



Science Reporter

EDITOR

HASAN JAWAID KHAN

ASSOCIATE EDITOR

DR. VINEETA SINGHAL

EDITORIAL ASSISTANCE

VRISHALI SUBRAMANIAN

PRODUCTION OFFICERS

SUPRIYA GUPTA

ASHWANI KUMAR BRAHMI

ART & LAYOUT

NEERU SHARMA

SENIOR SALES & DISTRIBUTION OFFICER

LOKESH KUMAR CHOPRA

ADVERTISEMENT OFFICER

PARVEZ ALI KHAN



COVER DESIGN:

NEERU SHARMA

CELEBRATING STATISTICS

Take a look at this statement: "Most lung cancers in men are tobacco-related." Now here's the same statement with a figure thrown in: "Almost 85% of lung cancers in men are tobacco-related." Which sounds scarier (of course, for those who use tobacco) and carries more impact? The second statement, of course. Giving a figure or statistic to a statement or an argument makes it that much more definitive and adds credibility to it. That is the power of statistics.

The recent forecast by India's Central Statistical Office of just 5% GDP growth this year had the government worried. During election times negative vote swings are a cause of extreme worry for political parties. And surging growth figures surely come in handy for ruling parties to drumbeat their achievements. Figures also make for good news stories and panel discussions. Statistics also decide player rankings both at the national as well as the international level.

Of course, statistics alone cannot feed the hungry, or provide health services to the marginalized or create jobs for the youth but they are critical in helping to gauge the nature and intensity of the challenge that lies before the authorities or policy makers, guiding them in designing effective policies that could help surmount those challenges.

It is to celebrate the growing significance and generate awareness about statistics that the year 2013 is being celebrated as the International Year of Statistics. It is slated to be a worldwide event supported by more than 1,600 organizations in 111 countries. The founding organizations of the International Year of Statistics—also called Statistics2013—are the American Statistical Association, Institute of Mathematical Statistics, International Biometric Society, International Statistical Institute (and the Bernoulli Society), and Royal Statistical Society.

Decisions today are increasingly becoming data-driven. Whether it is weather forecasting, agriculture, disease risks, prosecuting criminals or even climate change, statistics is becoming more critical.

An interesting insight into the history of modern statistics and the role it has played in the development of science and industry is provided by David Salzberg in his book *The Lady Tasting Tea: How Statistics Revolutionized Science in the Twentieth Century*. He cites an incident where at a summer tea party in Cambridge, England, a lady observes that tea poured into milk tastes differently than that of milk poured into tea. While the scientific minds in her group pour scorn on her observation, one guest, Ronald Aylmer Fisher, proposes to scientifically test the lady's hypothesis. Incidentally, Fisher had brought to the field of statistics an emphasis on controlling the methods for obtaining data and the importance of interpretation. In fact, the title of David Salzberg's book comes from an example, "lady tasting tea", from Fisher's famous book, *The Design of Experiments*.

One hopes that celebrations round the world during the International Year of Statistics will increase public understanding of the impact of statistics and also give the youth a glimpse into a viable career option.



Hasan Jawaid Khan

Printed and published by Deeksha Bist on behalf of the National Institute of Science Communication And Information Resources (NISCAIR), CSIR, Dr K S Krishnan Marg, New Delhi-110 012 and printed at Brijbasi Art Press Ltd., A-81, Sector-5, Noida-201 203.

Science Reporter is published monthly by the National Institute of Science Communication And Information Resources (NISCAIR), CSIR, Dr K S Krishnan Marg, New Delhi-110 012. NISCAIR assumes no responsibility for statements and opinions advanced by the authors or for any claims made in the advertisements published in *Science Reporter*.

For Editorial Queries: Ph.: 91-011-25848702; **Email:** sr@niscair.res.in; **Fax:** 91-011-25847062

For Sales & Subscription Related Queries: Ph.: 91-011-25841647, 25846301 Extn. 286; **Email:** lkc@niscair.res.in

For Advertisement Related Queries: Ph.: 91-011-25843359; **Email:** sales@niscair.res.in; **Website:** http://www.niscair.res.in

Subscription: Inland: 1 yr: Rs 200/-; 2 yrs: Rs 380/-; 3 yrs: Rs 540/- Foreign: 1 yr (Air Mail): US \$ 65

© National Institute of Science Communication And Information Resources (NISCAIR)