his office unannounced. I said to his secretary, "Please inform Dr Pachauri that I want to meet him and I have a guest that he might want to say Hi to." I was allowed in and it was my pleasure to introduce the great India captain Polly Umrigar to Dr RKP. He was floored and then went into raptures, recalling various feats performed by Polly, mentioning that Polly had been his childhood hero! For weeks after that, he kept saying that he never imagined in his life that he would meet the great Polly Umrigar in his office.

A man of diverse interests, fond of travel, passionate about sports, always well dressed and refined, Dr RKP has definitely left his footprints on the sands of time. His fearless campaigns for a better, more equitable environment, his love of flora and fauna, his concern about climate change—one could go on and on. People come and go, but the likes of Dr RKP are born but rarely. It has been a privilege to know and interact with him. And yes, when he was admitted to hospital for the last time, I am told that he was watching India vs New Zealand on the TV. How's That?

> Venkat Sundaram Consultant, Corporate Affairs (1998–2001)

The Art of Connecting with People

I met Dr Pachauri for the first time in early 1990 when I was attending one of those week-long training programmes for IAS officers in Delhi. It was a programme on alternative energy systems, and Dr Pachauri was the first speaker. His presentation had a very profound impact on me primarily because I had never seen such clarity in thought and simplicity in presentation as I saw that day. I thought this was the hallmark of a person who really understood the issues and did not get lost in meaningless jargon. Of course, his voice, and the confidence with which he spoke, added to the persuasiveness of the case he was making.

Dr Pachauri would walk into his colleagues' cabins for discussion. I thought this was a brilliant way of achieving multiple objectives. First, he came across as a person not stuck in his ivory tower but willing to meet his team members at their work places. Second, it gave him the opportunity to get a feel of the office and see what was going on.

> This got me thinking about joining TERI someday and work more closely with him. Being an electrical engineer, I was interested in the energy sector at that time. An opportunity arose, some ten years later, when I realized that TERI was taking officers from the IAS on short-term secondment. Of course, my interests had shifted to urban mobility by then, but the desire to work with Dr Pachauri and TERI for some time remained intact. I got in touch with Dr Pachauri in early 2000, after I had completed by master's in the US and also the mandatory cooling off that was part of the conditions of my employment. He was extremely supportive and, following an interview with some of his colleagues, I was accepted.

> I joined them in April 2000 and spent only eight months with TERI but had many opportunities to interact with Dr Pachauri. These have remained my cherished moments. In the following few paragraphs, I recount some of my interactions to highlight what an admirable person he was.

> There were several occasions when I had to accompany him to meetings with government officials and ministers. It was fascinating to see him equally comfortable meeting people at all levels. He was the same simple, honest, respectful, and straightforward person regardless of whether he was talking to a minister or a Deputy Secretary in a ministry. As a result, he was respected by all. At the top levels, his knowledge and willingness to support their efforts was what made a difference; at the junior levels, his humility endeared him to everyone he met.

Unlike what I was used to in the government, he did not always summon his junior staff to meet him in his office. Very often he would come down from his fifth-floor office to other floors and walk in to colleagues' cabins for a discussion. I thought this was a brilliant way of achieving multiple objectives. First, he came across as a person who was not stuck in his ivory tower but was willing to come down to meet his team members at their work places. Second, it gave him the opportunity to get a feel of the office and see what was going on. This helped keep a check on the functioning of TERI. He would be able to observe many things that you don't get to see otherwise.

The Indian Railways had been planning to dispose of the Darjeeling Hill Train as it was proving to be a financial disaster for them. However, a group of its fans, from Europe and Australia, did not want this to happen. They lobbied to have the World Heritage Site award bestowed on the Darjeeling Hill Train and thereby got the Indian Railways to keep this asset.

This group of well-wishers set up the Darjeeling Himalayan Railway Heritage Foundation and chose Dr Pachauri to become its chairman. A group of 70 of them also decided to travel to India to take a ride on the Darjeeling train and hoped that the Indian Railways would be hospitable enough to welcome this visit. One of my assignments, while at TERI, was to help coordinate this visit and make it a success.

Dealing with the Indian Railways was an extremely difficult task. Far from being welcoming, the Indian Railways used a crazy logic to overcharge this group. This was unfortunate, and Dr Pachauri could have blamed me for not handling the Indian Railways better. But he was very understanding and took responsibility for it in conveying his apologies to the group. This was a quality I had not seen earlier in my career and was an important lesson for me.

In one of his interviews, when asked about his favourite book, his response was Dale Carnegie's *How to Win Friends and Influence People*. I often wonder if one can learn this by reading a book. In Dr Pachauri, this seemed an inborn capability derived from his simplicity, despite the celebrity status that he enjoyed on a global stage.

The simplicity with which he explained complex things was a revelation to me. I have met several others, occupying high positions in think tanks and academia, working in the energy and environment fields, but none of them could explain things in the simple way that Dr Pachauri could. I realized that this comes from his very clear understanding of the subject and only those who are fuzzy in their heads get lost in jargon. When I asked him about this, he explained to me that he always tried to explain things to children and if he could get them to understand only then did he believe that he had understood things himself.

His energy levels, especially at his age, were phenomenal. I remember a day when he was to meet a delegation at 9.00 a.m. but was returning from a trip abroad the previous night. I was wondering how he would make it. I had left some papers for him to read, hoping he would be able to skim through them before the meeting. I went to the office early the next day, in the hope that I would find him for a few minutes to explain some important points. When I reached the office, I found that not only had he already arrived, but had, in fact, come in directly from the airport to see if there

were any papers for him to review. Not only was he well in time but had read all the papers left for him. Who would do such a thing! I wondered how he did it. I think the joy he derived from his work and his passion for it gave him the energy. This was yet another lesson for me.

Even at his age he was a formidable cricketer. In fact, he was an opening bowler who was able to swing the ball at a fairly mean pace. Having been an opening bowler during my college days, I knew how exhausting this was. It was difficult to imagine how a person, well past his sixties, could still play cricket and bowl fast—that too to stalwarts, such as Venkat Sundaram, who were almost part of the Indian test team and were regulars for the North zone.

Several years later, after I joined the World Bank, I was once on the same flight as Dr Pachauri. The World Bank does spoil its staff by permitting business-class travel on all trips. I was surprised to find Dr Pachauri was in the economy class. I don't think anyone would have grudged his travelling business class, given his stature and given that TERI could afford it. Yet that was not him. I have seen other NGOS who have allowed business class to their chiefs. Despite the fact that Dr Pachauri stood head and shoulders above them, he did not seek this for himself.

Finally, for me, he was truly a great man. A visionary, with complete clarity in his thinking, simplicity in his language, humble in his behaviour, and an amazing ability to win friends and influence people. We rarely come across people like that. I consider it a blessing that I had the opportunity to know him and interact with him. His demise is indeed a loss for our planet. We have lost a true general in our battle to save the planet.

> O P AGARWAL Senior Fellow (April–November 2000)

The Man with the Midas Touch

A leader and a visionary—a rare combination you get to see in the world. Dr R K Pachauri had tremendous qualities that were also rare in one person. My job at TERI was after a brief stint I did at the Indian Institute of Technology, Delhi. When I joined TERI, Dr Pachauri was at Yale University. He was teaching there for some time and therefore I had not interacted with him during my recruitment. One fine day I simply saw someone making the rounds of the floor on which I worked and wondered who he was. He was full of energy, talking to people and dressed colourfully. My colleagues informed me in hushed tones that he was Dr Pachauri, back from his sabbatical.

Dr Pachauri built up people's capabilities and their confidence. He gave people the space to grow and respected his colleagues.

Over the years I observed him to be a vibrant leader heading an institution of this calibre and quite varied in terms of the scope of work it undertook, from fundamentals in biotechnology to applied sciences and economics and outreach and capacity through education and awareness programmes. Dr Pachauri handled this diversity so well. There were hushed discussions amongst colleagues about how sharp he was and that he remembered everything spoken to him. He would, despite his hectic schedule of travel and work, stop by at people's desks during his rounds and ask them about an earlier conversation may be a few weeks or sometimes months before. I remember one of the colleagues telling me that Dr Pachauri had the brain of a computer: the moment he sees you, the relevant folder opens in his brain and he immediately recollects the last conversation he had with you on a particular topic. That is how he was! He was so sharp and hands-on with anything to do with TERI-he built and nurtured it until his last days. Many also benefitted from his guidance in their careers and there are many who stand where they do today because of him.

Dr Pachauri also made sure that the institute had a flat structure and he observed that spirit to the word. Anyone could meet him and fix a meeting with him for a discussion. His office was efficient and would get back to you promptly, offering you a time slot. There was respect for other people's work and time. Dr Pachauri never forgot why someone had approached him, no matter how trivial the matter may be. As a youngster in the institute, I remember being nervous while making presentations, and once I admitted as much to him: "But you sounded like a veteran", he said. That shows the quality of his leadership. He built up people's capabilities and their confidence. He gave people the space to grow and respected his colleagues. These qualities were evident in the people he had chosen to manage the institute, who always stood up for the institute—the leader leads and others follow suite. A visionary, Dr Pachauri never ceased to build TERI up and to expand TERI offices at other locations in India and abroad. I always enjoyed visiting the TERI Retreat at Gual Pahari and the Mukteshwar Centre. What a campus he had planned and built at each place! Both show how he was always a thousand steps ahead in planning for the growth of the institute. The university and then the school: who could have imagined that TERI would grow this big. And in all these establishments, every detail had been planned by him—he created it all.

Internationally too, Dr Pachauri was almost a household name in both the developing world and the developed world. He was known to be the leader of the climate movement. Once he took charge as chairman of the IPCC, within a few years he increased the panel's visibility to scales never imagined. The IPCC reached new heights and was awarded the Nobel Peace Prize for its contributions. I remember being given a replica of the Peace Prize because I had been one of the lead authors of the IPCC's Fourth Assessment Report. That's leadership! Dr Pachauri acknowledged the contributions of a thousand scientists and researchers around the world who had contributed to the IPCC.

Dr Pachauri was no doubt a man with a Midas touch! TERI, the TERI School of Advanced Studies, and many other institutions including the IPCC reached new heights under his leadership.

> SURUCHI BHADWAL Senior Fellow (2000–)

Multitasking: TERI, India Habitat Centre, and More

I first came in contact with Dr Pachauri in 1997/98 when he was a member of a committee set up by the Ministry of Power. I was a Joint Secretary then looking after promoting the participation of the private sector. The committee was headed by Justice P N Bhagwati, former Chief Justice of India. The committee was set up essentially to look into the possibility of doing negotiated deals to speed up the generation of electricity produced by the private sector. Quite early on, Dr Pachauri suggested to me that we should give up this approach and instead look at how we can introduce competitive bidding. That is what the committee finally recommended. This experience also gave me the lasting impression that Dr Pachauri was always ahead of his time.

I joined TERI in February 2000 in the Regulatory Reforms Division. Leena was our leader and Director. Once again, it was the vision of Dr Pachauri that independent regulation was coming and TERI should take advantage of it. As a result, our team was under constant demand as we were the first in the field. We were able to get such eminent experts as Prof. Littlechild (the well-known British electricity regulator) to our conferences. This helped to establish TERI's lead in this fast-emerging area. During the three and half years I spent in TERI I learnt a lot from Dr Pachauri. I will not spend too much time on this phase of my association with him because that has already been ably covered in this volume by many who were my colleagues then.

It was the vision of Dr Pachauri that independent regulation was coming and TERI should take advantage of it. As a result, our team was under constant demand as we were the first in the field.

I would only like to relate one incident to show his attention to detail. I was asked by him to take up a consultancy offer that the World Bank had made to him. After I came back from the first meeting, I went to brief him and take his advice on further work. When that was done, he asked me where I had stayed. I replied that it was some very low-budget hotel that had been booked for me. He laughed and said that I should never repeat this mistake. He asked me to let him know my next meeting dates and said he would book me in a hotel run by the Tatas and quite close to the World Bank. I did that and enjoyed my stay at the hotel—all the more so because they even put a complimentary bottle of wine in my room! While checking out, I went to compliment the hotel manager and thanked him for the wine also. He informed me that the wine was at Dr Pachauri's instructions!

Years later, when I was about to retire, I met Dr Pachauri at a retreat in Gual Pahari. He asked me about my post retirement plans. While discussing options, he suggested that I should meet Mr Kiran Karnik, the then President of the India Habitat Centre. One thing led to another and I joined the IHC as Director Designate and later as Director. On joining IHC, I had gone across to TERI to meet him. He narrated to me the story of how he had fought to get TERI into IHC. Although TERI was not that big then, he was convinced that IHC was just the right place for TERI. When the governing council of TERI did not approve of the plan, he threatened to leave TERI and said he would launch another organization because he felt such an opportunity would never come again. Finally, the governing council relented and approved the proposal—one more instance of how farsighted Dr Pachauri was. In IHC so many people came and asked me for a place in IHC. Of course there was no place and all had to be denied. Many others tried to start similar centres in Delhi or elsewhere and these efforts have also not borne fruit. There are of course the Bangalore International Centre, which Dr Pachauri did champion, and the ones in Goa and Pune. However, none of them could match IHC in scale.

He was convinced that IHC was just the right place for TERI When the governing council of TERI did not approve of the plan, he threatened to leave TERI and said he would launch another organization because he felt such an opportunity would never come again. Finally, the governing council relented and approved the proposal.

After joining IHC, I came across many instances that showed that apart from TERI, Dr Pachauri had also invested a lot of his time in steering IHC during its formative years.

Most people – outside of the IHC institutions – think of IHC primarily as a cultural, intellectual, and recreational space. The reality is that about 70% of the area and 100% of the initial funding came from the 37 institutions that started IHC. HUDCO was the largest and TERI, the second largest. Only HUDCO and TERI have an exclusive tower (or Core, in IHC terminology). The next largest is the National Housing Bank. These three institutions are given a permanent seat on the governing council whereas the remaining institutions are given 2-year terms in rotation. The participating institutions also dominate the various committees that support the governing council and also get preferential rates for banquets and the hotel. Finally, it is these institutions that select the president. This is what makes IHC unique: the primacy given to institutions like TERI. This governance structure has stood the test of time. Stability in the IHC governance in addition to the soundness of the basic concept and wonderful architecture have all come together to make IHC a great and unique institution without parallel.

Dr Pachauri was a staunch defender of this basic structure and over time, as more members joined the centre, there were suggestions that this structure should be revised. He opposed all these suggestions and pointed out how the institutions had taken so many risks and put up with privations to find the resources for this imposing institution. He used to point out that the large number of new members joined only when the success of this venture was proven and hence they cannot be treated on par with the pioneers.

There were many difficult decisions that we had to take in IHC; in all of them, Dr Pachauri was a great source of strength and support. I am sure that others will write on the other great institution that he started—TERI. There are also other institutions that he contributed to in taking them to a different level, notably IPCC, the Intergovernmental Panel on Climate Change. This is what I will remember him for: great foresight, tremendous capacity to take risks, and a wonderful builder of institutions.

> Rakesh Kacker Senior Fellow (2000–2003)

Pushed to Reach Greater Heights

I joined The Energy and Resources Institute in January 2000. Prior to that, while visiting Delhi in 1997, I had watched Dr R K Pachauri's interview on TV and was so impressed that I decided that if I ever get a chance to work at TERI I would join without a second thought. That was the reason that in my interview with Dr Pachauri I didn't even enquire what salary I would get.

Dr Pachauri was also a visionary in anticipating upcoming areas and initiating research on them—research that other research organizations would take up as well, but later.

Dr Pachauri has influenced my professional career and approach in many ways. Not only to me but to every professional in TERI he provided academic independence and always egged us on to reach greater heights by publishing and by influencing change on the ground. Once convinced, he used to have immense faith in the capabilities of TERI's researchers. He was very particular about spelling and addressing a person in written communication. Once in a draft letter to be signed by him I had misspelt the name of one of the joint secretaries with the Government of India: the very next day, while on his rounds, he chided me on my negligence and asked me how I would feel if someone were to refer to me as Pandy instead of Pandey.

Another important point regarding communication that I learnt from Dr Pachauri was the need to respond to mails and letters promptly. I often used to be amazed with his commitment to timely response and found him at times approving overseas travel within two minutes of receiving such a request through email. I have since made it a point to respond to most emails preferably the same day.

Dr Pachauri's commitment to honour scheduled meetings was unparalleled. Once we had produced a booklet describing a research project and wanted to release the publication at Jamia Millia Islamia (JMI) University because it was a partner institution in the project. Mr Najeeb Jung was then the vice chancellor of JMI (and later served as Lieutenant Governor of Delhi), and his office agreed to his presence at the release function provided Dr Pachauri would also be present. I went to Dr Pachauri and apprised him of the situation and he immediately agreed despite having another engagement the same day: despite traffic snarls in Jamila area because of the ongoing construction of the Delhi Metro, Dr Pachauri turned up in time for the function.

Dr Pachauri was also a visionary in anticipating new and upcoming areas and initiating research on them—research that other research organizations would take up as well, but later. In 2014 Dr Pachauri created a new work area and named it 'Resource Efficiency and Green Growth', knowing that in future, with Europe adopting principles of circular economy, this topic would be on the research agenda of the emerging economies. This initiative of his soon resulted in a large research project supported by the European Union. NITI Aayog (the erstwhile Planning Commission) later published a white paper based on TERI's background research on the need for resource efficiency in development. Subsequently, a resource efficiency cell was established at the Ministry of Environment, Forests and Climate Change and yet again TERI contributed to the resource efficiency policy developed by the ministry.

In his long tenure as the head of institutions such as TERI and IPCC among others, I am sure Dr Pachauri must have similarly motivated many aspiring researchers like me and shaped their careers directly or indirectly. I for one certainly treasure my interactions with him, which have made me the researcher I am today. Thank you, Dr Pachauri!

> SUNEEL PANDEY Senior Fellow and Director (2000–)

The Passion That Drove Us to Great Heights

Dr R K Pachauri was a father figure to many of us in TERI. My first impression of him was formed when I attended one of the early conferences of SESI, the Solar Energy Society of India, initially hosted by TERI. But my association with TERI as an institution started much before that when, in 1985, I started visiting TERI's library in the Army and Navy Building, Mumbai, to look up references for my master's thesis at the Indian Institute of Technology, Mumbai. What amazed me was the facility of photocopying available within the library. Photocopying was not a common facility that time and for an institutional library to have it for the convenience of student readers shows the foresight and attention to detail and the urge to improve time management and efficiency seen in TERI. Years later, in 2001, I had the opportunity to join the TERI family formally. And then came my first interaction with him as the head of TERI to finally approve my candidature. What impressed me was his straightforwardness and clarity of thought. During this interaction he finally made his position clear saying, "I cannot offer you the salary you might be expecting but an exciting future." My reply was, "Sir, we work in sustainability and my simple request is to take care of me and my family's sustainability." Trust me, he just laughed and the rest, as they say, is history. I have been a proud member of the TERI family since then.

