Address at the 49th Convocation at the IIT-Kanpur Arvind Panagariya

When I was a student, our world was divided into those who went to IITs and those who did not. Since I had chosen social sciences as my field of study in college, I automatically fell into the second group. While I, thus, had a good reason for missing out on the elite IIT club, it did not diminish my envy of those who belonged to it.

Today, I am tempted to think that by virtue of being your convocation speaker, I have crossed over to your exclusive club. But, alas, that won't work. You shall forever remain the envy of those who did not get the chance to study at an IIT. Therefore, let me first applaud and congratulate you all. You have already proven yourself at least twice: first by successfully entering IIT-Kanpur and now by exiting it with flying colours. Well done!!

But make no mistake. Life's journey is a marathon, not a sprint. It is full of unexpected twists and turns. As you prepare yourselves for the world beyond the one you now leave, many of you would realize that there is no identified final destination in this journey. Others among you would know the next station but not much else. But do not fear this uncertainty. Instead, embrace it. It is this uncertainty that makes life's journey exciting as well as challenging.

In order to succeed in this journey, you will need four key elements: intelligence, hard work, persistence and a little bit of good luck. It is safe to say that by virtue of having successfully completed your degree at IIT-K you all have intelligence. But because everyone against whom you would be competing will have your intelligence, those among you who work hard will have an edge. However, even hard work would not guarantee ultimate success. Winning a marathon would require perseverance and persistence. Solutions to all complex

problems call for not one, two or three but many more tries.

And these problems would put your patience to test.

Finally, success would also require occasional good luck.

Recall that even as brilliant a Mathematician as Ramanujan had to be "discovered" by G. H. Hardy. Fortunately, Mother Nature has the habit of spreading its bounty approximately evenly. So if you work hard and persevere, you can count on Lady Luck smiling at you every now and again. The trick is not to give up when luck is eluding you and patiently wait your turn. I once thought that missing the opportunity to do my Master's at the Delhi School of Economics, the equivalent of an IIT in my field, was the end of the world. But three years later, Princeton happened.

Remember that failure is an essential step on the path to success. No matter how successful one may appear from outside, she has had her share of failures and disappointments. In the end, only those who put failures behind them and keep

doing their Karma achieve true success. Always remember that life gives everyone not one, not two, but many more chances.

Achieving success as conventionally defined is, of course, not the same as enjoying success. Whether or not you are able to enjoy success greatly depends on how you achieve it. If success is achieved by deception or by taking advantage of those weaker than yourself, it will rarely give you true pleasure. As Mahatma Gandhi famously said, purity of end is not enough; our means must be pure as well. Sooner or later, impurity of means contaminates the end itself.

Allow me to abuse the privilege of this address and offer one final piece of advice. As you accumulate successes, do not lose sight of the fact that these successes have partially been built on the hardship and pain borne by others. You are where you are not just because you worked hard but also because others who preceded you made sacrifices that paved the path on which you tread today.

Lest this seems preaching in abstract, let me back up my advice by a true story. This story concerns a man I shall call BLP. BLP was born in 1921 in a village in a state in northwest India. Though his family had been wealthy once, just prior to his birth, it had fallen on hard times. Unfortunately, fortunes of the family continued to worsen after his birth. When he reached five years of age, his father passed away with the family losing its breadwinner. The responsibility of raising him and his sister fell squarely on the tender shoulders of his young mother.

The family had a tiny piece of land, which partially helped meet the requirements of food grain. The mother spent six hours per day on the spinning wheel, which allowed her to earn a princely sum of two annas or one eighth of a rupee. Financial condition of the family turned so weak that on most days, there was no dal or vegetable to go with roti. Ghee and sugar were luxuries to be enjoyed only on festivals.

The village had no school, pubic or private. But when BLP reached seven years of age, a teacher showed up in the village and began offering lessons in Hindi and Mathematics for a fee of one rupee per student per month. Though herself entirely illiterate, his mother had the wisdom and foresight to use a part of the income earned spinning the wheel to educate BLP. But within a few months, she discovered that she could not afford the one-rupee fee. BLP dropped out of the school. A negotiation followed and the teacher was persuaded to make a concession for BLP and accepted him for a fee of half a rupee. BLP was able to resume his studies.

