

APPLIED STATISTICS

Newsletter

Published by the Institute of Applied Statistics, Sri Lanka

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ISSN 1391- 4995

February 2013

International Year of Statistics – 2013

We are participating



Institute of Applied Statistics, Sri Lanka (IASSL) is proud to announce that it is actively participating in the International Year of Statistics 2013, a worldwide celebration of the contributions of statistical science to the advancement of our global society. In fact IASSL joined the global statistics community as a participating organization no sooner the year 2013 was declared as the International Year of Statistics.

More than 1600 organizations—universities, research institutes, high schools, professional societies, government agencies and businesses—in nearly 108 countries are joining to celebrate and promote the importance of statistical science to the science community, businesses, governments, the news media, policymakers, employers, students and the public.

During this yearlong celebration, Institute of Applied Statistics, Sri Lanka and the hundreds of other participating organizations around the world will be:

- Increasing public awareness of the power and impact of statistics on all aspects of our society
- Nurturing statistics as a profession, especially among high-school and college students
- Promoting creativity and development in the sciences of probability and statistics

Executive Council of IASSL has decided to implement activities in relation to the International Year of Statistics during 2013. The National Olympiad 2013, supporting research in Statistics, Island wide Quiz programme for school children are some of those. The Applied Statistics news letter will publish details of these activities in the future issues.

Induction of the IASSL President

The induction of Prof. L. H. P. Gunarathna as the second President of the Institute of Applied Statistics, Sri Lanka was held on 12th February 2013 at the Hector Kobbakaduwa Agrarian Research Institute, Colombo 07. A large number of members, and well-wishers of President Gunarathna gathered for the induction.

Hon. Dinesh Gunawardana, Minister of Water Supply and Drainage graced the occasion as the chief guest. Prof. Athula Ranasinghe, Dean of the Faculty of Arts, University delivered the keynote address.

Outgoing president Mr. Palitha Sarukkali welcomed the audience. In his brief speech, he spelled out the achievements of the Institute of Applied Statistics during the short period of its existence. He also said that the year 2013 has been declared as the International Year of Statistics by the world Statistics Community and IASSL is a participating organization. He said he was confident that Prof. Gunarathna would lead the Executive Council to achieve the objectives of IASSL and also the objectives of the International Year of Statistics.

President Prof. Gunarathna was inducted by the outgoing president Mr. Palitha Sarukkali.

Delivering his presidential address Prof. Gunarathna said that he treated it as a great honour and privilege for him to assume the role of president of the institute of Applied Statistics, Sri Lanka.

He also pointed out that the Applied Statistics Association of Sri Lanka (ASASL) was founded in 1999 at the University of Peradeniya and he was a founder member of the ASASL. "During the period from 1999 to 2011, the Association played a critical role in promoting proper use of Statistics via newsletters, journals, seminars and workshops. The Association has been incorporated by an act of Parliament as Institute of Applied Statistics, Sri Lanka (IASSL) to grant more legal recognition and to expand the scope of activities" he said.

Prof. Gunarathna indicated to the minister that we were the only professional body of statistics in the country and almost all the statisticians of the country are our members and hence we wish to

request the Government to contact us for any statistical analyses. Prof. Gunarathna selected the theme for 2013 as "**Towards Statistically literate Society**"



Arrival of the Chief Guest

Prof. Athula Ranasinghe delivering the keynote speech emphasized that hard scientists look at the quality of data where as the social scientists wants accurate data.

He also compared how econometrics and statistics are related and pointed out that although econometrics is statistics used in economics, when you examine an econometrics paper it is very difficult to identify whether it is an economics paper or a statistics paper.

Hon. Dinesh Gunawardana speaking at the occasion pointed out that Sri Lanka is heading towards an era of the fastest growth in the history driven by large-scale reconstruction and development projects.

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Applied Statistics Newsletter- More issues per year

On the recommendation of the Executive Council of IASSL, the Editorial Board has decided to publish three issues of the Applied Statistics Newsletter per year commencing from 2013. You will receive these issues in February, June and in October. This decision has been taken to improve the dissemination of news to our members.