Dr Pachauri had many qualities but what appealed to me most during my association with him was the passion and energy he had for the areas of his interest and for TERI of course. His passion was infectious and one of his qualities was to get people to work for him without selfish motives the quality of a true leader.

While travelling with him to Pakistan I came across another of his great quality, namely treating colleagues with respect and equality. Simple acts like taking colleagues' baggage from the conveyor belt at airports showed his simplicity and the spirit of camaraderie.

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> Dr Pachauri, even at the height of his career when he was the chairman of IPCC and also the head of TERI, was always available for colleagues in TERI. The best part was that you never ever had to wait outside his cabin. He had his own way of handling things in optimum time. One only had to inform his secretary and ask for 5–10 minutes and you would get a call: "Please come, Dr Pachauri is now free for 10 minutes between his meetings." I had experienced this many times and I am sure many of my colleagues have done so too. These meetings would always end with

clear instructions or actions to be taken either by us or by him, followed by action from his side before the end of the day. I think this amazing time management skill was one of his unique qualities. He had a knack of understanding people and their plus points and then convert them into assets by providing opportunities to hone those qualities. In 2010, when I decided to take a break from TERI and explore corporate opportunities, he didn't like it but was convinced of my reasoning and honesty of discussing the issue with him and when I decided to return, he not only welcomed me back but also gave me the opportunities to grow and be part of senior management at TERI. His observation was that I am a born researcher and TERI is the place for me. This is something only a true and passionate leader can do.

Dr Pachauri mentored many of us to look beyond the ordinary and to go for big dreams with passion. I believe that to be his legacy and an expression of his visionary leadership.

His eye for detail and his habit of insisting on 100% perfection in everything was again something special. I remember once I had copied an email to him, merely to keep him informed, but to my surprise I received a printout with his characteristic scribbles in pencil, correcting an error, namely addressing a man formally, with the title *Mr*, and then informally, using his first name.

Working with him was always motivating and inspiring even though it used to be challenging. It's rare to get such born leaders who not only influence their colleagues or organization but become exemplary leaders across the globe. Dr Pachauri was one such crusader for sustainable development, renewable energy, and climate change, and I was lucky to be part of his team and dream and will continue to cherish his memories and to tread on his path for sustainable development

Dr Pachauri was someone who shaped my life and made me realize my potential to explore and take on leadership in new areas. He influenced and mentored many of us to look beyond the ordinary and to go for big dreams with passion. I believe that to be his legacy and an expression of his visionary leadership.

He was a great institution builder and he always leveraged his learning from his travels to understand various institutional models and tried successfully to use them in developing TERI to what it is today—a true career builder and person with a vision.

Shirish Garud Senior Fellow (2002–2010, 2012–)

Igniting Young Minds

It doesn't exist anymore, but on the second floor of the Administrative Block in the campus of the TERI School of Advanced Studies was a large office, which many a student would peep into with awe. This was where every few days a bearded man would come and spend some time. Sometimes he would drop in on his way to the airport; sometimes he would drop in when he wanted to unwind. "Just being here gives me a lot of peace," he would tell me. Once in a while he would give a talk to the students; he would love discussions with faculty members. Although the pleasure on his face was apparent to all, he would yet say: "These young students and faculty excite me; they fill me with a sense of purpose!" Happiness was what I always saw on Dr Pachauri's face whenever he was on the campus—as if it was his dream come true. But then, it had! Creating two great institutions in one lifetime is not everyone's cup of tea.

Tucked away in one corner of Vasant Kunj in New Delhi is the campus of TERI SAS—only about 0.8 hectare but with a lot packed in; only 500 students on the campus, but with yearning to learn written all over them; only 50 faculty members, but buzzing with research ideas. "This bit of that world" is how I would describe the university whenever I would discuss with Dr Pachauri the unique programmes and research that we were engaging in.

I recall vividly even now Dr Pachauri, one day in 2002, walking into my office on the ground floor of TERI's premises at the India Habitat Centre. I was new in TERI then and just about settling down into my position as Deputy Director, Administrative Services. "We need you full-time in TERI School of Advanced Studies now," he said. "But I'm not an academic," I said with some hesitation. "Well, then, become one," he said with finality. And suddenly I moved up in life—from the ground floor straight to a lovely cabin on the sixth floor.

That sixth floor was where TERI SAS took shape. There were just three of us in those days: lots of discussions, lots of ideas, reams of paper, many cups of coffee, and a happy Dr Pachauri meant that we were on the right track. "What I want to see is a youthful university, brimming with ideas, where excitement becomes a way of life," he would keep telling us. In 2003, three faculty members joined us, with Dr Pachauri taking keen interest in the selection process. We started our first master's programme with 19 students in a room in the TERI Library. And then there was no looking back. The university grew as planned, smaller than other universities but with a very focused agenda. Early in its life, it gained recognition from many foreign universities and collaborators.

Dr Pachauri's vision was that while TERI had grown as a research institution, setting up an institution of higher learning would help in two ways: one, it would be a channel for disseminating the knowledge created by TERI to the younger generation; two, researchers of TERI would be challenged by younger minds in unconventional ways. A beaming Dr Pachauri conveyed it all at the university's first convocation in 2006 (the year in which TERI SAS became TERI University). Mr Nandan Nilekani was the chief guest and was awarded the first honorary doctorate conferred by the university. Eight doctoral degrees and 36 master's degrees were awarded. At the Stein Auditorium of the India Habitat Centre, where the convocation was held, the academic procession with accompanying pipers from the Army Band had everyone in awe. We all had lumps in our throat as Dr Pachauri, in his majestic maroon gown, rose to speak and confer the degrees. The first convocation is always a milestone in any university's history, and so was it with us. I can never forget the pat on the back from Dr Pachauri at the end of that memorable ceremony. "That is how any event in TERI should take place," he wrote in a message to all TERIERS.

Setting up an institution of higher learning would help in two ways: one, it would be a channel for disseminating the knowledge created by TERI to the younger generation; two, researchers of TERI would be challenged by younger minds in unconventional ways.

> As with every other division in TERI, Dr Pachauri set very high targets for the university. We moved to the campus in Vasant Kunj in 2008. He was rather worried about the university's financial sustainability since we were suddenly expanding with more programmes, recruiting more staff, and taking in more students. "You not only have to be financially independent but also must have a substantial corpus to tide over difficult times," he always stressed. So along with our focus on research and academic programmes, we had to spend a lot of effort on making the university financially strong.

> Building an ethos of sustainable development and a work culture that imbued interdisciplinarity wasn't easy at all. But in the next five years, the university built up a very strong and cohesive workforce. Faculty members focused on meaningful research on sustainable development. New academic programmes were added. International collaborations peaked. The students were a happy lot. Camaraderie between the staff, faculty, and students was all too obvious. Hard work resulted in not just the balance sheet being in the black, but the corpus rising to very respectable levels. And when the university faced its first inspection for accreditation from the National Assessment and Accreditation Council (NAAC), it came out with flying colours: an 'A' grade and a CGPA of 3.26, which placed TERI University on par with the best universities in India. And Dr Pachauri was smiling.

> Dr Pachauri was always a stickler for perfection. I remember when we began flying the national flag on the campus, the first thing he said when he saw it was, "Good, but if we are going to fly it here every day, make sure that we have enough flags. Look at the bottom right corner of this one: there is a small tear. That is not acceptable in the national flag."

Dr Pachauri's network and his fame across the world helped the university grow. Corporate houses and other institutions vied to set up academic chairs. The MacArthur Foundation selected the university to receive seed money to set up a master's programme in Sustainable Development Practice—one of only ten universities worldwide to receive this honour. The Government of India selected the university to run a master's programme in Public Policy and Sustainable Development for civil servants. Suzlon funded a programme in Renewable Energy and Management. Coca-Cola joined hands to create a master's programme in Water Science and Governance. Various foundations pitched in to award scholarships to students. International exchange programmes were also funded. The United Nations University chose us to be a founding member of the 'Promotion of Sustainability in Postgraduate Education and Research (ProSPER.Net)', an alliance of several leading higher-education institutions in Asia and the Pacific. TERI University was going places!

What is remarkable was the faith Dr Pachauri placed in me and in the entire TERI University team. He was always available for guidance and help but rarely interfered in day-to-day functioning. To all of us, until the last, he remained the founder, the father figure: always there when we had doubts, always there to give us confidence, to push us ahead.

He hated bureaucracy. "Don't let 'babudom' creep into the university," he always said. "That'll slow you down, and it'll bring in unhappiness and dissatisfaction amongst the team." He always encouraged and egged on the youngsters in the team. He sanctioned a special allowance for lecturers and assistant professors. "They are the ones who will come up with new research and innovative ideas," he would say.

In the movie about the university, there is a clip of mine where I say, "We have a small campus . . . but our dreams are large." As I conclude this write-up, I can't help imagining Dr Pachauri's reaction to it. He would have said, "You call those dreams large? If only you could see my dreams . . ."

The best way to honour that icon would be a pledge to keep imagining and reimagining his dreams and to continue growing TERI and TERI SAS into world-class institutions.

> RAJIV SETH Former Pro Vice Chancellor and Professor of Finance, TERI School of Advanced Studies (2002–2019)

Not Anyone Can be an Institution Builder

Dr R K Pachauri: with this name emerges the image not of a person but of a whole institution, The Energy and Resources Institute. It will not be an exaggeration if one says that the two were synonymous.

I served TERI for five years and was working in the area which was at the core of Dr Pachauri's interests, namely climate change. Despite this, I had only limited direct interaction with him. However, I used to observe the numerous qualities that he was endowed with.

For institution builders, possessing extraordinary qualities is not enough: they also need what are often considered insignificant qualities but are important nevertheless: team building, networking, and gaining and strengthening trust.

Dr Pachauri was a visionary and would attack a problem early on. That is how TERI was a pioneer in all the different aspects of energy, environment, climate change, and sustainable development research. Although while working in TERI I may not have valued it much, when I moved on to a bilateral agency, I truly realized its worth. In my work there, I would often deal with queries on developments on some or the other topics or programmes in India, and I used to find that TERI was the only organization that could give me some insights or clues into the matter.

I believe that for institution builders, possessing extraordinary qualities is not enough: they also need what are often considered insignificant qualities but are important nevertheless: team building, networking, and gaining and strengthening trust. I would dwell upon three such qualities: a personal touch in relations, perfection in whatever you do, and discipline.

Dr Pachauri would bring a personal touch to relationships with his staff. He would have come across several thousands of TERI staff during his long association with TERI. However, I used to be surprised that he would remember people by name even after they had left the organization. Receiving a birthday card signed by Dr Pachauri was also a gesture that gave us a feeling of not just being a staff in TERI but of being a part of the TERI family. Dr Pachauri knew very well how to win people.

Dr Pachauri was a perfectionist and would not ignore even the slightest of mistakes. I remember very well that when I had joined TERI and was drafting some letters to be signed by him, the line managers (the area conveners and the directors) would check each very thoroughly before allowing me to forward them to Dr Pachauri as they knew that Dr Pachauri would not accept even the most minor mistake. I am sure this training has benefitted all of us who have worked with him.

He was also a disciplinarian. I remember the time I was to receive a Japanese delegation. I had to go and meet them at a hotel in Connaught Place and then take them to various meetings. I was delayed by a couple of minutes and when I reached the hotel, all members of the delegation were waiting for me in the hotel lobby. They did not express any annoyance to me but apparently when they met Dr Pachauri, they told him of the slight delay. Later during the day, when Dr Pachauri saw me, he scolded me severely but also advised me to be punctual in general but especially with the Japanese.

TERI is a not-for-profit institution and sustains itself by working for a host of clients from the governments, trusts, foundations, academic institutions, corporations, foreign governments, multilateral organizations, and so on. TERI has, however, always maintained its independence and has always worked in the interest of its parent country, namely India.

The nationalist approach of Dr Pachauri was also reflected in the elaborate celebrations of Independence Day in TERI. Attendance of all TERI staff was a must in the celebrations, in which all used to participate with great enthusiasm, the programme well-crafted under the able supervision of the Director, Administration, M M Joshi, a former Air Commodore. I remember not being able to attend one of these celebrations and had not sought prior permission for my absence. I was then taken to task and the grilling continued until I had come up with a convincing explanation.

Such was our Dr Pachauri!

Dr Pachauri took TERI to celestial heights. TERI's reputation is not confined to India: the organization is known globally for its noble and novel work. Dr Pachauri's unfortunate and untimely demise has been a big blow to TERI. I wish wherever he is, he keeps showering his blessings and best wishes on TERI for it to carry on its set objectives!

> VIVEK KUMAR Associate Fellow (2003–2008)

A Railwayman Who Became a Crusader

It was, perhaps, destined that I come into close contact with Dr Pachauri. It began with a chance meeting sometime in April 2003 at a lunch organized by a dear friend of mine, Mr S K Chand, who was a Senior Fellow at TERI. In my first meeting with Dr Pachauri, I was rather in awe of him but I soon reached a comfort zone during our interactions and we began talking about railways. He was nine years my senior in service, having joined as Special Class Railway Apprentice through one of the toughest competitive examinations in India.

Dr Pachauri was deeply spiritual and once jokingly mentioned to me that in his childhood, an astrologer had told his parents that he had been a monk in his previous birth. In this life, too, like a monk, he dedicated himself to his calling and led a demanding life with a punishing work schedule.

> I was looking for a break from the railways for various reasons, primarily because the then railway minister had taken a dislike to me. It is likely that Mr Chand mentioned to Dr Pachauri my uneasy relationship with the political leadership in the railways and towards the end of the lunch, Dr Pachauri suddenly asked me if I would like to join TERI. I was not prepared for this question and was non-committal but promised to get back to him soon. I joined TERI shortly after that lunch meeting. My initial sojourn in TERI was for a little over six months and despite this short stint, my friendship with Dr Pachauri grew stronger as both of us began meeting for long chats, mostly over lunch at the India International Centre.

> We also made a few trips to Mukteswar, with brief halts at Kanchi, Neem Kaurali Baba's ashram. Dr Pachauri was a devotee of the Baba and liked to spend a few moments in the serene environs of the ashram. I also accompanied him on short visits to Rishikesh. He was deeply spiritual and had once jokingly mentioned to me that in his childhood, an astrologer had told his parents that he had been a monk in his previous birth. In this life, too, like a monk, he dedicated himself to his calling and led a demanding life with a punishing work schedule, sleep deficits not being uncommon for him. On one such trip to Mukteswar, we planned to leave early in the morning and I waited in the car outside his home. He came out surprisingly late and was profusely apologetic and told me that his flight had landed late at night and he had gone straight to his office and worked until early morning and had slept barely an hour—and was again ready to embark on a hectic road journey to Mukteswar.

Dr Pachauri liked to spend hours reminiscing as we sat by the fire in Mukteswar, talking late into the night. This would usually be followed by long walks in the hills with both of us drinking in the silence of the valley. During the day he would take me to exotic places on our way to Nainital and Ram Nagar. He was fond of visiting them and it is my guess that such excursions took him back to his childhood, which had been spent in such picturesque surroundings. His attachment to the hills was understandable, having been born in Nainital, and he returned to them for short spells to give himself a brief respite from his stressful schedule.

He had joined Indian Railways as a mechanical and electrical engineering student at Jamalpur, the only one-of-its-kind technical institute dedicated to producing mechanical engineers for Indian Railways. Being the youngest among his batchmates as well as a first-rank student, he was destined for the highest echelons in the railway hierarchy and was being groomed accordingly. However, his keenness to continue further studies made him travel abroad, where he earned not one but two doctorates. He wanted to come back to his first love, railways, but a series of circumstances changed the trajectory of his path so that from a secure and promising career in the Indian Railways he decided to follow uncharted territories, which ultimately led him to build TERI. He did not even consider it necessary to take a pension for his erstwhile service with the railways although after many years he did receive pension from the railways along with medical and travel facilities.

Although he left the railways, he continued to take a keen interest in conserving India's rich rail heritage. He set up a trust for protecting the invaluable legacy of the Darjeeling Hill Railway and worked unstintingly in coordination with Indian Railways for its upkeep. Being deeply attached to his alma mater, Jamalpur, he would make it a point to attend the institute's annual get-together whenever his busy schedule permitted. He was well deservedly honoured with the Distinguished Alumni Award by the National Academy of Indian Railways.

It is my hunch that Dr Pachauri was aware of what was coming and was preparing himself for it but this stoicism was clashing with his indefatigable positivity accompanied by that slight sense of regret about what all he could have accomplished yet.

> TERI, which began as a fledgling institution, grew from strength to strength, becoming one of the leading research institutes for the environment, energy, and climate change. TERI, as it stands today, owes its identity as a premier research organization to Dr Pachauri's grand vision and exemplary leadership. He had dreamt of building a comprehensive and integrated education system from an elementary school for small children to a higher education institute dedicated to sustainability. As part of this grand plan, the TERI School of Advanced Studies came up as a logical extension to TERI.

> His firm belief was that the technologies developed through painstaking research should be put to use for improving the living conditions of the vulnerable. When the government introduced the concept of corporate social responsibility through a new Companies Act, we at TERI, in order

to take this vision to a logical conclusion, managed to bring in longterm corporate funds to carry out various social activities, particularly in hilly areas of Uttarakhand and Himachal Pradesh, to improve the living conditions of marginal farmers. Dr Pachauri was keen to create marketing avenues and logistics for the export of medicinal and herbal plants grown in the upper reaches of Uttarakhand. This project remained unfinished owing to paucity of funds, and his dream remains unfulfilled.

In his last two years he had not been keeping well and fell seriously ill twice during his travels abroad. He became almost homebound a few months before his end and missed his once intensely active life. He longed to visit Mukteswar and talked to me often about going there but realizing at the same time that such a trip was no longer possible given the state of his health. Our meetings over lunches at the IIC Annexe dining hall continued as before, and although we never discussed his health, a relative physical slowdown was noticeable. It is my hunch that he was aware of what was coming and was preparing himself for it but this stoicism was clashing with his indefatigable positivity accompanied by that slight sense of regret about what all he could have accomplished yet.

The last evening before his critical surgery he called me and seemed positive about an expeditious recovery and getting back on his feet in a week's time. But destiny had planned things differently.