As luck would have it, the teacher left the village after less than two years. Another teacher followed but also lasted only a year. The mother knew that BLP was talented and therefore wanted him to continue his studies. A chance event created the opportunity for BLP to resume his studies in a nearby village where a Middle School existed and where his Mausi lived. So

his mother decided to send him, her only son, to live with her sister and study there.

On 30th June 1931, at ten years of age, BLP walked alone 12 miles from his home to arrive at his Mausi's place where he began his formal education. As predicted, he excelled at studies and soon distinguished himself as the top student in the class. But while his education progressed, his mother's health began to deteriorate. Suffering from hard work, malnutrition and years of worry, she fell victim to tuberculosis. Cure for TB in those days was not available and in any case would have been out of her reach had it been available.

Sadly, at 14, BLP lost his mother as well. But with his mother's last wish that he lead a life of honesty and integrity in his heart, he persevered. Hurdles that are too numerous to recount here came his way but with one lucky break here and another lucky break there, he kept moving forward. He went on to first complete high school and then B.A.

After Independence, BLP joined the state government as an officer and had a distinguished career as a civil servant.

Later, in his retirement, he went on to author numerous books. He fathered two daughters and three sons. While the elder daughter chose to be a housewife, the younger one distinguished herself as a teacher, winning the President's Medal. Of the three sons, the oldest distinguished himself as an engineer; middle one as an accomplished neurologist whom the Government of India honoured with Padma Shree two years ago; and the third one became an economist.

In case you have not yet figured out, BLP was none other than my own father. If I stand before you today as a moderately successful economist, it is not just because I worked hard, which I did, but more so because my grandmother gave all she had including her life to educate her son and that son then undertook the arduous journey of life, which eventually brought him from his remote village to the

capital city of Jaipur. Once he had taken that long leap, my own journey from Jaipur to Princeton to Columbia and now to New Delhi became no more than a series of short hops. I am sure that if you too were to look into your family history, you would find that it is the sacrifice of a parent, grandparent or even a great grandparent that paved the way for you to be where you are today. This is a fact worth reminding yourself whenever success threatens to go to your head and supplant humility by arrogance.

Lest you feel cheated that my address has not gone beyond preaching and recounting personal stories, let me briefly turn to the subject that currently occupies me: public policy. To keep sharp focus, I would concentrate on a narrow but important proposition: Before we introduce a policy, it is critical that we think hard about its unintended consequences. Sometimes, medicine we administer to cure a disease can lead to unintended side effects that worsen rather than cure the

disease. I shall offer two examples from our postindependence policy history to illustrate the point.

First, consider our industrial policy during the first several decades of planning. At independence, we had an abundance of labour and a shortage of capital. On the one hand, we wanted to develop the heavy industry while on the other we needed to create employment opportunities. We plausibly decided that heavy industry would be developed in either the public sector or organized private sector while employment would be created predominantly in labourintensive manufactures. To give effect to the employment policy, we decided to reserve the labour-intensive products such as clothing, textiles, shoes, leather products, sports good, toys, stationery, office products, furniture, household electrical appliances and simple plastic products for manufacture solely by small-scale enterprises.