Editorial Board will be glad to accept any article of statistical interest from members of IASSL or any other person for publication after reviewing it. Please email your articles to the Editor (editor@iappstat.lk) Or Immediate Past President (palithasaru@gmail.com) or Administrative Officer appstatsl@gmail.com)

NEWS IN BRIEF

PGIA signs a MOU with Yeshua University

The University of Peradeniya will sign a MoU with the Yeshua university in Accra, Ghana. Students will be enrolled from Ghana and other African countries to follow the MSc degree in Applied Statistics offered by the Post-Graduate Institute of Agriculture (PGIA). The courses will be conducted in Ghana and the core courses will be taught by the members of the panel of teachers from the board of Bio-Statistics, PGIA who will travel to Ghana. The other courses will be taught by resource persons from Ghana after approval by the PGIA. This will be the first time that a postgraduate program is outsourced.

Appointed Director General of the Department of Census and Statistics

Mr. D.C.A Gunawardena assumed duties as the Director General of the Department of Census and Statistics effective from 03 December 2012.

Mr. Gunawardena counts 34 years' service to the Department in various capacities ranging from Statistician, Deputy Director, Director to Additional Director General. He holds a B.Sc. First class Honors, degree from the University of Jaffna, a Post Graduate Diploma in Statistics from the Vidyodaya University.

He also obtained a Post Graduate Diploma in Economic Statistics from the U.S. Bureau of Census, Washington DC, U SA. He has also served as the national consultant on number of UN sponsored projects and has also represented Sri Lanka at numerous international forums on census and

statistics including the RETA, ICP and MDG. Mr. Gunawardena is an old boy of Ananda College Colombo.

Mr. D.C.A. Gunawardane is a founder member of the former Applied Statistics Association of Sri Lanka and held several posts in the Executive Committee. After the incorporation of the Institute of Applied Statistics he served as a Council Member in the last Executive Council.

We wish him all the best and success in his every endeavor.

Member of IASSL to lead SLAAS Physical Science section (E1)

Dr. Chandima Thilakarathna, a former secretary of the IASSL has been elected to the post of President of the Physical Science (E1) section of the Sri Lanka Association for the Advancement of Science (SLAAS).

We wish her all the best and success in her every endeavor.

IASSL Head Office gets more space

IASSL Head Office gets additional 290 sq ft of space from OPA building to start classes for the proposed Diploma in Statistics course.

Identity cards for IASSL members

It has been noted that still a large number of members have not obtained IASSL identity cards yet. Please contact the office for applying for identity cards.

EDITORIAL**International Year of Statistics**

We have just stepped into the International Year of Statistics, declared by the world statistics community. IASSL is a participating organization of the celebration of this important event. The purpose of the **International Year of Statistics** is to focus awareness of the importance of statistical methods in our world. Statistics has played an increasingly important role in science, in industry, in health and in business; in short every aspect of our life.

Statistics is essential for everyday life although most people cannot feel it. There are a large number of products around us that had used statistics to present it in a final form.

Consider a piece of chocolate that everybody likes to eat. The taste, size and other attributes have been identified using a repeated consumer preference surveys which use statistics. The ingredients and their composition have been determined by scientists using statistical methods to carefully assure the taste and effectiveness of the ingredient and the proper concentration. The chocolate was formulated through a series of designed experiments that determined the optimal formulation through statistical modeling. The production was monitored by statistical process control to ensure quality and consistency, and to reduce variability.

Then the pricing, packaging and marketing were determined through statistical methods to determine the best marketing strategies. Even the location of the chocolate on the supermarket shelf was the result of statistically based studies. The advertising was monitored using statistical methods. Your purchase transaction became data that was analyzed statistically. The credit card used for the purchase was scrutinized by a statistical model to make sure that it wasn't fraudulent. Again there may be consumer surveys to check whether you satisfied with the product. So we see how much of statistics were involved in this process until it goes into our mouth. This is just one example; Every product we use, every activity we perform, every service we render had to go through similar statistical processes.