Dr Pachauri was one of the leading lights of the day. The great visionary that he was, who tirelessly worked for a sustainable world, he has left behind him an immense legacy of meaningful and invaluable accomplishments. He dedicated himself to the cause of mitigating the ill effects of climate change, which is one of the gravest issues that confront the world today. I firmly believe that if we carry out even a fraction of his maxims on not only achieving sustainability but also making it a part of our lives, we would pay him the greatest tribute.

> SHRI PRAKASH Visiting Senior Fellow (2003–2004), Distinguished Fellow (2011–)

A Short Story of Three Conversations

First conversation, 2003

"Why do you want to join TERI when you already have a much better offer as an analyst and modeller from the ICICI Bank?" This was the question thrown at me by Dr Pachauri during my final interview at TERI in November 2003.

I responded, saying "I can play cricket amidst a lush green campus and at Patchy Greens if I work for TERI but I can't do that if I join the ICICI Bank as an analyst or a modeller." That was the only question and my only answer in that final round of interview. I saw a lovely, childlike glitter in the eyes of that well-built and strong personality facing me. He looked into my eyes after I gave that answer: our friendship was born that day and became stronger every day for the next 17 years. It did not mean that we did not differ in our views. Our friendship withstood everything that came in between and just became stronger with every passing year. There were many moments of differences on issues and ideas. However, we would always listen to each other on any issue and would also pull each other's leg.

The sense and timing of humour in the middle of any situation is a magical quality of any leader that makes the leader different from anyone else.

Sometimes, Baba – which is what I used to call Dr Pachauri and that is how I will refer to him now and then in these reminiscences – would pull my leg in public and occasionally would make me go pink or blue or red. But Baba could sense every little emotion in me and perhaps more often at times than my father, who was my other lost dearest friend.

The sense and timing of humour in the middle of any situation is a magical quality of any leader that makes the leader different from anyone else. A sense of humanitarianism, empathy, kindness, with sheer honesty about being human, is what made Baba so special.

In every professional action of Dr Pachauri, the unique element was the honesty with which he would convey the direction backed by a sense of care and compassion, which was always well hidden behind his passionate scolding, occasional emotional outbursts, and intense reprimanding too, which emerged from his dedication and deep involvement. He was ahead of his time, strong, and honest about anything that he believed in. To me, that was the most special quality of a leader and an institution builder. So, although many times I would be naively sentimental and express that too very openly, I could not sustain my naïve sentimentalism when confronted by his persuasive skills, which would bring me back on the same wavelength, the wavelength of our friendship.

One unique way in which he would assuage my hurt feelings was by flattering me by asking "Can you sing that Kishore Kumar number?" Or he would say, "So, Subhash Chandra Bose or Dada or Anando, what do you think of Ganguly's captaincy or Indian team's performance?" Or sometimes wryly, with a little naughty smile, "Are you composing some new poems or songs for anyone?"

Yes, we had so many common interests to keep our friendship on a common wavelength and the amplitude of that friendship was always balanced by notes from R D Burman, by a perfect off drive of Ganguly, and sometimes by our varying viewpoints and ideas about Indian and world economy, climate change, politics, literature, cinema, energy economics, and policymaking.

We respected each other with our emotional outbursts, differences in ideas and views but with the common thread of friendship. And Conversation 1 highlights the key qualities of a true institution builder and leader who would understand deep human psychology to bring a change. Yes, he was a real change maker: he could change people, could heal their wounds, and would always create a space filled with new memories—which was and is the only way of exploring truth in a society that is getting more and more burdened with the post truth, non-empathetic leadership. Therefore, may be nature is unhappy with the demise of a natural, empathetic leader fighting for the conservation of nature because of which it is teaching the humanity a lesson with the pandemic of COVID.

From here, the story moves to Conversations 2 and 3.

Second It was June 2014, two years before I left TERI. I had written a manuscript conversation, merging children science fiction and sustainability and had titled it 'Lucy 2014 and the Train: a tryst with sustainability'. The manuscript was forwarded by Mr Prabir Sengupta (former Director, TERI Press) to Dr Pachauri for review and approval. I was diffident, rather despondent, about the fate of my manuscript, which had faced a few rejections from some well-known publishing houses but had also elicited some interest from one publisher of children's literature. I was in two minds: whether to publish my manuscript through TERI Press or through this other publisher. I was waiting for a few months to hear back from the other publisher when, all of a sudden, Mr Sengupta informed me that both of us are to meet Dr Pachauri. All along our way to Dr Pachauri's office on the 5th floor, I was tense and kept asking myself, "What will happen to Lucy?"

A leader has to show trust in any new idea without worrying about failure; a good leader calms down every colleague and comforts them by taking them away from their zone of uncertainties, confusion, and dilemmas.

> Mr Sengupta knocked on the door, heard the familiar, crisp, command 'Come in', and we entered Dr Pachauri's office. He was gracious, calm, and composed and requested us to sit down. Mr Sengupta asked him about the book proposal and the manuscript. Dr Pachauri replied with a smile and with immaculate sense of humour: "Well, I know I have to deal with certain crackpots but that's okay." He gave us a printout of the email proposing

publication marked with his usual precise hand in pencil, which simply said, "Pls go ahead." I received no award that day but I learnt that a leader has to show trust in any new idea without worrying about failure and how a good leader calms down every colleague and comforts them by taking them away from their zone of uncertainties, confusion, and dilemmas.

Later on, during 2018, in the middle of a break between two innings of a cricket match, I asked him, "Dr Pachauri, why did you approve the manuscript of my book *Lucy and the Train*?" He smiled, and with his infectious wit, straightforwardness, and positivity said, in front of all colleagues, "Well, I did not understand exactly what you were trying to say but I knew this needed to be published." The conversation taught me the unique quality of any institution builder, intellectual, or a visionary, namely to spot an idea for the future and stand by the idea without worrying about anything. May be he could see a dystopia coming and that's how somewhere my deep psychological, dystopian, imagination about humanity along with affirmative action got enmeshed organically with Dr Pachauri's vision and that was again how our friendship was strengthened through the birth of *Lucy and the Train: a tryst with sustainability*.

Now let us move forward in time and come to the final conversation.

FinalIt was 26 January 2020, nearly 17 years after our first meeting. I wasconversation,to perform one of my songs on climate action and sustainability at2020Venketaswara College as part of the college festival, called 'Blisspoint'.
Before every such event, I had made it a practice to share any new
composition of mine on climate action and sustainability with Dr Pachauri
for honest, critical feedback. On 26 January 2020, I received a message from
him saying "Sorry, Anando; I could not listen to the song this time as I am a
little down under".

I could sense right away that something was wrong and kept on asking him "Are you okay?" He kept assuring me that he was fine. May be he knew that since the loss of my father, there was a deep void which could only be filled by him through his mere visual presence, the occasional strong scolding, care, and empathy. Yes, in the last five years, unknowingly he had become that banyan tree for me which was much more than the great banyan tree at the Acharya Jagadish Chandra Bose Indian Botanic Garden in my birthplace, Kolkata. Our friendship had transformed into a symbiotic relationship where he was both the roots of my lost connection with my father and of my birthplace. A birthplace is essentially defined not merely by a geographical location but also by the people who make you feel born again and again and also push you towards reflection, reincarnation, and restitution in a single lifetime.

My electronic conversation with him ended on 26 January 2020 but it created a much deeper path of this organic relationship for all seasons towards reincarnation, restitution, and reflective conversations in the future. Today, while every Indian lit a candle as a symbol of unity in these difficult times, I am constantly keeping alive Dr Pachauri's flame of energy,

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positivity, and a deep sense of purpose and mission, which he has left for us through his mortal life and perhaps continues to watch all of us in the form of a shining star in the clean sky above New Delhi.

Anandajit Goswami Fellow and Africa Coordinator (2004–2016)

Be the Change You Want to See in the World

"Be the change you want to see in the world"—living by these lines was a man with the most charming smile and a huge, warm heart, our beloved Dr R K Pachauri.

People say that first impression matters, but Dr Pachauri had the power to grow over minds. Every conversation, every interaction, and every moment you shared with him had its way to win your heart. Humble, polite, unconditionally kind personality, draped in the most caring and loving persona, Dr Pachauri could grow on people's minds with his positivity and heartiness. I remember him through fond memories and great laughs, a guiding light who had the brain of a machine and heart of gold. He was a terrific example of a true leader: a global name, a learned spearhead, and a fun livewire that could spread his spark and enlighten everyone around him.

Suddenly the door opened and Dr Pachauri walked in. We were so shocked that we kept the music on while he started asking work-related questions. He carried on with the conversation as if nothing was wrong. Once the meet was over, he smiled and said, "I must say, this room is very vibrant, and it's because you girls are not just colleagues; you are great friends—keep it up."

When I first met him, I was a young professional starting my career. I started as a film and television professional in TERI and he was the head of the organization, the chief of TERI.

Between us was not only the distance of six floors of the building but also unmatched long years of knowledge, position, passion, experience, wisdom, and status. I represented the newly emerging youth of professionalism, and he epitomized the model of excellence that every young mind wanted to be one day: learned, polished, polite, and exceptionally respected and well-known not only locally or nationally but globally.

I was one of the young professionals when I joined TERI, so there was lot of fun, laughter, pranks, and music with so much to learn while at work. We at the Film and Television Unit had a small cubbyhole of a room on the first floor, and we loved our little cabin. Let me share with you a sweet story. We, a group of five girls, became friends more than colleagues. At office we use to make films, and outside office we had a great friendship.

We all knew that Dr Pachauri used to make his rounds around ten o'clock every day. One day he did not, and we thought may be he was out of the country, travelling. Dr Pachauri, as many would agree, was a globetrotter. The day passed and that cosy winter afternoon asked for a mood to play some music. We all decided to have some mood-lighting and musical moments. In the middle of the trans mood, suddenly the door opened at 3.30 p.m., and Dr Pachauri walked in. Stunned, shocked, embarrassed, and very scared—we girls knew that today we were really up for a class on work ethics from the head of TERI. We were so shocked that we kept the music on while he started asking work-related questions. A beautiful pleasant personality as he was, he carried on with the conversation as if nothing was wrong. Once the meet was over, before closing the door, he turned back and smiled and said, "I must say, this room is very vibrant, and it's because you girls are not just colleagues; you are great friends—keep it up." Then he closed the door and left.

Dr Pachauri made sure he was available in case we needed any permissions from ministries to the local government to village-level administration or in case we wanted any highlevel approvals. It seemed that Dr Pachauri had opened all doors, both of his office and of his heart, to bring this project to light: we established a beautiful community radio station in Kumaon, namely Kumaon Vani, meaning the voice of Kumaon.

> That was our Dr Pachauri, unlike the bosses who get stubborn, strict, controlling, and really sticky with their colleagues. Dr Pachauri was funloving, lively, and a very genuine person. He understood the importance of friendships, relationships, and happiness.

> Carved in my heart as a role model who walked with a smile in the corridors of TERI, friendly, humble, and heartfelt, Dr Pachauri's greatest strength was his power to connect heart to heart, to bond with everyone at a personal level, no matter who and what you were. Dressed to impress, especially with his formal jacket and a matching pocket square, he was always fashionable, always high-spirited, and always enjoyable, with an incredible sense of humour.

The chairman of the Nobel-Peace-Prize winning IPCC, Director General of TERI, an expressive poet, a passionate cricketer—epithets kept piling up, but he walked as a simple man with his head held high, welcoming arms, and a charming smile that made everyone feel special about themselves.

I was fortunate to have seen him work, seen him lead, seen him with his colleagues – senior or junior - and with the young. I was fortunate to have learnt from him, been a part of his vision, and engaged in projects that were close to him. I was fortunate to work one-on-one with him on the project that was close to his heart—Kumaon Vani!

Dr Pachauri was very close to Kumaon. The Mukteshwar retreat office was one of his proudest spots. Amidst the beautiful mountains and the green Himalayan range was this loving town of Mukteshwar that was close to his heart. I was honoured to be chosen to work with Dr Pachauri to establish a community radio station in Mukteshwar. The project that was close to him became my passion too. It was during those 4–5 years that went in setting up and running the radio station that Dr Pachauri taught me some valuable lessons in leadership. Nearly every day he used to ask for an update on the station. He made sure he was available in case we needed any permissions from ministries to the local government to village-level administration or in case we wanted any high-level approvals. It seemed that Dr Pachauri had opened all doors, both of his office and of his heart, to bring this project to light. His passion gave me the motivation to keep working towards this project, and we were able to establish a beautiful community radio station in Kumaon – to which was given a beautiful name, 'Kumaon Vani', meaning the voice of Kumaon. I was so fortunate to have had the opportunity to call him a true mentor.

I worked towards his vision during my stint in TERI, but even when I left TERI and moved to Canada over a decade ago, Dr Pachauri was never left behind. We always kept in touch. We stayed connected be it celebrating occasions, greetings, talking of food, or working on ideas to create international environmental projects. A man of ideas, a powerhouse of knowledge, a spark that kept shinning bright, for me he was a star that will always shine upon us and continue to inspire.

It was April 2019. I was visiting Delhi. Like all times, I texted Dr Pachauri enquiring after his health and everyone at home. Dr Pachauri invited me for tea at his lovely residence in Jor Bagh. I walked in and there I saw the most powerful couple, the beautiful Mrs Saroj Pachauri and the handsome Dr Pachauri, welcoming me with a warm smile. We sat over our tea, shared moments from the times at TERI, and ate the most delicious pakoras and tea. When I was leaving, he came out to my car, opened the door for me, and made sure that I was comfortable. As the car began to move, I looked back and he smiled and waved and said, "Thank you for coming; take care." That was my last meeting with Dr Pachauri, my last image of Dr Pachauri, and my last memory of Dr Pachauri.

Some are said to be born as leaders, some become leaders over time, but those who live life to its fullest, engage with everyone they meet along this journey, enlighten us with passionate learning and then leave a mark, a vision that many follow even after they are no more—one such divine soul and an immortal legend was our beloved Dr R K Pachauri.

> ZAINAB YUSUFZAI Media Executive, Film and Television Unit (2004–2009)

Building the Bangalore International Centre

I met Dr R K Pachauri for the first time in his Golf Links home when my wife and I were invited by Dr Saroj Pachauri, his wife, to a social evening. As she introduced us to her husband, we saw a tall, casually dressed person with somewhat dishevelled salt-and-pepper hair and beard and deep, penetrating eyes. The evening was great, and we met several other friends there. Subsequently there were several other such social evenings at their place which we attended when, apart from the gourmet food and thirst-quenchers, we came to know Dr R K Pachauri more intimately. A warm friend, a voracious reader, a cognoscenti in widely different spheres, an enthusiastic cricket buff whose deceptive bowling used to baffle several established batsmen of those days, and an excellent conversationalist who could hold his own on any subject. I used to envy his huge network of friends, most of them stalwarts in their own areas who used to come over to the Golf Links home from time to time. But I did not see him in his office at all during my stay in Delhi. So I had no occasion to witness how he was building up TERI brick by brick.

After my retirement in 2003, we relocated ourselves to Bengaluru and we lost touch with the Pachauris. In early November 2005, I got a call from the Bengaluru office of TERI, inviting me to the inauguration of a centre, called Bangalore International Centre, by the then President of India, Dr A P J Abdul Kalam. I was also told that the Director General of TERI, Dr R K Pachauri, was coming for the event and was keen to see me there. It was 21 November, when the glitterati of Bangalore, including the Governor of Karnataka and several ministers, were present to hear Dr Kalam giving a stirring speech on what should be the vision of the proposed venture. It was after that meeting that Dr Pachauri requested me to join Bangalore International Centre as the Director and also as Senior Adviser in TERI.

It would not be out of place perhaps here to mention that I came to know of Dr Pachauri through Saroj, his dynamic wife, whom I had come to know when I was busy in setting up a semi-autonomous organization to prevent the spread of a hitherto unknown virus called HIV in our country. This organization, called NACO (National Aids Control Organization), was set up under a trilateral collaboration with the Government of India, the World Health Organization, and the World Bank as partners. This hybrid animal benefitted hugely from advice received from experienced persons, such Dr Saroj Pachauri and several other epidemiologists and public health experts.

As I started working in my dual capacity as Senior Adviser, TERI, and Director, Bangalore International Centre (BIC), I slowly began to understand the depth and clarity of vision Dr Pachauri had and his functioning style. He clearly saw that in its formative years considerable amount of hand-holding and financial support would be needed by BIC to stand on its feet. This he made available through TERI in adequate manner, but he encouraged BIC to take baby steps to slowly become selfsufficient in raising funds and ultimately move out of TERI premises to its own building. During this period, he was unflinching in his support to the fledgling organization and gave a lot of his time amidst several other preoccupations he had. I had complete freedom to plan my activities with no interference from him. However, he was always there when some others (some of whom he knew better than I did) tried to queer my pitch. In the process, BIC started to grow as planned. Sadly, he could not see BIC functioning in its new premises and flourishing, but he did see the building coming up to its final shape.

Later on, as I started getting more and more involved in the work of TERI as well, I could see how Dr Pachauri had been building up TERI from a small NGO funding energy-related research to a world-class environmental consultancy body with a mighty clout in shaping world opinion on almost all ecological issues. He was of course assisted by a band of dedicated and highly skilled professionals whose major quality was to think out of the box and the ability to interpret which way technology would need to grow in the fast-changing world. They shared his vision and his passion. It is interesting that he could pick up a stray point during conversations, develop it into an idea, and then get it operationalized. I recollect a casual conversation in Bengaluru when another colleague, Mr Narasimha Murthy, mentioned about a coffee estate owner in Kodagu floating a general enquiry about disposing of his estate. Dr Pachauri's face lit up and he immediately asked Murthy to contact the owner and start negotiations for an outright purchase by TERI. In the subsequent days he asked for a detailed map of that area, the coffee yield of the estate, availability of drying area for coffee beans in the estate, possibilities of growing exotic spices, average rainfall data, and a whole lot of other data. The idea of developing a small retreat for TERI professionals in that estate had started germinating in his mind! I still remember several trips we made to that coffee estate, which was slowly getting ready to shape up to his vision. It was difficult to keep pace with him as he literally used to run to cover the hilly terrain. And he absolutely insisted that the proposed Retreat building must use locally available materials and conform to the best ecological norms in the region, utilizing simultaneously solar energy, soil conservation, rainwater harvesting, and waste disposal measures to the extent possible in the entire area. The first coffee crop we harvested gave him great delight and he requested us to send some in neat packages to Delhi for distribution to colleagues and VIPS. I saw the same missionary zeal in him while discussing the new campus of TERI coming up in Hyderabad.

Thinking back, I believe he was trying to achieve too much within a short time while Destiny willed otherwise. RIP, Dr Pachauri: You lived life on your own terms and will be always remembered as a great institution builder who took TERI to dizzy heights.