On the surface, this policy of small-scale industries (SSI) reservation made sense. Small enterprises would employ more labour per unit of capital thereby creating more overall employment with the limited capital we had at the time. But unintended consequences of this policy turned out to be devastating. The definition of small enterprises we adopted was so restrictive that these enterprises could barely see beyond the local market. They did not have sufficient scale to export their products to the world market. The result was that India was denied the benefits associated with specialization in products of comparative advantage and exporting them to the global markets. As a highly labour-abundant economy, we should have specialized in and exported in large volumes the labour-intensive products. But the artificially enforced small scale of enterprises subverted such specialization. Small scale also meant that our enterprises failed to reap the economies associated with large-scale operation. Confinement to highly

localized domestic markets resulted in generally low product quality. We neither got the advantage of creating employment by exploiting the vast world markets in labour-intensive products nor benefited from quality- and productivityenhancing effects of large-scale manufacturing. Countries such as South Korea, Taiwan and Singapore diagnosed the problem correctly, allowed firms in the labour-intensive sectors to grow large and chose to go for the world markets. As a result, by 1990, they had transformed themselves into modern prosperous and urban economies. They not only generated handsome employment opportunities by supplying the vast world markets but also managed to offer high wages to their workers due to the gains in productivity. We began recognizing our folly much later in 1991 when we embarked upon a program of dismantling the license-permit raj and, subsequently, an end to the small-scale industries reservation. But much damage had been done by then.

My second example is the Urban Land Ceilings and Regulation (ULCRA) Act of 1976. The objective of this Act was to free up urban land in the major cities of India for public projects such as housing for the poor and infrastructure. To release more land in the market, the act imposed tight ceilings on the ownership and possession of vacant lots by individuals, families, firms, corporations or associations. The ceiling ranged from just 500 square meters in large cities to 2000 square meters in small ones. The Act provided for the acquisition of the excess land by the government at the throw away price of 10 rupees per square meter with an overall ceiling of 2 lakh rupees per owner.

Given the negligible compensation, landowners had no incentive to allow acquisition of their excess lands by the government. The Act had provided exemptions on grounds of public interest, hardship and building houses for weaker sections of the society. Nearly all owners with excess land

claimed one or more of these exemptions. With the powers to grant these exemptions vested in the state governments, local politicians and bureaucrats liberally granted them in exchange for large bribes. Owners who failed to access the exemptions went to courts and the land got tied up in lengthy legal battles.

A Government of India note issued in January 1999 stated the failure of the act in these stark terms, "The performance of the Act has been quite dismal. The State Governments could physically acquire only 19,020 hectares of excess vacant land out of an area of 2,20,674 hectares estimated to be in excess of the ceiling limits. This works out to a mere 9 per cent of the total estimated excess vacant land." Maharashtra had one of the most dismal records with only 106 hectares of the total eligible land of 12,150 hectares acquired.

The net result of these developments was that neither could the government acquire much of the excess land, nor

¹ See "Performance of repealed Urban Land (Ceilings & Regulation) Act, 1976" by the Press Information Bureau of the Government of India at http://pib.nic.in/focus/fojan99/fo1201991.html.

could the owners sell it on the open market. Most Indian cities came to face huge land shortages with prices in large cities such as Mumbai rivalling those in Tokyo and New York City.

Although the central government finally repealed the Act in 1999, the effects of the Act still haunt us because vast volumes of land in the major cities remain tied up in disputes between the government and landowners.

These examples illustrate how policies ostensibly introduced to do good end up doing much harm because we fail to anticipate their unintended consequences. This, however, is true not just in the domain of public policy but other walks of life as well. Hence the caution: when taking any major action, ponder over what collateral damage that action might do.

Let me conclude this address with an appeal to you.

Should you decide to do one good deed in life, let that deed be the promotion of the Swachh Bharat Abhiyan of the Prime

Minister. I have no hesitation in saying that of all the missions that the Prime Minister has launched, Swachh Bharat Abhiyan is by far the most important. Develop the habit to wash your hands with soap the moment you enter home and teach the same to all your family members. See to it that trash that you and your neighbours generate does not end up outside your homes. Lobby your local government to fix drainage systems so that rainwater would not turn into a standing body of water that serves as the breeding ground for mosquitoes. Above all, spread awareness of the Swachh Bharat Abhiyan wherever you go. If you would pledge to do this much, I'd return to Delhi feeing that I had accomplished something important for the nation on my maiden visit to this great institution of yours. With these words, let me congratulate you once again on your enormous achievements and wish you ever-greater successes in the decades to come.