We don't need to be aware of it, since it is just an embedded in the process. Thus Statistics is useful everywhere you look. Statistics is an emergent discipline that has rapidly adapted to current challenges.

In this ICT era we may deal with large amount of data-- you need statistics to make that data useful. Statistics must be used responsibly. Otherwise people will not trust statistics. You need good and enough data to carry out your experiments.. When you are doing analysis yourself, you need to learn the problems that may encounter. You need to

think through the statistical analysis very carefully to come over those problems..

Thus we see, some of us learn statistics as a part of our education. Some of us learn on the job. Some of us still have a lot to learn. Therefore we may make International Year of Statistics 2013 the occasion to think of the value of Statistical methods and Learning how to use them responsibly, as we cannot live without statistics.

Wish you a Happy International Year of Statistics 2013

SCHOLARSHIPS

Following information on scholarship programs and free online courses in Statistics were advertized in the internet recently.

Information about the Central European University and it's programs :

Prospective Students <http://www.ceu.hu/prospective-students>

Admissions Information <http://www.ceu.hu/admissions>

Schools and Departments <http://www.ceu.hu/academics/schools-departments>

Degree Programs <http://www.ceu.hu/academics/degrees>

Scholarships and Fellowships

<http://www.ceu.hu/admissions/financialaid>

If you have additional questions, you can always contact the CEU Student Recruitment Office by dropping an email to student-info@ceu.hu.

Free Online Education : The world top universities offer courses online for anyone to take. There are many interesting courses in Statistics and other subject areas..

<https://www.coursera.org/category/stats>

The Institute of Mathematical Statistics is an international professional and scholarly society devoted to the development, dissemination, and application of statistics and probability. The Institute currently has about 4,500 members in all parts of the world.

IMS offers FREE membership to students. Student Membership includes full membership benefits.

Check out for more details <http://imstat.org/membership/>

A very important website, which shows "International Scholarships and Financial Aid Positions":

<http://scholarship-positions.com/>

2012 2013 College and free online Scholarships, PhD Scholarships, Postdoctoral, Graduate International Scholarships, Scholarship-positions.com, Undergraduate Scholarships, Postgraduate Scholarships, Financial Aid Fellowships, PhD Positions, Postdoctoral Positions, Scholarships for Developing Countries,

Calling for Papers

The Sri Lankan Journal of Applied Statistics (SLJAS) is a refereed journal started in 2000 which publishes the results of original work on applications of Statistics and on theoretical and methodical aspects of Statistics. The journal also welcomes critical reviews including conceptual discussions, opinions and book reviews. Applications of Statistics in the area of Agriculture & Forestry, Medical, Dental and Veterinary Sciences, Natural, Physical Sciences, Social Sciences, Economics and Actuarial Science fall within the scope of the journal.

The Editorial Board of the IASSL is calling papers from Researchers from Sri Lanka and abroad for the Volume 14, Issue No. 1 of the SLJAS which is scheduled to be published in early 2013. Instructions to authors are available at the website of IASSL.

Please visit:

[http://www.iappstat.lk/journal/ojs/Instructions to Authors \(summary\).pdf](http://www.iappstat.lk/journal/ojs/Instructions%20to%20Authors%20(summary).pdf)

Online Submission of papers is also available in the website.

IASSL WORKPLAN FOR 2013

We give below the work plans of the Institute of Applied Statistics, Sri Lanka as submitted by the chairpersons of Statutory Committees. All these functions are in line with the Statistics2013 objectives.

R & D Committee

R & D Committee will continue with awarding scheme for undergraduate/ postgraduate projects for the year 2013. Other tasks undertaken R&D Committee are given below.

1. Developing a database of Statistical Research done in Sri Lanka.

2. Statistical Consultancy

It was mentioned that through the institute, statistical consultancy work could be done by the members and contribute both to the researchers and to the work of the institute the same time.

3. Working Paper Series

Need to start a working paper series to publish studies done by scholars of whom the standards are not sufficient to be published in the institute Journal has been suggested.

4 Training Program on Data Analysis

To start a training program on data analysis was discussed.

5. Bidding for Research Projects

The possibility of bidding for research projects was identified as a task for 2013.