P R DASGUPTA Distinguished Fellow and Senior Director (2005–2019)

Research on Environment-Friendly Materials

Dr Pachauri was the most down-to-earth, amicable, and dedicated environmentalist all his life. I am fortunate to have interacted with him on various occasions. His vision for motivating researchers to research environment-related topics was commendable. He could foresee that development of natural or eco-friendly materials needs a knowledge base and experimental research. During early interactions, he was pleased to know that I came to know about TERI through *TerraGreen*, the magazine which looks into various aspects of energy and environment. Dr Pachauri's perception that the environment has to be protected from different perspectives such as policy, assessment, and research was admirable and he thus steered TERI to being a multidisciplinary institute. This also resulted in his setting up the TERI university, which helps educate young minds to conduct research and solve environmental problems. This initiative by him is now spreading across India.

Dr Pachauri also encouraged our group to publish and patent our research findings. His attention to detail, amicability, dedication, and untiring efforts to protect the environment in all directions were truly impressive.

> I first met Dr Pachauri in Bengaluru and expressed my interest to work on biodegradable and environment-friendly plastics. He expressed his concern as the laboratory was not equipped to carry out such experimental work. However, he encouraged me to pursue research on environmentfriendly plastics. It was because of his initiative and Mr P R Dasgupta's support that we now have a well-equipped and spacious laboratory. Dr Pachauri also helped in getting our laboratory certified by the Karnataka State Pollution Control Board, which helped us extend our services while pursuing research. During discussions on research, Dr Pachauri would enthusiastically and encouragingly ask what new materials have been developed. Every discussion encouraged us to look into various possibilities for environment-friendly plastics. This inspiration helped our group to look into encapsulation of natural wound-healing materials and biodegradable adsorbents to remove dyes apart from researching on alternative materials such as bio-based implants for orthopaedic applications. This motivation also spurred us to look into eco-friendly additives to plastics leading to benign and fire-retardant plastics.

The majority of assignments that come to us involve collaborative research, and researchers from many institutes used to appreciate the freedom and space for creativity that Dr Pachauri inculcated into TERIERS as part of the TERI culture.

Dr Pachauri also encouraged our group to publish and patent our research findings. His attention to detail, amicability, dedication, and

untiring efforts to protect the environment in all directions were truly impressive. I remember the time when our work based on modified soya flour composites was nearing completion. During this time, Dr Pachauri was on a visit to the Bengaluru office and I sought his advice because I faced a dilemma: whether to publish this work or to patent it. His timely advice led us to patent the work. Dr Pachauri had a keen interest in research, particularly in application-oriented research that would be relevant to the developing world. He encouraged originality and innovation and was willing to invest in such work. His approach to formulate a policy was to discuss the matter from all angles, pool the various viewpoints of colleagues, and arrive at a united approach. It was this approach that helped him build a unique institution like TERI.

> R R N SAILAJA BHATTACHARYA Senior Fellow (2006–)

A Personality Far Beyond One Can Visualize

Dr R K Pachauri was a rare personality. There was always much more going on in his mind than was easily discernible. His actions were such that it was wrong to judge the immediate outcomes because he mostly had some second, third, or fourth moves in his mind before we could see the actual result that he might have been aiming for.

Dr Pachauri had four more secretaries and he had the capacity of keeping each one of us busy. Throughout the day he had interactions with a number of employees of TERI because there was no restriction and everyone was free to walk into his office for his advice. A half an hour's meeting with Dr Pachauri would keep us busy for a week.

> I joined TERI as Executive Assistant to Dr Pachauri in April 2006 and until the day before his surgery on 31 January 2020, I had the privilege of having almost daily interaction with him, which was a valuable learning experience. My first interaction with him was on the day of my interview and I was flabbergasted at how he made the decision after interacting with me for just about three minutes. Every employee at TERI who joined before the first quarter of 2015 might have had this experience. He could judge a person simply by interacting with him or her for a few minutes.

My first day was twelve-hour long and it continued that way. There was no time to understand my work from my predecessor, who was with me for about ten days or so. Dr Pachauri had four more secretaries and he had the capacity of keeping each one of us busy. Throughout the day he had interactions with a number of employees of TERI because there was no restriction and everyone was free to walk into his office for his advice. A half an hour's meeting with Dr Pachauri would keep us busy for a week. There was no end to the scores of things he could handle in one day and after all this, he also found time to play cricket about which he was so passionate.

I found Dr Pachauri to be a superman. On many occasions, he would link up his commitments in different parts of the world and complete them in one trip. This would involve flying overnight to ensure that his time was used most fruitfully. He would spend the layover time at airports by speaking to us to ensure that all his emails were attended to each day. I cannot forget the COP 15 meeting in Copenhagen, when he accepted to speak at 26 events within two weeks (3–17 December 2007), all of which were held at and around the venue of COP 15. (COP is short for Conference of Parties that have signed the UN Framework Convention on Climate Change.) Apart from these commitments, he also held bilateral meetings with a number of people at the venue and hotels where they were staying. It is simply unimaginable how he managed this. He was absolutely amazing. Despite being so busy with daily affairs, Dr Pachauri kept himself abreast of all global affairs including politics, the environment, and stateof-the-art technologies. He was not only well aware of ongoing activities in different fields globally but was also aware of upcoming activities. There were instances when he would write or speak to political stalwarts mentioning about the possibility of their taking up a new portfolio after a few weeks and offered advice on how they should function in their new roles. He kept himself well informed about the upcoming reports and research in the field of the environment even after his tenure as chairman of the Intergovernmental Panel on Climate Change ended. It was amazing how he found the time to peruse all the reports so thoroughly. This updated knowledge in all fields aided him in building relationships with new contacts at all times, wherever he went. He had made acquaintances on every continent and made it a point to keep interacting with them at all times.

During his tenure as chairman of the IPCC, Dr Pachauri had interactions with several heads of state and many eminent personalities all over the world, all of whom had great respect for him and yet he interacted freely with people even at the lowest levels.

> Dr Pachauri spoke at so many events but on each occasion, we were surprised that until the very last moment he was busy with other issues and would hardly take out the time to prepare for his speech. There were so many occasions when he would speak extempore even without the use of PowerPoint and yet he delivered memorable speeches every time.

Dr Pachauri had eidetic memory. He could remember facts precisely. While dictating, he would refer to certain instances with exact dates of incidents that happened years ago. While dictating the matter for articles or books, he would open large tomes and locate apposite quotes within a minute or so.

Dr Pachauri was down to earth. During his tenure as chairman of the IPCC, he had interactions with several heads of state and many eminent personalities all over the world, all of whom had great respect for him and yet he interacted freely with people even at the lowest levels. Such was his simplicity.

Various reports brought out by the IPCC under the leadership of Dr Pachauri made the common person understand the challenges that humankind is facing as a result of global warming and its disastrous consequences. While he was the chair of the IPCC, well before some young people began coming forward to put across to the world leaders their frustration at the fact that they are doing nothing to protect the future of the younger generations, Dr Pachauri had realized that it is the youth of the world who have to take a lead in finding solutions for protecting our planet from disasters stemming from our actions and in convincing policymakers to take effective measures. To take forward his vision, he formally established the POP (Protect Our Planet) Movement on the Earth Day 2016 although this seed was sown in his mind many years ago. He was a climate warrior and his contributions to the field of climate change and his dedication have been unparalleled.

Dr Pachauri had a special knack for understanding and tapping the capabilities of each individual at the right place and in the best possible manner. By his deep analysis and knowledge of the capabilities and capacities of each individual he met anywhere in the world, and by harnessing that potential, he not only built TERI and all the organizations he was associated with but also helped the individuals concerned by introducing them to others wherever possible.

There was certainly much more in his mind than what he could share explicitly with all those who knew him; unfortunately, he departed from this world before we could take advantage of all his knowledge and wisdom. However, we should help make his vision a reality by putting in our best in whatever we do.

My last meeting with him was in the morning of 29 January 2020 with my colleague, Anoop. As we were leaving, he hugged both of us together, a moment we will cherish forever.

The world will always miss this distinguished luminary. May his soul rest in peace!

Remigius Fernandes Manager, Project Monitoring Unit (2006–)

Pursuing Dreams in Maharashtra

Dr Pachauri was one of the greatest men ever to grace the face of this planet. Today, we remember him for all that he was: a wonderful leader, the fastest email replier, a true professional, and above all, a benevolent human being.

Dr Pachauri left in his wake an institution the employees of which pride themselves on being a part of that institution. He imparted many gifts to his employees, including some brilliant pearls of wisdom: "Trust in your instincts and pursue your dreams with passion and cent per cent dedication." Dr Pachauri had the ability to light up a room by his mere presence, his charm, and his demeanour. In all senses of the word, he was a true gentleman.

Dr Pachauri ensured that we always gave our absolute best in whatever we did, irrespective of the assignment. He was a gifted man with many accolades to his name, including the chair of IPCC-but he was also the humblest man I have ever met. A few years ago, I had the honour of accompanying him to a meeting with the chief minister of Maharashtra. This was just after his acceptance of the Noble Peace Prize on behalf of IPCC. In the waiting room, we saw a large number of people gathered around one man. Upon enquiring, we found out that he was a well-known builder and developer from Mumbai. Having learnt this fact, Dr Pachauri immediately went over and made his acquaintance without once revealing who he was and what he had accomplished. He said, "Sir, I have but one request to ask of you. I want you to think about implementing a green approach in all of your projects. We must work towards a sustainable future and it will benefit the future generations a great deal." He then went on to share his concerns with the developer about energy use in buildings and how it bothered him when he looked at the many high-rise buildings in Mumbai. "How will we sustain all these buildings, Sir?", he asked. The developer heartily agreed, and promised to consider the request. Further, the developer also appreciated how a man with global reputation could be so humble and so dedicated to his beliefs. This incident made quite an impression on me and thereafter, to this day, I have never hesitated to approach people – be they powerful and senior ministers, bureaucrats, or businessmen - with requests related to sustainable development. Dr Pachauri showed me that no matter which walk of life you belong to, a kind word and good manners go a long way.

Dr Pachauri had a vision, dreams, and plans for TERI. He was very keen to establish a centre in Mumbai. He encouraged all of us to take up new projects, implement new ideas, and even for that matter experiment with our work regardless of whether we succeed or fail. He always supported the Mumbai office in its endeavours. He always followed up on matters related to the Mumbai centre, remembering even the minutest details, team members, associates, and partners. I often wondered how he managed to keep a mental record of all the initiatives. He was particularly happy to see our engagement with diverse stakeholders. He asked us to be patient and innovative in our approaches.

When we started work in Mumbai, it was like coming a full circle, as TERI as an institution had started its activities in Mumbai although the base was later shifted to Delhi. I was given the responsibility of identifying niche areas in Maharashtra for TERI and developing a good network of like-minded stakeholders. We began as a team of two people. Initially, we decided to promote TERI's publications. Since I am a book person myself, this quickly became my favourite task. I proudly sold the first book to an engineer who was keen to know more about energy efficiency initiatives of TERI and sent a message to Dr Pachauri. His instant reply was this: "Great! Well done! Now you are all set to reach out to at least 5000 people in the next one month. People should get all the good quality information our colleagues have painstakingly compiled. All the best wishes."

Dr Pachauri believed in small and humble beginnings but then sky was the limit for all of us in TERI. He showed us the path and we kept walking alongside him with full dedication and passion. Time just flies when you are fully engrossed in work that you believe in. This is so true for my tenure in TERI. We kept initiating new projects in the field of green buildings, climate change, wetland management, and nutritional security. Dr Pachauri not only always extended the required support and guidance but also kept encouraging us.

It was noteworthy to see the respect Dr Pachauri commanded from top officials of many organizations including government agencies and the private sector. He created a brand name for TERI.

'Lighting a Billion Lives' was one of his dream projects. In Maharashtra, we connected to the remotest areas through this project to provide solar lanterns to villages that lacked electricity. There were a few villages in particular where one had to cross two rivers using small rafts and travel through two patches of forest. When he learnt of this location and that we had provided the lamps to the villagers, he was particularly happy.

Dr Pachauri was always just one email away! We only had to send an email asking for his time, consent, approval, or comments—no mail ever went unanswered. Often, there would be queries and request for more details but decisions were always quick. I always wondered how he managed to address so many emails in a day, remembered all the details, names of more than 10,000 people who were in his close contacts, and even more important, accurate designations of all his contacts, which ranged from prime ministers and presidents of several nations to humble office attendants in Mumbai.

Dr Pachauri was and will remain an inspiration to countless employees and a genuinely huge part of our thinking. His memories and teachings will stay with us forever. May his soul find peace and tranquillity in heaven and may he continue to spread positivity and happiness.

> ANJALI PARASNIS Senior Fellow and Associate Director (2006–)

Green Buildings and Climate Action

India's global commitment to climate action includes green buildings, an area the foundations of which were laid by TERI for sustained and meaningful action. We, as a society, owe it to Dr Pachauri, a stalwart in advocacy against climate change, for creating the vision and enabling teams to work passionately towards ensuring resource optimization in the built environment.

In the next few hours, not only did Dr Pachauri go and meet the ambassador of that country but also spoke to the corresponding Indian ambassador, checked with the bureaucrats familiar with the issue, and assigned me to facilitate the visit of these professionals.

> Aligned with Dr Pachauri's vision, TERI developed a tool, namely GRIHA, to evaluate the performance of a building and its impact on the environment, which attained national and international recognition as a tool for measuring the efficacy of measures to mitigate the adverse effects of climate change. Dr Pachauri was instrumental in the integration of GRIHA within the policy framework of India, and I am grateful to have been on that adventure under his guidance.

Dr Pachauri stood by colleagues and gave them the confidence to fight and stand their ground. At one time, I was involved in forging a partnership with a well-established publishing house in Mumbai. The publishing house complained against me to the Director General, TERI. This letter was also copied to other directors in TERI, and to the Secretary of a ministry we worked closely with. I was quite certain that Dr Pachauri would not take kindly to the letter but on reaching office the next morning, I found a note on my desk, stating that I must send a befitting reply and inform the complainant to get ready for legal action. "You don't have to explain anything", was all he said as I left his office that day. But the fact that Dr Pachauri placed his trust in me has meant a lot and given me immense strength over the years.

Dr Pachauri listened, considered every apprehension we shared with him, found a solution, and ensured that we went on with every assignment. One such instance was when the news of my hesitation to work with a team of professionals from a certain country reached him, and I was summoned to his office. "What is the problem?", he asked. My hesitation was due to the fact that TERI was going to host a team of professionals from a country while in the midst of political tensions related to the border with that country. Dr Pachauri heard me out, made a joke about me 'betraying my country and doing something illegal', and asked me to leave.

In the next few hours, not only did Dr Pachauri go and meet the ambassador of that country but also spoke to the corresponding Indian ambassador, checked with the bureaucrats familiar with the issue, and assigned me to facilitate the visit of these professionals. It was an exciting time for me to organize that visit for the group of professionals, who send me new year greetings even now!

I joined TERI as a young graduate in 2006, and Dr Pachauri was a guide and mentor throughout my ten-year tenure until our last meeting, on 21 January 2020. I will always miss Dr Pachauri, and as Dr Ash Pachauri said to me, "Dad left us one big family. We will always be that way."

> Priyanka Kochhar Fellow, teri and Advisor, griha Council (2006–2016)

Close Encounters

What traits do leaders show? What characterizes a global personality that showed the way of sustainability to leaders of the world? What does it take to be Dr Pachauri? Well, don't expect an answer to that from me! But bear with me as I take you through a few anecdotes that, in my opinion, highlight traits of his that I found inspiring and have committed to carry forth in my relationships and my work.

Leaders have a communicable vision that they live by

Dr Pachauri's office, February 2006

With a vision to work on sustainability in the building sector and after months of searching during my postgraduation, the only place that I find, and where I subsequently apply for a job, is TERI.

After clearing my preliminary interview with Mili Majumdar, Pradeep Kumar, and Sameer Maithal, all of whom would be major sources of inspiration for me in my career, I now face my final interview with Dr Pachauri.

"I promise you this. Whatever you do here with us will contribute to the future of our country and to the greater good of humanity. You will enjoy working here."

"Why TERI? And how come you're opting for a job that would not get you nearly as much as your peers will get in the industry?" Asks Dr P, genuinely wondering what I was up to. As I sit across from him, already in awe after several months of Google searches and reading about TERI's work (particularly Mili Majumdar's books on sustainable habitats), I realize I hadn't thought of that aspect at all!

"Well, Sir, someone has to do something for sustainability in the building industry; it can't go on with reckless abandon, and I am aware that TERI has projects that work on just that – sustainable buildings – and I would love to contribute to that work."

He looks over his glasses that rest on his nose (and over what I guess is my cv in his hand) and says in his booming, clear voice, "I promise you this. Whatever you do here with us will contribute to the future of our country and to the greater good of humanity. You will enjoy working here." He goes on to add, "You may not get paid as you would in a corporate setup, though."

I hear those words, and I am sold. Hooked. Inspired. In an instant, Dr Pachauri communicated to me a vision (his vision?) that made me realize and appreciate that 'contribution, and service to the nation, and in the process, to the world' could amount to a real career choice for a young person.

Little did I know that I will live by those words for the rest of my life.

Leaders don't rest on their laurels. In fact, they don't rest at all!

Fifth floor Terrace, Darbari Seth Block, April 2006

"He personally addresses everyone? All of us?" I ask my colleagues Guruprakash Sastry (now the global head for sustainability at Infosys) and Yatin Chaudhary (now a senior researcher at TERI) in disbelief. "Where does he get the time?" They reply in calm yet surprised tones: "Of course! He always makes himself available to the organization! Do you know, you can readily take an appointment, walk in, and have a conversation with him?" says Prakash, as though it was obvious, wasn't it? I'm amazed. "Whenever he's in India, of course!" adds Yatin, smiling with delight.

Regardless of how high the honour, how grand a chair, how high a position he was entrusted to hold, Dr Pachauri never let it get to his head and was ever ready to share credit where it was due—with his colleagues in TERI.

I see what seems to me like the entire Darbari Seth Block gathered on the terrace, filled to capacity with the entire TERI family. Dr Pachauri faces us, relaxed, calm and clear in his communication, welcoming everyone and greeting them. I recognize a few people who take up seats in the front row: M M Joshi, Leena Srivastava, Alok Adholeya, Vibha Dhawan, Banwari Lal, Sameer Maithal, Akanksha Chaurey, Annapurna Vancheshwaran, and R P Singh. These were the people I have come to just about recognize over the course of the induction process. Dr Pachauri goes on to address us. I watch all the way from the back, listening keenly.

