CONVOCATION OF INDIAN STATISTICAL INSTITUTE

January 10, 2014 (Friday)

1. It is my privilege to be here today for the forty eighth Convocation of the Indian Statistical Institute (ISI). It is a leading institution in our country for research, teaching and application of statistics, natural sciences and social sciences. I thank the Institute for giving me this wonderful opportunity to address you on this happy occasion.

Friends:

2. The foundation of this unique institution was laid by Professor P.C. Mahalanobis, who was recognized for his pioneering work in applied statistics. He was also known for his economic development model that was followed in India's Second Five Year Plan. In the nineteen hundred twenties, Professor Mahalanobis had a wonderful vision about the potential of statistics in creating a modern society. He correctly identified statistics as a key tool for the progress of science and technology. He sought to develop the statistical infrastructure in the country. In 1931, he set up in one room of the Presidency College in Kolkata, a statistical laboratory. This path-breaking

initiative taken more than eight decades back has now become a large institution. ISI is today reckoned as a world class academic body in theoretical and applied statistics. I have fond memories of my association with ISI when I chaired the Institute's Council for eight years. I note with pride the immense contribution of this Institute in the development of statistical theory and innovative applications.

3. ISI has produced outstanding scientists, teachers, researchers, consultants, entrepreneurs, institution builders and other professionals. The quality of ISI's products is a telling evidence of the high standards of education imparted by it. The Convocation Day, today, marks the culmination of fruitful educational experience of yet another batch of students from this Institute. On this occasion, I see a palpable sense of joy and exhilaration in the students. Through the sweet pain of their labour, the graduating students have fulfilled their long-held dreams and that of their well-wishers. I congratulate all of you on your success and urge you to play a key role in deciding our country's path of progress. You, the bright future of our nation, have the potential to think differently. Apply judiciously what you have learnt here to make a lasting contribution in the field that you have chosen to pursue.

Friends:

4. Statistics, as a discipline, finds wide application in society. The modalities of carrying out business and government transactions have undergone a sea change over the last few years. Application of data sciences and quantitative decision-making has led to a dramatic change in business and governance landscape.

5. Enhanced capability of analyzing large data has had a positive impact on our ability to formulate effective public policies. It has helped in improving transparency to ensure last mile connectivity. It has facilitated in reaching out to a large cross-section of people for wider service delivery. Improved capacity for analyses of large data sets has also led to an improvement in weather forecasting systems. This has resulted in greater accuracy in the predictions of severe climatic conditions. During the occurrence of natural calamities, this has accorded us crucial elbowroom to carry out large evacuations and save precious human lives.

6. **Data mining** and statistical techniques have also been used to initiate counter terrorism programmes like the National Intelligence Grid. Efforts have been made to introduce

statistical systems for estimation and control of fake Indian currency notes. I am happy to note that ISI is involved in developing technologies and theories in the areas of cryptology and information security that are likely to have far reaching impact on national security policies.

7. The efficacy of our policies, especially in the social sector, hinges on the quality of data collected by different government agencies. Good policies call for good data standards. Great emphasis must therefore be laid on the authenticity of the information gathered so as to form the basis of policy intervention. The Collection of Statistics Act, 2008 seeks to facilitate the collection of data on several socio-economic and other parameters. It is the collective responsibility of the citizens and the seekers of information under this Act to ensure that correct and adequate statistics is furnished. I am sure our policies will continue to have the imprint of quality data and their sound analyses.

Friends:

8. Statistical and allied techniques are depended upon by business for operational and strategic decision making. The corporate sector makes extensive use of Statistics and

allied subjects like Mathematics, Economics, Operations Research, Quality Management and Computer Science. Data such as usage of social networking sites, footfalls in large retail stores, hits on websites and usage of credit cards are thoroughly analyzed for widely differing purposes like uncovering hitherto unknown consumer behaviour, assessment of risk, detection of fraudulent transactions and discovering new customer segments.

9. It is a fact that statistical models and techniques bestow great advantage to the user. However, it is prudent to also exercise due caution in analyzing large data and drawing inferences. Capturing unstructured data and converting them into a structured format are technically challenging problems. They have to be pursued in an enlightened manner. Drawing inferences call for adequate scrutiny of the theory requiring the combined knowledge of the statistician and of the subject expert. In this context, it is worth remembering what Albert Camus, the French author and philosopher of the last century, had stated and I quote: "*The evil in the world comes almost always from ignorance, and goodwill can cause as much damage as ill-will if it is not enlightened*" (unquote).

10. Big data, analytics and ubiquitous computing have created unique opportunities. It has led to an increase in the demand for well-trained professionals in these fields. However, as the analytic techniques are complex, they underline the need for a great deal of expertise. A large pool of competent statisticians in the country is necessary to support the analytical needs of the public and private sectors. Our universities and academic institutions teaching Statistics and allied subjects must take due care to up-grade the standards of instruction. I look upon a distinguished institution like the ISI to take the lead in transforming the academic management of this important discipline.

My dear Students:

11. As a happy coincidence, the calendar of 2014 exactly matches that of 1947 – the year we started our *tryst with destiny*. There were a lot of hopes then and we have been successful to a great extent in realizing them. We are today in the throes of attaining global leadership. This is possible only through the singular contribution of all our countrymen. For that, we must ensure each and every citizen of this country to partake the benefits of progress and prosperity. Today, technology provides us the hope to realize this goal. Our manpower

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provides us the wherewithal to create and administer the technology.

12. As you leave the portals of this Institute today, remember that the skills you have gathered through intense training here can create innovative changes in the lives of common folks in our country. Your knowledge of economics and quality management; your ability to gather and analyze large data, can play a significant role in improving the quality of governance and public policy. I am confident that as you move ahead, you will not only make an impact on business and technology but also will be empathetic in shaping the destiny of our nation. We are all proud of you and nurture high hopes from you. Be the worthy citizens of our country. With these words, I conclude. I wish you the very best in all your endeavours. I also take this opportunity to wish everyone present here a very happy, healthy, rewarding and intellectually satisfying 2014 and beyond.

Thank you.
Jai Hind.

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