"Projects are gotten by going out into the field, and not by sitting around waiting for them to come to us. If you see something you wish to impact, by all means write a proposal, apply for a grant, or send it to me if you wish, come discuss it with me, and we'll see how to take it forward. We must generate projects and through them get funds and grants that can propel us forward. We can't ever afford to sit on our laurels and assume work will come to us."

These words, in my humble opinion, capture the essence of Dr Pachauri; regardless of how high the honour, how grand a chair, how high a position he was entrusted to hold, he never let it get to his head and was ever ready to share credit where it was due—with his colleagues in TERI.

I stand amazed and inspired by his words. Something flipped in my head that day. I know what kind of 'going out into the field' it will take for the success of the project we are working on, a little project with a big vision, called GRIHA (Green Rating for Integrated Habitat Assessment).

Leaders take people where they ought to be

India International Centre Annexe, September 2006

"You want me to do what, ma'am?" I ask Mili in utter shock and surprise. "Yes, you will make the presentation on GRIHA to the secretaries of the central government ministries; to (the then) Director General, Bureau of Energy Efficiency, Ajay Mathur; and to all the senior architects and engineers (who, by the way, are the who's who of the building sector in India). We shall present alongside other organizations working in the same area, and based on the votes from the stakeholders, India's national rating system will be selected."

I can't believe my ears. I mean, I know that Mili and Pradeep Kumar have given each of us full freedom in our work (something that they in turn received from Dr Pachauri, ever since the Jor Bagh days), but I'm merely few months old in TERI. "Does Dr Pachauri know this? I'm certain he wouldn't approve," I reply, trying to get myself out of the situation. "He has agreed, and is with us on this decision. We trust you will do a good job."

Over the years at TERI, I experienced a sense of clarity of purpose and a drive that gave us a tremendous sense of fulfilment in our work. And I think it was Dr Pachauri's clarity of purpose and drive that rubbed off on the organization.

> The next few days are a blur as far as I'm concerned, as I deal with my own nervousness and prepare to put my best foot forward. I wonder if Dr P, Mili, Pradeep, and Maithal know what they're doing. I really wonder. I realize later that I had no reason to doubt their magnanimity or their judgement.

> After the inaugural addresses by Ajay Mathur and by Ajit Gupta of the Ministry of New and Renewable Energy at the stakeholder conference for selecting India's national green rating system, Dr Pachauri goes on to deliver the opening address and concludes "I will now request my colleagues Mili Majumdar and Gaurav Shorey to present their proposal to you all." I am amazed at this value – another value that I carry forth into my own organization and life in general – to address all of us as 'colleagues' and doing so genuinely. He meant every word when he said it.

That day, the confidence he instilled in us enabled us make a strong proposal and had the stakeholders rule in our favour: GRIHA went on to be adopted as India's national rating system for green buildings under the solar buildings programme of MNRE, the Ministry of New and Renewable Energy, and that marked merely the beginning of India's journey towards a green building sector and paved the way for norms that, several years later, would have Prime Minister Modi add GRIHA to India's Nationally Declared Contribution towards mitigating the adverse effects of climate change.

Over the years at TERI, I experienced a sense of clarity of purpose and a drive that gave us a tremendous sense of fulfilment in our work. And I think it was Dr Pachauri's clarity of purpose and drive that rubbed off on the organization. But what amazed me was how far this sense of fulfilment percolated.

While travelling to meetings within Delhi or the periodic pilgrimages to Gual Pahari to show people around RETREAT, extended conversations with Trilok Singh and Joshi (our supremely caring drivers, each of whom had shared memorable moments with Dr Pachauri on hundreds of drives over several years) revealed how much Dr Pachauri cared for everyone across the spectrum of people at TERI.

Additionally, the secretarial staff, with whom we would dine daily, gave us keen insights into the greatness of Dr P. "He asked about the health of my son a few months after I had fleetingly mentioned it to him when he asked about my family", said Chitra, our secretary, her eyes almost welling over at the recollection of the gesture.

Leaders have a sense of responsibility and commitment towards their vision, regardless of circumstances

Dr Pachauri's Defence Colony office, winter of 2017

It's been five years since I've moved on from TERI to start my own company, an NGO in the sustainability domain. During this time, I have continued to serve as an advisor to GRIHA, a technical committee member and a trainer on GRIHA's certification programmes (yet another initiative that Dr Pachauri readily approved to take our mission to the entire country).

I've read about the legal proceedings that Dr P faces and I have a strong urge to meet him. I knock on the door of his office. He looks up and asks me to enter.

"Hi! How are you?" He asks, friendly and alive as ever, though visibly thinner than I recall. "For whatever its worth, Sir," I reply, "I wished to tell you that I owe who I am today to your leadership and encouragement, and my team and I are here for anything you may need us for." I frankly have no clue what I can do for him, if at all, but have to let him know nonetheless. "Well, thank you, but not at all." He replies without batting an eyelid, nor missing a breath. "It was your hard work and commitment that has got you where you are today and don't you forget that. Now, let's see how your organization and we can work together to further GRIHA."

Yet another humbling encounter with his generosity. I know a person when they make stuff up. Don't we all know ourselves enough, and what it takes to fib? As always, his reply was instantaneous, clear, and straight from the heart. And his focus was on the organization and what it needed, despite the odds that he faced then.

Leaders know that the only limit is in our thoughts

Dr Pachauri's home in Jor Bagh, December 2018

I am grateful to my colleague and friend Priyanka Kochhar, who suggested we go and meet Dr Pachauri. I needed advice, and Priyanka thought Dr Pachauri would give the right advice.

"Sounds great! You're proposing a total shift in the current value system from what we see today! I would suggest you start with a team of 300 strong. And see how you can take this to the world. It's really that simple, and your initiative deserves it."

I was surprised and amused. This was what leadership looks like: clear in its intention to take what can make a difference out to the world where it belonged.

Leaders have families that are generous-and allow them to be leaders

Central Courtyard, India Habitat Centre, 14 February 2020

I hear passers-by as I stand there, outside the ground floor seminar hall, where his body lies. "What's going on here? In all our years at IHC, we've never seen the courtyard so crowded ever."

That pretty much summed up the love and gratitude that the world had for Dr Pachauri, as also the gratitude we felt towards his entire family, who were just as generous in bringing his body to the TERI HQ for us to pay our respects, a rare opportunity that many of us, including me, would have felt very incomplete without.

> Gaurav Shorey Area Convener, griha (2006–2011)

Obsessed with Academic Ethics

I met Dr Pachauri for the first time sometime in 2002 in Geneva as we were staying in the same hotel, Mon Repos. He was yet to become the chairman of the IPCC (Intergovernmental Panel on Climate Change), but I guess the process was already on. His activities there might have been centred on the World Meteorological Organization (WMO), which is located within walking distance from the hotel. My activities were in the World Trade Organization (WTO) and interestingly also in the WMO building. While I had to meet several people at the WTO, which was just across the road, I also had to attend a conference we were organizing at the WMO building: WMO has good conference facilities, which it also rents out to outside parties.

Among Dr Pachauri's great qualities was giving due credit to younger colleagues for their work. In many academic and research institutes, it is quite 'normal' to publish as one's own the work done by someone else (of course a junior). But Dr Pachauri was different.

> We had a chance meeting at the hotel cafeteria during breakfast where a common acquaintance introduced me to him. At that time, I was working with CUTS, the Consumer Unity and Trust Society, in Jaipur and on international trade and competition policy issues. We had a brief interaction, and I still remember how he 'selfishly' utilized the time to expand his own knowledge rather than trying to tell us what all great work he was doing! He enquired about the kind of work I was doing and what all was happening at the WTO as it was going through a period of hectic activity post the launching of the Doha Round of negotiations. Little did I know that after a few years, I would be working with Dr Pachauri!

After about five years, I was looking for a change as I was thinking of relocating back to Delhi. One of my mentors, who happened to be a friend of Dr Pachauri, informed me that TERI was looking for a person like me. I was not very sure. But the person whose departure from TERI created the vacancy was also a friend of mine. So I discussed the matter with him and he also recommended that I apply for the position. But when I finally met Dr Pachauri in connection with this topic, I was somewhat surprised to note that he wanted to know whether I was aware of the problem of plagiarism and whether I strictly followed the relevant norms. I told him that I follow even stricter norms as I had worked on copyright issues as well. People consider plagiarism as a moral issue but I am also aware that copyright violation is a legal issue and I am quite conscious about the implications of such violations. He was quite pleased.

Dr Pachauri was a great leader and institution builder, which I realized after I joined TERI. A few months of my joining, the IPCC, of which he was

the head at that time, was awarded the Nobel Peace Prize. I realized what a stellar role he was playing in promoting the environment and climate change discourse where it is today.

Great leaders possess many great qualities. I would like to share one such quality that I saw in him. It was about giving due credit to younger colleagues for their work. It was about academic ethics. In many academic and research institutes, it is quite 'normal' to publish as one's own the work done by someone else (of course a junior). But Dr Pachauri was different. Once he was invited to write a chapter for a book that a reputed institute was publishing on the occasion of its golden jubilee. He expressed his inability as he did not have the time, and also because he did not work in that particular area. However, on their suggestion that he could ask one of his colleagues to write the paper, he advised them to request me to write the paper. He also advised them to deal with me directly.

On their request, I wrote the paper, and in about three months' time, I sent them the paper mentioning my name as the author. However, they got back to me saying that the invitation was to Dr Pachauri and hence, only his name should go as the author. I brought it to Dr Pachauri's notice, and he asked me to write to them that since Dr Pachauri does not even know what is in the paper, it should carry only my name. They replied to me saying that since all the other contributors were very famous people, it was fair (my emphasis) that Dr Pachauri's name goes as the author. Again I brought it to his notice. He was furious, and this time he wrote to them directly. What he wrote was something like this: 'It might be fair in your institute to publish someone else's work as your own but not in TERI. If the paper is acceptable to you then who wrote it should not be important. In any case it was written by a colleague of mine who is more knowledgeable than me in this area and has several important publications to his credit. You do not deserve a paper either from me or from any of my colleagues.'

He could easily give up the temptation of getting a paper published in his name without actually writing it—something very few people can resist. That was the time I also realized why he was so concerned about plagiarism when he was interviewing me! I had my share of disagreements and misunderstandings with him on some occasions. Nevertheless, keeping everything aside, we maintained a respectful personal relationship until his last days. He will be remembered for making TERI what it is today. The fact that TERI is going strong even after five years of his departure is certainly in a great measure due to the current leadership but also to a great extent due to the resilience that he created within TERI.

> Nitya Nanda Senior Fellow (2007–2019)

A Prophet of Science

I used to call him MP, for Mahatma Patchy—as a way to joke but also to express my earnest admiration. Like a mahatma, he had remarkable intellect, charisma, and, most important, a noble cause to fight for.

A specific message that Dr Pachauri was keen to spread was the importance of lifestyle changes to mitigate climate change. He used to conclude his presentations with the famous quote from Mahatma Gandhi: "Be the change you want to see in the world."

> Back in the summer of 2007, climate change hardly ever made headlines and I had never heard of Dr Pachauri or TERI, before a colleague advised me to send him my cv, for I was dreaming of leaving France to experience India. A few weeks later, I found myself in Delhi, taking on what would become the most amazing, meaningful, and enlightening professional and personal experience in my life. After a few weeks assisting Dr Pachauri in his IPCC outreach activities, I became even more aware and concerned of the terrible events to come because of climate change. A few months later, at the announcement that the Nobel Prize for Peace was awarded to the IPCC and to Al Gore (which resulted in a memorable explosion of joy and excitement in and around TERI premises), I felt so lucky and proud to be part of this historical moment. After that, I followed a relentless Dr Pachauri on his numerous trips around the world to give speeches and meet heads of states, and I realized his crusade was to make change happen. A crusade full of air travel and associated carbon emissions that would anger the most cynical - or sensible - of you. When asked about this contradiction, Dr Pachauri would sometimes ironically reply that as a good Hindu he believed in reincarnation and intended to compensate for his carbon footprint in his next lives. So, if one day you are looking for his reincarnation, remember to check out the monasteries.

> A specific message that Dr Pachauri was keen to spread was the importance of lifestyle changes to mitigate climate change. He used to conclude his presentations with the famous quote from Mahatma Gandhi: "Be the change you want to see in the world." In this way, he intended to make people aware of their own responsibilities and convince them to become the ordinary heroes in a new model of society that would value sobriety and solidarity more than materialism and individualism. "If there is one single action you should take to save the planet, then giving up meat is the most effective one." With this clear message, Dr Pachauri became a new idol among vegetarians around the world, while at the same time arousing a lot of opposition and derision. As a committed vegetarian myself, I was responsible for dealing with his numerous invitations to speak, build his arguments, and find the best ways to raise awareness on this divisive subject. A moment of glory came on 3 December 2009

with the hearing at the European Parliament of Dr Pachauri and Sir Paul McCartney. Both made beautiful speeches about the ethical and environmental nonsense of intensive livestock production. Here is a funny anecdote: there was so much excitement among Dr Pachauri's and Sir McCartney's staff at that time that the idea came to us to compose a song that would explain the tragedies caused by livestock rearing and call people to go on a plant diet at least one day a week. Indeed, it would have been an extraordinary duet from a rock star and a top scientist. For some reason that idea did not go through although no doubt it would have become a number-one hit. In one of his last emails to me, Dr Pachauri proudly shared an article he had written for an Indian newspaper. The article, titled 'Demolishing the meat mountain', aimed at convincing Indians to stick to their tradition of vegetarianism.

Calling for wisdom and tirelessly spreading the message of science, Dr Pachauri and his fellow environmentalists have changed the thinking of political leaders and forced them to focus on the environment. As the world suddenly faces the shock of the Corona virus, affecting our health and economic well-being, it is becoming clear that humanity is not invincible. Climate change is a more insidious threat, and it will affect our well-being and our existence, and the entire biosphere, much more seriously than any virus. We need the work and dedication of many other 'prophets of science' to build on Dr Pachauri's legacy and lead the way towards urgent action for a brighter future.

> ISABELLE RICHAUD Consultant, TERI Europe (2007–2013)

Dumbledore of the Climate Movement

Early

The impression Dr Rajendra Kumar Pachauri gave was that of a professional benevolent and wise figure among his peer group. My first professional impressions interaction with Dr Pachauri was at an event in Columbia University on a freezing winter evening in New York, a few months after IPCC (the Intergovernmental Panel on Climate Change) and Albert Arnold (Al) Gore, Jr, were jointly awarded the Nobel Peace Prize for 2007. This was a watershed moment for the entire scientific community and for the many scientists who had contributed to the IPCC's assessment reports. I was then working with Dr Cynthia Rosenzweig, a strong woman climate scientist at the Goddard Institute for Space Studies (GISS), a laboratory in the Earth Sciences Division of NASA's Goddard Space Flight Center, which is affiliated to the Columbia University Earth Institute in New York.

TERI had a very open, non-hierarchical work culture where ideas were encouraged and discussed; in fact, the culture at TERI was similar to American work culture but with the warmth of a close-knit Indian family.

> Many climate scientists at GISS including Dr Rosenzweig were members of the IPCC working groups and had worked closely with Dr Pachauri over the years. Dr Pachauri was known for his composure and rarely displayed intense emotions of anger or fear. He was considered an eccentric, who used humour to make people feel comfortable and was whimsical in his appearance including his signature triangular beard with a white stripe. He was seen as an authoritative but approachable individual who would listen to his colleagues and to anyone who approached him for advice. During my work in New York at the Urban Climate Change Research Network (UCCRN) at GISS, Dr Pachauri served on the steering committee of the UCCRN, and the team benefitted from his guidance and wisdom. It was remarkable that despite so many other full-time responsibilities and commitments, Dr Pachauri was always there to guide other climate initiatives around the world. His was surely the Professor Albus Dumbledore of the climate change movement.

TERI Family In 2009, after two years in USA, I decided to come back to India. I was warned by my friends that I would never like the work culture in India because it is very hierarchical. Having grown up in Mumbai, New Delhi was already a cultural shock. I decided that I would return to USA for PhD after working for some time in India. I started working as a researcher with TERI in New Delhi with Dr Ligia Noronha, another strong and tough woman. Contrary to what I was told about Indian research institutes, TERI had a very open, non-hierarchical work culture where ideas were encouraged and discussed. In fact, the culture at TERI was similar to American work culture but with the warmth of a close-knit Indian family.

Days turned to weeks, weeks turned to months, and months turned to years and I did not go back to USA to pursue a PhD as there was so much learning in TERI, much more than any doctoral course could give.

NicholasDr Pachauri would often have conversations with me on NicholasGeorgescu-Georgescu-Roegen, a scholar whose writings inspired the field of ecological
economics and such movements as degrowth. He wanted TERI to
encourage more disruptive and radical ideas instead of only reformative
incremental thinking and so he wanted to institute an award in the honour
of Nicholas Georgescu-Roegen, to be given at TERI's flagship event every
year. Dr Pachauri entrusted me with the responsibility of identifying the
members for a panel of judges and of convening the awards, a role which I
accepted gladly.

Dr Pachauri tweeted and wrote about all these issues and I edited his write-ups including tweets. Yes, tweets: like a sincere student, he would draft a tweet and check with me whether the hashtags and tags were right.

> In 2012, he decided to create a new division in TERI to focus on green growth and asked colleagues to share their ideas on what the new division could work on. I remember disagreeing with Dr Pachauri on the name of the division, because I believed that the development paradigm should be 'degrowth' and not 'green growth'. In his signature style, Dr Pachauri listened patiently and then reasoned with me, saying that green growth would be a more pragmatic policy; I countered by saying that a pragmatic policy for India could be 'sustainable growth' or simply the well-accepted paradigm of 'sustainable development'. To this, Dr Pachauri's response was that instead of wasting time on semantics, it is more important to solve a problem-it did not matter whether the solution was labelled green growth, green economy, sustainable growth, or sustainable development. And to be able to work on a problem, one needed to raise resources for interdisciplinary research and there was opportunity in green growth as funders were adopting this as a norm. Finally, he said that being part of a think tank such as TERI, researchers should be able to influence present discourses on green growth, to be more responsive and flexible to problems, as well as to offer more disruptive solutions and policy paradigms such as degrowth and post-growth. Dr Pachauri had convinced me, and it was easy to take forward this vision with a team of young researchers. A little more than two years later, an independent study on green growth identified TERI as "one of the institutions with the greatest capacity to address green growth in a cross-disciplinary manner" (OPM 2014). Dr Pachauri's vision surely deserved the credit, as did many of his colleagues who stood with him through thick and thin, namely (presented here in no particular order) Kanwal Nayan Singh, Suneel Pandey, Prodipto Ghosh, S Vijay Kumar, P D Tiwari, Aparna Vashisht, Rumbidzai Faith Masawi, Nishant Jain, Ashutosh Senger, Rinki Jain, Aastha Sharma, Yuge

Ma, Ananda Vadivelu, Anandajit Goswami, Manish Anand, Saswata Chaudhury, M K Bineesan, and Ninika Dhawan.

Student andIt was 2015, and Dr Pachauri felt that I should enrol in a PhD programmeteacherand get a doctorate degree and also take some time to work in an academic
setting. In July 2016, I enrolled in Jawaharlal Nehru University (JNU) after
I was offered a seat early that year. While on study leave, I continued to
visit Dr Pachauri and his family and, among other topics, also talked about
student politics and course work. Dr Pachauri was keenly interested as well
as concerned about the developments in JNU and in India.

The greatest lesson that I learnt from Dr Pachauri was that of standing with colleagues and with their family in times of grief and need.

From early 2018, I started volunteering with the World Sustainable Development Forum and the Protect Our Planet Movement, two organizations that he had set up. I mentored his young colleagues and also later became Dr Pachauri's Twitter tutor and blog editor. He had a health setback in mid-2019, as a result of which he could not travel. After staying away from social media for a very long time, in 2019, Dr Pachauri started following Twitter and social media after such movements as 'Fridays for Future' and 'Extinction Rebellion' came up. That year saw many setbacks to the environment, what with the Amazon fires, Australian bushfires, and another stalemate in the round of deliberations at the IPCC. He tweeted and wrote about all these issues and I edited his write-ups including tweets. Yes, tweets: like a sincere student, he would draft a tweet and check with me whether the content, hashtags, and tags were right. Dr Pachauri's keenness to learn was so amazing that it inspired a social media un-savvy person like me to learn about twitter and teach. The twinkle in his eyes when he learned something new could inspire so many.

The cause lives My last interaction with Dr Pachauri was in mid January 2020, one day before I was to go on a vacation with my parents. Normally he would be excited about colleagues spending time with their family but this time he did not seem too happy and even told me not to go albeit indirectly. I found that very odd and thought that he did not mean it, failing to sense that he was unwell and that he had a major surgery planned ahead. The last message that I exchanged with Dr Pachauri was on 25 January: I wrote to him from Vietnam, wishing him a happy lunar New Year; as expected, he responded immediately. Dr Pachauri went for a surgery in late January and I never got to see him conscious on my return from the vacation. Doctors had given up hope and Dr Pachauri breathed his last on 13 February, around 8 p.m., surrounded by his family and his Twitter tutor. The greatest lesson that I learnt from Dr Pachauri was that of standing with colleagues and with their family in times of grief and need. I wanted to be with his family, as Dr Pachauri, his colleagues, and his family were working in full

swing, preparing for the World Sustainable Development Forum (WSDF) to be held in Durango, Mexico, about three weeks later. When the cremation and last rites were done, Dr Pachauri's son, Dr Ash Pachauri, with support from his colleagues and family, went back to work on the WSDF and the POP Movement.

The WSDF Durango was a fitting tribute to Dr Pachauri, with participation from 25 current and former heads of state and government and more than 2000 people including more than 1200 youth from 27 countries across the world. Lord Alfred Tennyson said, " 'Tis better to have loved and lost than never to have loved at all." Dr Pachauri would have said, " 'Tis better to have lived, loved and created something that can never be lost." Dr Pachauri set rolling a movement on climate change, and this cause lives. Dr Pachauri too is watching and smiling.

Reference OPM. 2014. Scoping green growth challenges and opportunities in South Asia, p. 64. Oxford: Oxford Policy Management. 76 pp.

Shailly Kedia Fellow (2009–)

A True People's Person

It was in late 2007 when pictures of Dr Pachauri and accounts of his work began circulating in leading magazines and television channels. This was the time when the Intergovernmental Panel on Climate Change, of which he was the chairman, was awarded the Nobel Prize and it made every Indian proud. I began reading about his research and his organization, TERI, which he so passionately nurtured during his lifetime. It was in 2010 when I met him for an interview in his office and was deeply impressed by his approach towards employees, whom he truly considered human resources, and his vision of training people and sharpening their skills.

Once Dr Pachauri observed a fast, probably inspired by Gandhiji, announcing that unless everyone worked hard to get payments that were due and push to complete projects on time, he would not eat. Obviously, that hit us hard and he achieved his objective.

I worked with him for five years, until 2015 and during this period, our discussions centred on recruiting talented young professionals. We would talk about retaining the outstanding ones and ways to constantly engage them with the organization. He would remark, "Give opportunity to the most meritorious candidates but focus on those who possess honesty and creativity." He made sure that we gave him a slot during the orientation programme for new recruits so that he could connect to each one of them, ask them questions, and make them comfortable to approach him directly. He would quote several examples from his early career to motivate and value new staff, urge them to think out of the box, create new ideas, and keep the child in them alive.

Dr Pachauri had an aura, a positive vibe around him, which drew people to his magnetic personality. He had immense power to influence, which was clearly evident if we look at how he steered the IPCC members towards a common goal within a stipulated time frame without having much authority over them.

Whenever my team members or I used to go to him with our departmental plans drawn up to train staff, he would listen to us with full attention and utmost humility. He would either get convinced or convince us when he disagreed with any item in our plan. It was so easy to work with him as a leader because he was open to viewpoints of others but at the same time had his strong opinions and clear thoughts on what he believed and wanted to do. It may sound simple, but it is rare to find a combination of intelligence, leadership, grit, and approachability.

Value for time and high financial ethics were two of his principles he lived by and tried to imbibe in every TERIER (that's what we fondly called TERI staff). Almost always on time, he would always take the trouble to let others know of delays if any amidst his super busy schedule. I emulated some of his time management habits such as forecasting not only the tasks for each week, month, and quarter but breaking the tasks down into planning, conceptualizing, coordinating, and execution. I recall designing the content for a workshop on time management skills for directors of divisions within TERI, a workshop that Dr Pachauri wanted to conduct himself. In this workshop, he introduced participants to the 'eat the frog' trick, which involves tackling the toughest job first and going for it straightaway. He was a true role model for those who want to see how much one can accomplish in a day. Irrespective of his crazy flight schedules and travel across the globe, he would accomplish a variety of tasks seamlessly one after the other wearing different hats. Once he came back from Pakistan early morning with a suitcase full of 'rewari', which was distributed to all staff. At the end of the month, he would remember to ensure that everyone got their salary for the month. Once he observed a fast, probably inspired by Gandhiji, announcing that unless everyone worked hard to get payments that were due and push to complete projects on time, he would not eat. Obviously, that hit us hard and he achieved his objective.

Dr Pachauri remembered everyone's name and the project with which they were associated, which shows that he was truly interested in people. He would glow in the staff meetings, joyfully talking to people of all age groups. He would gorge on samosas and jalebi with everyone, having fun with team members on the beautiful terrace. He would give 'Accolades', a scheme to appreciate employees for a cost-cutting measure that they undertook or for winning a proposal.

He was most excited on the Gual Pahari cricket grounds where he would bat like a teenager and wanted him to be treated as one of the members of the cricket team. Always full of gratitude towards his guru, Mr Darbari Seth, the founder of TERI, he once quoted, "In life or in an organization, draw a circle around you which defines your scope of work and excel in the area of expertise. You will soon see that it will positively impact others around you and gradually that circle will expand. Then you can make more constructive contributions, build trust and consensus."

While I write this memoir, hundreds of images flash past my mind of those impactful years spent in TERI under his leadership. I remember desks in the office decorated with personally signed birthday greeting card sent by the Director General. I remember his genuinely written condolence message when I lost my father. He was undoubtedly a father figure, and his presence would energize us. He believed that young professionals can take charge and deliver if given a chance, and he discouraged unnecessary hierarchies, which constrain originality and imagination. He was someone who believed that irrespective of the position in the organization, everyone can have an impact and make a change.

> GEETIKA SHARMA Deputy General Manager, Human Resources (2010–2015)

Remembering Dr Pachauri

Great Leaders are made, not born. Dr Pachauri's leadership was his translation of vision into reality and his belief in the unbelievable and he motivated us in this journey along with him. Dr Pachauri's going away has been a loss to all of us who gained a great deal by his association, and we are blessed to be part of the organization that he built.

Personally, July 2013 was a time of reckoning for me: it was the year I joined TERI. I first met Dr Pachauri when he interviewed me for a job. I didn't know what to expect because in my mind he was an enigma. I was pleasantly surprised to find him very polite and casual and he made me feel very comfortable during the course of the meeting. As they say, first impression is always the last impression! I was amazed by his charismatic personality and could sense a mystical aura about him, emanating perhaps from the uniqueness of his persona. I was fortunate to get his nod to be on board and soon got a call from TERI's human resources department and an offer of appointment. That was the beginning of my journey with TERI.

A leader isn't someone who forces others to make him or her stronger: dynamic leaders are those who are willing to lend their strength to others so that they may have the strength to stand on their own.

Under his leadership and guidance, I continued to grow. Despite my 20 years of professional experience, I found there was always something to learn, and I continued to update my knowledge and develop new skills. My roles and responsibilities kept increasing and apart from protocol duties, I was entrusted with important administrative tasks under his directions. Dr Pachauri was like a chess grandmaster: he recognized what was unique about each member of his team – their strengths and weaknesses – and used this understanding to draw out the best from each individual. I am, therefore, not surprised that we were always ready to go the extra mile for him. As my journey progressed, I was blessed to receive the roll of honour from TERI. I shared this news with Dr Pachauri by sending him a message and thanked him for having given me an opportunity to be part of the TERI family. His response was, "Heartiest congratulations. Everyone in TERI must share your sense of pride. Well done." I was, to say the least, ecstatic!

Dr Pachauri's presence can be felt in TERI even today. He has gone yet he is always here. He will be remembered for his multiple and diverse qualities: leadership, skills in both verbal and written communications, oratory, diplomacy, the ability to create and nurture institutions, social entrepreneurship, and many more. No wonder he has left behind the legacy of a multidimensional organization with capabilities in research, policy, consultancy, and implementation on both national and international platforms.

An author, a passionate cricketer, but indeed a simple man at heart with

a charming smile—these are the facets that made Dr Pachauri so special. "Sir, you will be the star that shines over us and will continue to inspire us and be our role model. We promise to keep your legacy alive!"

A leader isn't someone who forces others to make him or her stronger: dynamic leaders are those who are willing to lend their strength to others so that they may have the strength to stand on their own. Thank you, Dr Pachauri, for being that leading light and pillar of strength for all of us at TERI!

> Dr R K Pachauri, You empowered us With the power of knowledge You motivated us With the best tutelage

You helped us move ahead With unending motivation As a leader and human being

You are a true inspiration!

SANGEETA BADHWAR Senior Manager, Coordination (2011–)

My Midlife Course Correction

Dr Pachauri led an exemplary life and impacted many lives—of which mine is one. He has impacted my working life so deeply that whenever I feel low when at work, I recall his allegiance to work. Dr Pachauri's exceptional dedication, devotion, and commitment to his work and his leadership style always inspire me.

Many times I was witness to his steely determination: sometimes he was not well, and playing was an ordeal for him, but he would sit in the dressing room for a while and then – I don't know by what force he could summon – he would get up and be ready to play: the most amazing part was that he would be fit after playing the match.

> I cannot ever forget him because he steered my career, and that too when I was nearly forty. I had never imagined such a change of course for the better at that stage of life. Indeed it was a miracle that he should choose me: I was manning a travel desk at the time, and I am forever grateful to him for the immense faith he showed in me and for giving me the opportunity to handle a whole range of activities including cricket, general administration, and support services at the large TERI Gram campus in Gual Pahari.

I joined TERI on 1 December 2011, and I am delighted that ever since, I have had many opportunities to interact with Dr Pachauri whenever he would visit TERI Gram to attend meetings, to accompany some VIPS, or to play cricket. My memories of Dr Pachauri related to cricket are endless. Many times, I was witness to his steely determination: sometimes he was not well, and playing was an ordeal for him, but he would sit in the dressing room for a while and then - I don't know by what force that he could summon - he would get up and make himself ready to play: the most amazing part was that he would be fit after playing the match. Whatever qualities one can imagine, dedication, sincerity, extraordinary concentration, a cool nerve and yet the killer instinct and a never-say-die fighting spirit, exceptional leadership skills, and many more-he would show all of them when on the cricket ground. His presence was the key factor in motivating the TERI cricket team. It was truly a privilege that I had the opportunity to observe him at close quarters and witness all those qualities and to learn so many great lessons from him. Whenever I approached him for advice, I found his guidance to be valuable and encouraging. Whenever he was on the campus, his way of dealing with different situations, his fighting spirit on the pitch, his powers of observation, and his working style always imbued me with energy and a positive drive to work. Over time, while working for Dr Pachauri, I began to sense the gradually developing integrity, sincerity, and commitment to work profile in me because of this synergy with him. I always remember

his words: "Whatever you do, do your best, and that must be of very high standard." I have adopted this as a *guru mantra* and I always do my best to practise it. As I look back over my nine years – and counting – in TERI, my outlook and approach to work have advanced my career, and all this because of the rich and rewarding experience in the company of Dr Pachauri. Yes, he worked for the world, and I am both lucky and proud that I worked under his guidance and in his company. Where I stand today would never have been possible without the direction and guidance from Dr Pachauri.

> VINAY PATHAK Deputy General Manager, Administration (2011–)

A Maverick Leader

'Aaap kya karenge' (Hindi for What will you do?) was the question Dr Pachauri lobbed at me as part of my job interview at TERI in May 2011. That was my first interaction with him. Today, when I look back after almost a decade, 'Aaap kya karenge' has come full circle. Each time I take a decision, execute it, and follow it up, I am constantly reminded of those three words. They not only come as a question but act as a guiding principle. Over the course of these years, I began to understand what Dr Pachauri expected of me when he asked that question: extraordinary dedication in whatever I do, professional integrity of very high order, mutual trust and faith, carrying everybody along despite disagreements and unstinting loyalty to the organization—Dr Pachauri did not merely expect these qualities in others but even practised those himself to the hilt.

Dr Pachauri's communication skills proved to be a turning point in the history of climate science when people began to accept the reality of climate change. A never-say-die attitude adorned his personality. The controversy around the Fourth Assessment Report of the IPCC, meant to deter him, made him even stronger and determined to the cause. In his own words to the naysayers: "They can't attack the science so they attack the chairman, but they won't sink me. I am the unsinkable Molly Brown. In fact, I will float much higher." During his stint as the chairman, IPCC won the Nobel Peace Prize for its unparalleled work on climate change.

Dr Pachauri's communication skills proved to be a turning point in the history of climate science when people began to accept the reality of climate change.

His problem-solving abilities could be attributed to his training as an engineer. He demonstrated this ability in the creation of sustainable and green assets. One such fine example is his vision to set up facilities in TERI Gram, a 40-hectare campus at Gual Pahari village in Gurugram on the Gurugram-Faridabad road. Dr Pachauri saw this facility as a crucible for researchers, a place where different viewpoints, styles, theories, etc. are mixed, to innovate and he provided them with state-of-the-art laboratories. The facility was well-equipped to help researchers imbibe the philosophy 'Work hard, play harder'—a philosophy Dr Pachauri practised by being in TERI Gram every Saturday whenever he was in India. An avid bowler himself, he played like a young kid - although he was in his seventies then - fuelled with the desire to take wickets. His 767th scalp was as late as in October 2019. His presence at TERI Gram served a dual purpose: he could play cricket and, at the same time, connect with the entire staff at TERI Gram. This was a win-win situation for the organization as the world would soon see that this facility became a place for many such exciting platforms including the TERI Prakriti School, the Nanobiotechnology

Centre, and the plant tissue culture unit. Another engineering insight of his was setting up of a unique sustainable facility known by the acronym RETREAT (Resource Efficient TERI Retreat for Environmental Awareness and Training), which deployed many sustainable and energy-efficient devices for space heating and cooling including earth tunnels and solar chimneys.

Dr Pachauri had a flair for creating self-sustaining assets and facilities, which were like his own children to him. In his daughter Shonali's words, "TERI was the sibling that we were all jealous of."

His vision behind the TERI University (now TERI School of Advanced Studies) was to see TERI grow as a research institute. He believed that the university would be a source of intellectual inputs to drive research in TERI. It was also necessary to take TERI's findings and philosophy to the younger generation, and the university was to be a vehicle for that. TERI's researchers also needed to be challenged by younger minds willing to look at things in unconventional ways, and the university would offer that challenge. Likewise, Dr Pachauri also had a vision to set up a chain of schools. The schools, to be named TERI Prakriti Schools ('prakriti' being Hindi for nature), were meant to prepare future leaders for a sustainable planet. Dr Pachauri brought in Lata Vaidyanathan, who created an exclusive faculty and a well-researched curriculum and inculcated into the pupils a concern for sustainability. Unfortunately, the school had to be closed down. Dr Pachauri imbued these children with values that set them on the right path to excellence. His professional and personal life was synonymous with TERI. In his capacity as the President and also as a member of the governing council of India Habitat Centre, he made the centre a self-sustaining venture by introducing revenueearning facilities and efficient management to keep expenses low. Today, India Habitat Centre is one of the most happening and sought-after places worldwide. Dr Pachauri was also a member of the board of trustees of India International Centre and vice president of the Bangalore International Centre, which he set up initially in TERI's southern regional station in Bengaluru.

A man who knew the importance of using his words judiciously, Dr Pachauri had a great appetite to build relationships and was very particular about acknowledging gestures, communications, and performance. In the last eight years, I was privy to many stories and anecdotes with which he used to regale me. A common thread in all these anecdotes was his desire to nurture relationships through personal warmth and love for the person. Such exchanges, which became more frequent in the last two years, were often laced with the exotic spirits that he brought back from his travels across the world. He had a stupendous international reach, which was evident from the galaxy of speakers who would attend the annual Delhi Sustainable Development Summit, TERI's flagship event. Getting as many as eight heads of states to attend an event organized by an NGO speaks volumes for his leadership. He also had friends in Hollywood: Arnold Schwarzenegger attended the DSDS twice, and Dr Pachauri's association with Hollywood extended to his being an occasional scriptwriter.

Dr Pachauri believed that we had a long way to go in winning the battle against climate change. According to him, the only way out was to mobilize youth, who constitute 25% of the world's population, because it was their future that was at stake.

> Another example of his networking acumen was to find partners to fund his idea of providing solar-charged lanterns. TERI started the campaign 'Lighting a Billion Lives', a hands-on approach to implementing solar technologies on the ground. The campaign was an instant hit globally, and many donors came forward to support it. We took this campaign even to the interiors of North-East India, for which we used Assam Rifles deployed there. Thanks to Dr Pachauri's vision, the campaign spread its wings overseas to Africa and Mexico.

> Dr Pachauri treated TERI as an extended family. Although conservative in offering compensation packages, he offered a security net to all colleagues and their families. In one of the meetings when a senior director mentioned the relatively high salaries of drivers, Dr Pachauri cut him short and told him not to be a bean counter. He also expressed the joy one gets from seeing the children of subordinate staff prosper and recounted how some of those children who graduated from such prestigious institutions as the Indian Institute of Management in Ahmedabad and several reputable engineering colleges have landed themselves well-paid jobs. He also mentioned with pride how many of our colleagues have managed to have a home of their own in Delhi by availing themselves of loans from the institute.

> Dr Pachauri believed that we had a long way to go in winning the battle against climate change. According to him, the only way out was to mobilize youth, who constitute 25% of the world's population, because it was their future that was at stake. To quote Dr Pachauri, "Dealing with climate change requires people-based action driven by knowledge about the problem and its solution." For this, he set about mobilizing the youth of the world for knowledge-based action and partnership. The Protect Our Planet (POP) movement was conceived and was set up in 2016. At the same time, Dr Pachauri was also aware of the need for a platform on which heads of states, ministers, technology providers, the academia and members of civil society would converge to mobilize global action. He launched the World Sustainable Development Forum as a global initiative to promote and mobilize global actions for effective implementation of both the Paris Agreement on climate change and the Sustainable Development Goals adopted by the UN General Assembly. The forum was to be a knowledge provider and facilitator in implementing the actions required under these two sets of agreements. Today, the WSDF enjoys the support of distinguished leaders from across the globe as its patrons and is in a unique

position, because of its convening power with those who can act, to meet the priorities of society defined by the Paris Agreement and the SDGS. Both WSDF and the POP Movement were conceived by Dr Pachauri during his last few years in TERI and he set the ball rolling after he left TERI. In a way, they are siblings of TERI.

Personally, Dr Pachauri led a frugal life, boasting of a well-maintained 40-year-old wardrobe. His food habits were very simple too: he would often have a roasted corn on the cob from a roadside vendor as his working lunch at work. It was the quality of work that gave him his identity and he was often a role model for many in the simple way in which he conducted himself. Another aspect worth mentioning is the way he connected with his colleagues, sharing whatever he had: whenever he returned from his trips abroad, he would share the saved-up chocolates with all, leaving them on the table for his TERI colleagues, just like a Santa. His door was open to all and behind that door was an extremely patient listener who would welcome anybody with the vaguest ideas which he took pains to listen to and implement them if practical, and showed ways to turn the impractical into possible. He enjoyed his drink; the last drink we had together was at the meet of the Old Martinian Association (La Martinère College, Lucknow, his school) in November 2019 at the India Habitat Centre. A multifaceted personality, he was also fond of good music and singing.

Dr Pachauri was a maverick, leading with unconventional ideas and ground-breaking strategies. For him, that was the way to lead, compete, and succeed. One thing was sure, that under him TERI made a place for itself and as a brand gave a head start to those who would succeed. It is a stable ship with a course set to realize the dream of a sustainable planet. Today when people ask me my identity, I say with pride that my identity is TERI, one of the finest institutions in the world.

> Sanjai Joshi Director, Administrative Services (2011–)

Eternal Reflections

Does the mind envisage such accomplished grandiose, or it is but a haze progressively shaped by harnessed prospects in a resolute life-walk? What keeps it aflame during uncertain opportune waiting? What feeds its faith through bleak winter months of despair and impeding

walls of peril? What navigational toolkit unwinds the political waters that threaten the

What navigational toolkit unwinds the political waters that threaten the horizon?

What gene enables a labyrinth of deep connections, inspired loyalty and profound amplification?

What stirs the soul to brew cosmopolitan ingenuity and root it home, compelling the global to visit its nest?

What keeps the umbilical cord steadfastly rooted in foundational ethos despite illustrious heights, enabling the mind to dream and grow beyond zenith?

In crushing tragedy and shattering loss what resurrects the spirit to sprout newlings?

In us these boundless strengths replicated is the only apt epitaph.

I treasure my time at TERI University (2011–2013). Among notable life moments was meeting Dr Rajendra Kumar Pachauri. The first encounter was only a glimpse. A towering frame glided in as university staff scrambled to keep pace. I do not remember what had brought him to the university that day. My impression of his zestful movement was that of a programmed man whose every second had to be accounted for. Everyone else tried to catch up both with his momentum and his vision.

At the end of the three-week programme, Dr Pachauri in his signature graciousness, hosted a luncheon for the participants. He listened attentively to participants' comments on course evaluation. His sharp eyes darted with interest at whatever set his wise mind ablaze. He had the foresight to identify outstanding participants and to build international bridges.

> As my rigorous, multidisciplinary master's programme in Sustainable Development Practice came to an end, and thus my time in India, I penned an appreciative email to the Chancellor to express my gratitude for the transformative experience. He responded enthusiastically by requesting for a meeting. Even more impressive was the effort he made to fulfil the appointment. Dr Pachauri's schedule was so tight that he came from an international flight straight to his office to meet me. My flight out of India was scheduled the same evening. I will forever cherish his magnanimity towards a mere student.

It would take a year for us to meet again. Zimbabwe was not ready for my forward-thinking qualification. In an email I gave Dr Pachauri an update, suggesting how the university could better assist with job placements. Again, he responded unequivocally, "Come back to India and use your knowledge to help Africa." I am not sure if he had a particular plan in mind then, but one of his greatest strengths was exploring and forging alliances to advance TERI's work. He identified the Green Growth Strategies group in TERI as a snug fit for me. He was dead right! The GGs group was the heartbeat of creative origination, ideation, incubation, and trendsetting. It was led by a very progressive, super brilliant, and talented mind that was generously empowering, cosmopolitan, wholesomely supportive, and professionally astute. Ms Shailly Kedia and her team of versatile and vibrant young minds made my time in TERI a rich and joyous roller-coaster.

On my very first day with the GGS group I was sending international invites for the Special Course on Social Enterprise for Sustainable Development organized under the auspices of the Ministry of External Affairs, the Government of India's Technical and Economic Cooperation (ITEC) programme, and the Special Commonwealth African Assistance Program (SCAAP). Within a month, I was a resident hostess at Gual Pahari, coordinating the implementation of the special course, including field trips. I had a diverse group of participants from Bangladesh, Bhutan, Nepal, Uganda, and Zimbabwe. At the end of the three-week programme, Dr Pachauri in his signature graciousness, hosted a luncheon for the participants. He listened attentively to participants' comments on course evaluation. His sharp eyes darted with interest at whatever set his wise mind ablaze. He had the foresight to identify outstanding participants and to build international bridges.

Soon after the ITEC and SCAAP came the Delhi Sustainable Development Summit. I had already transitioned into pioneering South– South (India–Africa) Development Cooperation through knowledge exchange on climate resilient green growth. With sweeping swiftness, enabled by the GGS team's logistical efficiency, I developed a working relationship with the Zimbabwean embassy in India. It is in this context that the Zimbabwean Minister of Environment and Tourism invited GGS to a business dinner during his visit to India. The group discussed possible areas of collaboration—and was ready with concept notes the next day. To date I still miss the efficient execution of tasks, which was synonymous with GGS. I understood then that the leadership of the 'gliding towering frame' was alive in GGS and TERI. The Delhi Sustainable Development Summit was so noteworthy that it fostered a sustainable relationship with the diplomatic community in New Delhi. In fact, the Zimbabwean embassy became our launch pad to all African events in Delhi.

As I started to reach out to the African Regional Economic Blocks, the African Union, and the African Development Bank, Dr Pachauri assigned Distinguished Fellows to guide us. He would personally write introductory correspondence to the heads of the organizations as we sought passage. Meanwhile, with Shailly Kedia's support, I started publishing as well as giving institutional presentations on Africa. One day Dr Pachauri astounded me by coming to my desk to apologize personally for having missed my presentation because of a schedule conflict. The support I got from him starting from my being given a place in the GGS group and his thoughtful leadership will always be an inspiration. I strive to be equally empowering to others because not only is it a precious rarity in the benefactor but a life force to the recipient.

Then the India–Africa Summit happened, and we added another success to our tally. The Green Growth Strategies group met the then Zimbabwean president, His Excellency R G Mugabe. We presented a proposal for an integrated energy plan. Our delegation included Dr Pachauri. He was going through a very trying time, yet he rose above his personal challenges to advance the mission of TERI. He truly put TERI first.

We remained in touch beyond TERI. He became 'Baba' and advised me to concentrate on joining my husband in USA. Baba put effort and time to nurture and maintain relationships beyond work. In many ways he viewed equity and sustainability as opportunities to diffuse power asymmetry and champion environmental justice. To those of us whose lives he touched, let us honour his larger than life spirit by being true to sustainability.

> RUMBIDZAI FAITH MASAWI Volunteer Research Fellow (2014–2016)

A Fine Environmentalist Who Led By Example

अर के पश्चीरी द्वीकी पर्यक्रमाहित रकने वालां H R 200 विख्य भी वस नाम से हरू मान्म की उनस करने का अगवसार मिला, उनके साग्र मादें में साफ्ता करना जाहता सोर प्रवास के सारान जाव -41 H41201 प्रभावरण संरक्षण ही अग्नी हन 4401 3224 सीर करता का आधिका सिक उपयोग अगो 17 क बढावा वर्धा जल संभय का छोटसाहन ! पंथावरण संरक्षण के साथ-साथ रन्थानी भ रोजगार सूजन की खात बार-बार उन्होंने unenain 951 त प्लास्टिक बोतल उपमांग न करने की सलाह मा उनकरारी पर उन्होने दी। दूसी का परिणाम है हैको पर्भटन हो। उनामें निक रेवती की खढ़ावा हो। या छिर तक जल संचाम को लेकर बनो कह यो जनायें आज इस केन न सिर्फ ग्राहिमान है जादने मविवय में अगेर आध्य सम्भावनाओं के साथ रुक मिसाल मो है। अपिम परिमा के धनी कत्यों के परि निरंतर समपित रहे, सरत स्वभाव वाले दूस महण व्यक्तित्व को सत्-सत् नमना HIUSTID COUTAIN

TARADUTT BUDDHALAKOTI Assistant Manager (2003–)

Air Quality and Human Health: the known and the unknown

We are writing this paper as a tribute to Dr R K Pachauri, who was not only instrumental in expanding our knowledge about energy and environmental issues but also laid the foundation for researching the complex problems of climate and society.

If we think back to the time when India was still making its presence felt on the world environment stage, Dr Pachauri's role and contribution remain unparalleled. People know him for his significant impact on climate change discourse and action. But few know about his championing of local environment and emphasis on technologies and policies to move the needle on the global climate debate—a debate that has often had the potential to get derailed because it lacked significant participation from the polluters of tomorrow, namely China and India. His foresight and vision of the world and environmental politics was extraordinary and was instrumental in initiating several areas of research that went beyond the immediate to recognize lurking problems that in some manner had their origins in energy supply or use. One such research area was the impact of indoor and ambient air quality on health. In this paper, we discuss Dr Pachauri's significant contributions to this area of work. These span a clear recognition of the synergy between local pollution control and global concerns of climate change and of rigorous approaches to analysing impacts and their associated benefits and costs to support policy interventions.

These themes are more fully developed in the following pages with reference to local air pollution and health.

Combustion of fossil fuels is the most significant contributor to air pollution, with the main sources being (1) stationary facilities and infrastructure (power plants, industry, and mining, all with inadequate pollution control), (2) mobile sources (namely road transport, ships, and aircraft), (3) fuels (biomass, coal, coke, kerosene) used in households for a variety of end uses, and (4) controlled biomass burning in agriculture and forest clearing and incineration of waste from residential and commercial sectors. Besides these, roadside dust and dust emanating from construction sites is also a significant contributor (Academy of Science of South Africa et al. 2019).

In the last few years, India has made news worldwide on account of having dangerously poor air quality, particularly during specific times of the year. News articles began referring to Delhi's air as toxic or hazardous and to Delhi as the smog capital of the world (Chakraborty and Singh 2019). Several of these articles went into some detail about health-related crises waiting to happen (Irfan 2016; Slater 2018). Although the pollutants included volatile organic compounds (vocs), nitrogen oxides, and hydrocarbons, the most lethal of all was particulate matter (PM_{10} and $PM_{2\cdot5}$) and ozone (O₃), especially particles smaller than 2.5 µm ($PM_{2\cdot5}$). In December 2016, and almost every year thereafter, $PM_{2\cdot5}$ levels touched a high of over 900 μ g/m³, worse than the levels recorded during a raging wildfire. The 2018 wildfire in California caused a spike in PM_{2.5} levels, raising the concentration to 200 μ g/m³ (Popovich et al. 2019). For comparison, the acceptable levels of these pollutants according to the World Health Organization are 25 μ g/m³ as the 24-hour mean for PM_{2.5}, 50 μ g/m³ as the 24-hour mean for PM₁₀, and 100 μ g/m³ as the 8-hour mean for O₃ (WHO 2005).

There are interactions and reinforcements between impacts of local and/or regional air pollution and climate change. For example, methane contributes to the formation of ground-level ozone, which, in turn, raises temperatures to levels that may lead to wildfires-and wildfires tend to elevate the levels of particulate matter in the atmosphere. Similarly, black carbon from combustion has adverse impacts on health and also implications for atmospheric temperature and precipitation in the region, which may result in extreme weather events. Mountainous and glaciated regions, such as the Himalayas, are especially vulnerable to thawing due to heating effects of accumulated black carbon resulting in changing rainfall patterns and variations in hydrological cycles, which impact livelihoods through impacts on agriculture and water supply. Thus, policies that mitigate local air pollution can be synergized with those for tackling climate change. Dr Pachauri's emphasis on highlighting this essential aspect was critical in moving the discussions from a stalemate to agreements.

Linking air pollution to adverse impacts on human health is not straightforward and requires a fairly complex approach, starting from delineating the exposure quotient and then to extrapolating the doses to finally calculating risk while accounting for uncertainties associated with age, lifestyle, gender, and ethnic differences, to list a few variables. While assessing risk to health is a significant enough goal, Dr Pachauri would always take it to the next step of estimating or understanding the direct and indirect economic impacts of impaired health. In this paper, we briefly look at health impacts, the methods available in this research space, and the relevance of associated economic and policy impacts.

Health impacts Health impacts from air pollution can be categorized into short-term and long-term effects. A large body of epidemiological literature suggests that there are significant and wide-ranging health impacts from exposure to both coarse as well as fine PM (PM₁₀ and PM_{2.5}), particularly on the cardiovascular system (Cohen et al. 2005; EPA 2014; Ostro 2004). Although extreme exposures (or modest levels for sensitive populations) have acute effects, even relatively modest levels of exposure may have such effects as change in blood pressure; irritation of the ear, nose, throat, and lungs; and mild headaches (Ghio, Ki, and Devlin 2000; Pope 3rd 2000). Although some symptoms are seen within a few hours of exposure, some may be triggered after several days of elevated exposure, especially in people with existing cardiovascular and respiratory conditions. Particulate matter has also been shown to be an important endocrine disrupter, contributing to the

development of such metabolic disorders as obesity and diabetes mellitus, which in themselves are risk factors for cardiovascular diseases (Darbre 2018). Although epidemiological evidence for the harmful effects of PM on health is increasingly accepted, newer studies point to mechanisms through which PM exerts its toxic effects (Chang et al. 2019): PM, VOCS, and lead are known to cause significant damage to the brain. Studies have indicated that PM_{2.5} can cause oxidative stress and inflammation of the central nervous system causing significant damage over the long term. Bishop et al. (2018) provide the first large-scale evidence to support the hypothesis that longterm exposure to air pollution could cause dementia among older adults (Bishop, Ketcham, and Kuminoff 2018). The findings show that the effect of pollution on dementia is primarily driven by PM_{2.5}. The results build on earlier studies on short-term exposures to PM_{2.5} and how it can increase the risk of mortality (Deryungina et al. 2016; Di et al. 2017).

Given India's extremes in terms of income and living conditions, the impacts of air pollution vary greatly; the variation is exacerbated by the differences in age: infants, younger adults, and the older population are affected to varying degrees. Lack of access to nutrition and health care makes the matter worse. Dr Pachauri's emphasis on studying these vulnerable populations for health impacts of select types of fuels in combination with certain types of living spaces was critical to formative research on the health impacts of indoor air pollution in India-work that also led to collaboration with Dr Kirk Smith, the renowned air-quality expert, to study the impact of polluted indoor air on infants and women in rural households. In the 1990s, this led to several studies that conclusively established that combustion of solid fuels indoors in open fires or traditional cooking stoves results in high levels of toxic pollutants in the kitchen and adjoining areas (Saxena and Dayal 1997; Smith 2000; Sharma et al. 1990). The use of these fuels is thus considered a major risk factor for lung cancer, cardiovascular diseases, COPD (chronic obstructive pulmonary disease), asthma, and other respiratory ailments such as chronic bronchitis and tuberculosis (Mishra, Retherford, and Smith 1999; Salvi and Barnes 2010). Poorly ventilated kitchens, which are more common among the lower economic strata, often worsen the already adverse health effects of asthma (Agrawal 2012).

Highlighting results specific to India, Ghude et al. (2016) estimated $PM_{2\cdot5}$ -related premature deaths related to cerebrovascular disease, COPD, coronary heart disease, lung cancer, and acute lower respiratory illness and O₃-related deaths due to COPD in 2011. The estimated premature mortalities were greater in heavily polluted and densely populated areas. The Indo-Gangetic Plain showed the highest estimated premature mortalities due to both ground-level $PM_{2\cdot5}$ and O₃, followed by southern India (Tamil Nadu and Kerala) and the Mumbai–Gujarat industrial corridor. Among the polluted areas, the largest share of premature mortalities was that of the Indo-Gangetic Plain region: approximately 42% due to exposure to $PM_{2\cdot5}$ and 45% due to exposure to O₃. This is of some concern as one-eighth of the world's population lives in this region, and projections based on emission scenarios from representative concentration pathways predict

a substantial increase in O_3 and $PM_{2.5}$ concentrations from this region due to climate change (Fang et al. 2013; Horowitz 2006).

A more unexpected impact of PM_{2.5} exposure has implications for productivity, namely diminished performance over a range of cognitive domains (Suglia et al. 2008; Weuve et al. 2012). Extremely small PM penetrates buildings easily, making exposure difficult to avoid even for office workers (Vette et al. 2001). Further, such fine particles are easily absorbed into the bloodstream and can get embedded deep into the brain stem through axons of the olfactory and trigeminal nerves into the central nervous system (Oberdörster 2004). This can cause inflammation of that system, cortical stress, and cerebrovascular damage (Peters 2006). Consistent with this epidemiological evidence, Israeli teenagers performed worse in high-stakes examinations on days that recorded higher PM levels (Ebenstein, Lavy, and Roth 2016). Emissions of PM alone could cause a 5%–6% dip in productivity due to impaired cognition (Chang et al. 2016).

Methods of For Dr Pachauri, research methods were as important as formulating research questions and understanding data needs. In that sense, analytical analyses rigour formed the basis of any research. To ensure that projects adhered to data integrity at all times, only publicly available data and official sources were used in most projects. Even in the early 1990s, this often required collecting extensive data, which had to be mined manually as it was before digitization. Dr Pachauri would get involved at each stage, from scoping and use of specific approaches to identifying data sources and analysing the results. He scheduled regular meetings with the team to assess the progress. His engagement in the technical aspects of the project was complete, irrespective of whether the analyses were qualitative or quantitative. Whenever there were issues regarding using a specific method or in obtaining the required technical apparatus or data, he was approachable and ready with a practical resolution, and through all of this he never lost his sense of humour. The following discussion of the methods of analysis is in keeping with that spirit.

> The assessment of health risks associated with exposure to pollutants is complex and subject to many uncertainties. To reasonably understand the health implications, it is necessary to determine questions related to exposure, population or demographic variations, and health end points (WHO 2014). The methodologies used for health risk assessment typically encompass components of exposure assessment, risk characterization, and estimation of disease burden. These studies can generally be categorized as using one or some or all of the following approaches: (1) atmospheric chemistry modelling using general circulation models (GCMS), (2) integrated exposure response (IER) functions derived from epidemiology, (3) estimation of healthy life expectancy (HALE), or the number of years of life expected to be lived in good health, and disability adjusted life-years (DALYS), a measure that assesses health loss from a particular disease, and (4) statistical and econometric methods involving cross-sectional, time-series, or panel regression estimates.

Atmospheric chemistry modelling using GCMs captures the chemical interactions of atmospheric components. Unlike models of air quality and health impacts focusing on urban areas where measurements are available, atmospheric chemistry models are useful for areas that lack reliable data on air quality. General circulation models based on highresolution data on regional and global atmospheric chemistry are used for estimating global air quality and changes therein, and then combined with country-level demographic and health statistics to estimate the impacts on morbidity and mortality. Importantly, the links between radiation and atmospheric chemistry are decoupled so that the model dynamics are not influenced by changes in the composition of the atmosphere. The decoupling helps to ensure that air quality projections are determined mainly by emissions rather than by climate change. Further, having attributed individual or groups of sources of emissions (natural, industrial, residential, and commercial energy use, land-based transport, agriculture, power generation, and biomass combustion) to aggregate atmospheric concentrations of PM2.5 and O3, these fractions are applied to calculating mortalities due to air pollution (Lelieveld et al. 2015).

Some advances in atmospheric chemistry GCMS entail coupling climate change with air quality modelling (Fang et al. 2013). The coupling of chemistry-climate models provides a more comprehensive approach to ascertaining the impacts of climate change on the quality of surface air, because connections and feedback loops across atmospheric dynamics, chemistry, and physics tend to have a direct bearing on air pollution (Fang et al. 2011; Kloster et al. 2010). Premature mortality related to calculated variations in surface O₃ and PM_{2.5} due to changes in climate is estimated using suitable concentration–response functions that are discussed in the following section (Fang et al. 2013).

Integrated exposure response functions from epidemiology are mathematical relationships that connect mortality or morbidity (or changes in them) to concentrations of pollutants by working through the levels of baseline mortality, relative risk of disease, and the extent of population exposed to a given pollutant.

Lelieveld et al. (2015) calculated possible premature mortality due to exposure to $PM_{2.5}$ and O_3 by combining the concentrations of the pollutants with an epidemiological exposure response function. Often, the functional forms derived from epidemiological cohort studies for USA and Europe, where annual mean $PM_{2.5}$ concentrations are typically lower, are not reflective of countries in which pollution levels are higher, as in South and East Asia. Therefore, a modified exposure response function is used that includes epidemiological data comprising exposure to second-hand smoke, indoor air pollution, and active smoking to account for high $PM_{2.5}$ concentration levels (Burnett et al. 2014; Lelieveld et al. 2015). The Global Burden of Disease (GBD) estimates for 2010 used these formulations of relative risk (Lim et al. 2013). Studies based on the epidemiology-driven estimates of IER in Indian context are somewhat scanty. Ghude et al. (2016) simulated O_3 and fine particulate matter as $PM_{2.5}$ concentrations using a regional chemistry model for India at the district level to capture exposure and premature mortalities. The excess mortality functions are similar to those used by Burnett et al. (2014) and Lelieveld et al. (2015).

To track changes in years of life spent in good or poor health across countries and regions, a commonly used comprehensive measure is DALYS (a measure complementary to DALYS is HALE). The analysis of DALYS and HALE captures temporal trends in the state of health of a population and the leading causes of changes in disability. WHO (2017) promotes this approach by stating that information on mortality and health in populations in different regions of the world is disintegrated and sometimes inconsistent, and using DALYS helps create a common framework to integrate and analyse information on GBD to compare the relative importance of different categories of diseases and injuries in causing premature death, loss of health, and disability in different groups of population. GBD/WHO (2018) have used the data on age-specific mortality rates, years of life lost due to premature mortality, and years lived with disability to work out HALE and DALYS for the period 1990– 2017.

Finally, there are empirical or statistical approaches to quantifying health effects of air pollution. The complex etiology of the disease is also confounded by factors such as socio-economic characteristics, lifestyle, seasonality, background health (tobacco consumption and nutritional status), and other meteorological phenomena that show sustained patterns (namely maximum temperature and humidity). Thus, an alternative set of approaches is now being used that rely on time-series and cross-sectional and panel regressions to capture the influence of these control variables.

Multivariate models rely on cross-sectional or panel (pooled crosssectional and time-series) data to estimate the interrelationship between at least three variables. In one such attempt, the association between infant mortality and the concentration of total suspended particulates in a country or a region is estimated by postulating a generic version of the panel model of infant mortality, where the control variables used are parental attributes and behaviour, other country or regional characteristics, education, access to medical facilities, etc. (Chay and Greenstone 2003).

Time-series methods offer an alternative to multivariate regression approaches inasmuch as these models take into account the temporal co-movement of disease incidence and environmental variables that tend to follow repetitive cycles, trends, and seasonal variations. For example, time series was used in evaluating monthly deaths due to bronchitis, emphysema, and asthma as related to monthly consumption of cigarettes, temperature, and the concentration of pollutants (Favio et al. 2002).

Economic implications and policies

Any potential impact will generally have an associated economic side to it. Dr Pachauri considered most analyses incomplete unless the costs and benefits of any policy measure were quantified. In the 1990s, he envisioned a series of forward-looking studies under the GREEN India 2047 project, in which assigning monetary costs to environmental damage was centre stage. (GREEN was the acronym for growth with resource enhancement of environment and nature.) According to him, imputing monetary costs and benefits enabled a complete evaluation of alternative strategies and policy measures. He hoped that these costs, which are external to general price signals, will be recovered through taxes and levies, an approach that provides policymakers with a neutral lens to examine the recommended measures. TERI was at the forefront in applying novel approaches to the valuation of environmental or resource costs of growth and the benefits of mitigation strategies, some of which are discussed below.

While health impacts themselves are debilitating from the point of view of human life as well as the quality of life, their spillover impact is far reaching. Air pollution costs the world economy trillions of dollars each year (wB and IHME 2016). Impacts discussed in the earlier section translate to productivity as well as financial losses at an individual level. Monetizing the damage or losses due to air pollution is therefore critical to designing policies for mitigating such adverse impacts. Imputing a value on health costs helps policymakers to act more judiciously because it enables them to compare the costs (of controlling air pollution) and benefits (of avoiding the ill effects of that pollution) in planning policies to mitigate such adverse outcomes for society at large.

WB and IHME (2016) impute a value on premature mortality, derived from the GBD 2013 estimates attributable to pollution, using two different approaches, one linked to overall welfare and the other linked to income.

The welfare-linked economic approach assigns a monetary value to the increased risk of fatality associated with air pollution: the monetary value is based on the individuals' willingness to pay (WTP) to avoid the ill effects of pollution. In essence, WTP captures an individual's perception of trade-offs in terms of the amount she or he is ready to pay to lower the probability of death due to pollution. The value of statistical life (VSL) represents the aggregate of many individuals' WTP for marginal changes in the risk of such death.

The income-linked method assigns to premature mortality a pecuniary cost equivalent to the present discounted value of forgone lifetime earnings. In this case, typically the per capita average labour income is differentiated by age group, since individuals of different age levels have varied levels of education, work experience, abilities, and other factors that determine their earning potential (WB and IHME 2016). The 2016 OECD study also used a similar approach to estimate the economic consequences of air pollution by integrating impacts on human health and crop yields.

Using the VSL method of welfare loss, the global cost of mortality attributable to ambient and indoor pollution was estimated at \$5.11 trillion (WB and IHME 2016). In terms of relative magnitudes, welfare losses in South Asia, East Asia, and the Pacific were the highest, approximately 7.4%-7.5% of regional gross domestic product (GDP), followed by Europe and Central Asia (5.1%) and Sub-Saharan Africa (3.8%). For most regions of the world, fine particulate matter $(PM_{2.5})$ was found to be the most significant factor in these losses; however, in South Asia and Sub-Saharan Africa, as one would expect, indoor air pollution in households from cooking with solid fuels or other traditional forms of energy accounted for the biggest loss due to premature mortality from air pollution. Losses in income from labour, although smaller than those estimated using the WTP approach, were nevertheless substantial in regions with younger populations. For instance, in 2013, the lost income in countries in the South Asian region aggregated to more than \$66 billion, or 1% of the region's GDP; at the global level, the figure was \$225 billion (WB and IHME 2016). The number of premature deaths from outdoor air pollution was estimated to increase from about 3 million in 2010 to 6-9 million in 2060, with bulk of the deaths occurring in India, China, and Eastern Europe; the associated annual global welfare costs were projected to rise from \$3 trillion in 2015 to \$18-25 trillion in 2060 (OECD 2016).

Ghude et al. (2016) estimated the costs of mortality due to air pollution ($PM_{2\cdot5}$ and O_3) in India for the year 2011 using a VSL-based approach. Because estimates of VSL were not available for India, the authors used the estimates for advanced economies after adjusting for differences in income or per capita national output (OECD 2014), and Chen et al. (2015) estimated the aggregate economic cost, at the prevailing pollution levels, of premature mortality from $PM_{2\cdot5}$ and O_3 at \$640 billion (range, \$350-\$800 billion) annually (in purchasing power parity adjusted to 2011 US dollars). The costs were the highest for Uttar Pradesh (\$98 billion), followed by Maharashtra (\$62 billion), West Bengal (\$57 billion), and Bihar (\$53 billion).

Policies and measures to mitigate the adverse health impacts of air pollution will have to target the sources of such pollution and devise strategies to reduce it at the source.

Technological solutions for mitigation include regulatory measures such as mandating emissions control equipment at the point of combustion, retrofits, controlling end-of-the-pipe emissions and effluents, enhancing energy conversion efficiency, and switching to cleaner fuels in industry and power utilities. With energy from renewable sources becoming cheaper, replacing energy from fossil fuels with that from renewable sources (the sun, wind, and others) is an option being used worldwide. In homes, access to cleaner cooking and lighting fuels (such as liquefied petroleum gas and natural gas) and safe disposal of garbage are critical. Policies that utilize crop residues instead of burning it are increasingly gaining consideration in the agriculture sector. Promoting sustainable public transport and urban infrastructure are becoming central to smart city initiatives (Academy of Science of South Africa et al. 2019). To bring about these transformations, regulatory measures should be coupled with economic incentives such as taxes on emissions and abatement subsidies to bring about a change in relative prices and to encourage market-driven changes in choices.

Taxes on emissions would also generate the much-needed revenue for investments in projects to find and implement cleaner options.

Having said that, policy-making could benefit from combining monitoring, control, and reduction of emissions at the national and subnational levels. Importantly, policy discussions related to energy, transport, and industrial sectors will have to incorporate cost-benefit analyses of these measures for them to be economically justifiable (wB and IHME 2016). Identifying and quantifying co-benefits of specific policy instruments can potentially sweeten the challenge of finding a common ground with multiple goals of mitigating the adverse effects of climate change, attaining food sufficiency, and ensuring energy security (Academy of Science of South Africa et al. 2019).

Concluding The estimated disease burden for India based on three possible future remarks scenarios ranges from 73 million healthy years of life lost or DALYS and over 3.6 million deaths in 2050 with no new pollution control actions to an aspirational future of avoiding nearly half the deaths with specific measures (HEI 2018). This health burden will have enormous direct as well as indirect economic impacts at both individual and national levels. OECD (2016) estimated that global impacts of air pollution on the market amount to about a 1% drop in GDP by 2060. Welfare costs from premature deaths are projected to increase almost tenfold in non-OECD economies, from \$1.7 trillion in 2015 to \$15–22 trillion in 2060, which are much higher than the projections for OECD economies. Although both these studies use the income-based approach of VSL to evaluate the welfare impacts, it would be useful to undertake context-specific WTP or a revealed-preference study for India. Furthermore, it would be interesting to analyse economywide impacts of the adverse effects on health and of measures to mitigate those adverse effects. Such a study would have been close to what Dr Pachauri tried to accomplish with the GREEN India 2047 project, which attempted to capture the macroeconomic cost of environmental damage to India's prospects for growth and development.

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Dr Pachauri's note to Veena Joshi

1992 Remonal Ar. Ven Joshe I have gone through your note of April 21 and also some of the minutes of area meetings. I am hoppy that you have taken these initiatives, because we must keep active forems of desursion and channels of communication open. But I do woh to peas on a word of advice, which I hope would be seen as constructive in the discharge of your new responsibilities. A leader in any sphere must inspire largely by example in deed but also by the intered word. A problem is generally as large as one makes it and often as downling as the lack of a defined solution . A problem when analysed by a group must also require the identification of possible solutions "Bue Tackles these solutions then by sorting them out as those which can be implemented and those that can't, or further, those land have to be singlemented by someone else. The solution part mush everge from any decusion as dominant, because this breeds an atmosphere for positive retion. And where solutions are difficult but essential the leader of the group must say and carry conviction with " by God, me must do it, bit's do it haltusiasm and determination are infections, just as negati is corroding, about imperceptibly, of faith and optimism. M then anything else groups and individuals must feel that they have to stritch the to the limit of their abilities, for them only will hunds expand, bragness his on in this phenomenon. last thing we need to do so to provide people with alibis for inaction or less than excellent performance I would like to descuss there issues with you if you wish to And I would not have contrar the above if I felt that this advice would be wasted. Allach 4.5

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About TERI Alumni Association

The TERI Alumni Association has more than 100 members who are currently working in TERI and over 200 members who had worked in TERI but are now retired or working elsewhere. The main objective of the Association is to keep the alumni connected to one another and also to their alma mater and to work together towards the objectives that guide their mutual interests. The Association has been activated only recently and proposes to work on the broad areas of preservation of the environment and sustainable development. Towards these objectives, the Association organizes various events apart from get-togethers of the alumni and TERI staff to strengthen their bonds. Nearly all contributors to this book, the first publication of the Association, are members of the TAA.

About **TERI**

TERI is an independent multi-dimensional organization with capabilities in research, policy, consultancy, and implementation. An innovator and an agent of change in the energy, environment, climate change, biotechnology, and sustainability spaces, TERI has pioneered conversations and action in these areas for over four decades. TERI believes that resource efficiency and waste management are the keys to smart, sustainable, and inclusive development. TERI's work across sectors is focused on

- promoting efficient use of resources,
- o increasing access and uptake of sustainable inputs and practices, and
- reducing the impact on environment and climate.

TERI's research and research-based solutions have had a transformative impact on industry as well as communities. TERI has fostered international collaboration on sustainability action by creating a number of platforms and forums by translating its research into technology products, technical services, as well as policy advisory and outreach.

Headquartered in New Delhi, TERI has regional centres and campuses in Gurugram, Bengaluru, Guwahati, Mumbai, Panaji, and Nainital. TERI's 1200-plus team of scientists, sociologists, economists, and engineers delivers insightful, high-quality, action-oriented research and transformative solutions supported by state-of-the-art infrastructure. To grow, within 30 years, from a small, rented room and fewer than half a dozen people to more than 6000 square metres at Delhi's prestigious India Habitat Centre and a staff of over a thousand – let alone self-owned real estate and functioning laboratories and offices in Bangalore, Panaji (Goa), and Guwahati and a sprawling 40 hectares campus barely 35 km from Delhi and presence in USA, the UK, Japan, and the United Arab Emirates – is a remarkable story. That it was achieved by the vision, the drive, and the capabilities of just one individual may be considered an exaggeration—that it is the truth will be evident to the readers of this book from the voices of many, all hand-picked by the same individual, who have contributed to this volume—a tribute to Dr R K Pachauri.

Although published to honour his memory, this volume is not a eulogy but a guide to all those who seek to set up, expand, or run institutions, especially research and academic institutions. Not run-of-the-mill institutions but institutions of excellence recognized and respected worldwide. The many anecdotes that are central to this book show how TERI was nurtured, why it enjoys such a fan-following from its own employees both past and present, and what it took to make a success of it. The book brings out the many facets of an exceptional man who rubbed shoulders with prime ministers and presidents and Nobel laureates, led a huge international team of climate scientists, and established a university that won Grade A the very first time it was assessed by the National Assessment and Accreditation Council—but who could also shove his way through an unruly crowd to snatch a cone of ice cream for his colleague, fire opening salvos as a medium-pace bowler for his cricket team, and silence with his invective forever the man who dared to harass a lady receptionist with obscene calls.

Dr R K Pachauri: the visionary institution builder is a tribute, a homage, a volume to commemorate his memory: it is neither an assessment of his life and work nor a hymn to sing the glories of TERI. Among the contributors to the book are those who knew Dr Pachauri before he joined TERI, those who joined TERI before him, his early recruits, and young people who came to know him only after he and TERI had acquired global fame. The contributors also cover a wide gamut of professionals from scientists to economists to those who ran the back end of TERI: its administration and support services. They share their experiences and anecdotes to tell the story of how Dr Pachauri built institutions – TERI and the TERI University – and the part he played in building India Habitat Centre and the Bangalore International Centre to further the purpose of this book, namely to illustrate Dr Pachauri's many sterling qualities so that they inspire those who run research and academic institutions and non-governmental organizations—and those who serve in them.



TERI Alumni Association