Academic Training Committee (ATC)

ATC will mainly concern with commencing the proposed Diploma in Statistics program. This is expected to produce Chartered Statisticians after 3 to 4 years of studies.

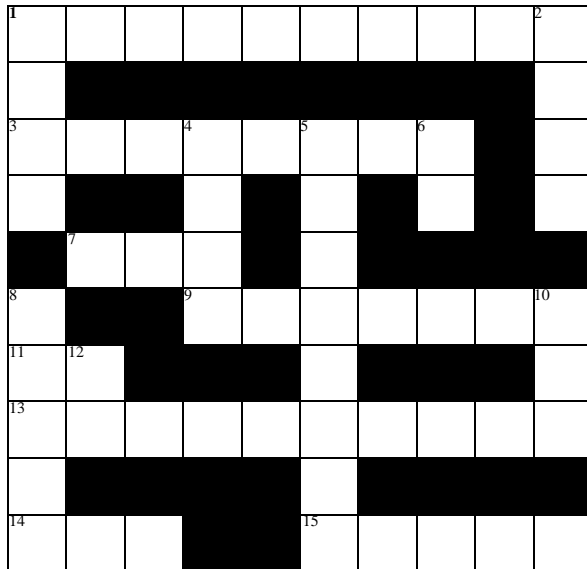
It is expected to enroll the first batch of students within next two months.

ATC will continue with the usual Basic Statistics Program, Use of Statistical packages for data analysis course and the Basic SPSS course during this year also.

Contd ... page 06

STATISTICS CROSSWORD – 01

Fill the following crossword with Statistics / Mathematics terms. Solution will appear in the next Newsletter.



ACROSS

1. A process that leads to one of several outcomes
3. Another name for the Normal Distribution
7. Maximum Likelihood Estimation
9. This is the distribution of a random variable X such that the random variable $Y = (X/\lambda)^k$ is the standard exponential distribution with intensity 1
11. The series $A_1, A_2, A_3, A_4, \dots, A_n, A_{n+1}, \dots$ such that $A_n - A_{n-1}$ is constant for all $n > 1$ (abbreviation)
13. Probability
14. The quantity that should be purchased to keep the inventory cost of an item a minimum
15. Something may or may not happen and whose probability is of interest

DOWN

1. Intersection between two adjacent planes
2. Software used in solving LP problems
4. Asymmetry in the distribution of the sample data values.

5. Very large
6. A letter in the Greek Alphabet
8. Worth or utility as estimated
10. Right Hand Side digit of a number
12. A letter in the Greek Alphabet

Contd ... from page 05

IASSL Work Plan for 2013

Statistics Popularization Committee (SPC)

Statistics Popularization Committee will continue with holding the Statistics Olympiad just before the next GCE (OL) examination.

SPC has also decided to stage an island-wide quiz program in statistics among the school children. This will popularize the statistics discipline among them and also will help them in preparing for the Statistics Olympiad.

Meanwhile SPC had planned to start the proposed training of statistics teachers program commencing from Matara district.

Editorial Board

Editorial Board's main task is to publish the Sri Lankan Journal of Applied Statistics (SLJAS). This journal has been published once a year and its 13th Volume was published in 2012.

From this year the Editorial Board has taken steps to published three issues per year. This has been possible since an Editorial Advisory Board and a panel of Associate Editors was appointed selected from internationally recognized personnel. Now there is a significant increase of papers from foreign statisticians.

Editorial Board has also decided to increase the number of issues of the "Applied Statistics Newsletter" from one to three which includes additional features as compared to earlier newsletters.

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INDUCTION OF THE IASSL PRESIDENT

Hon. Minister went on to say that Sri Lanka was able to maintain over 6% GDP growth rate for last five years with two straight years of above 8%. Sri Lanka will continue to experience sturdy economic growth despite bad economic climate in the western world.



Prof. Gunarathna is being inducted by Mr. Palitha Sarukkali

He also said we maintain highly satisfactory living standards in the region as revealed by measures such as Physical Quality of Living Index and Human Development Index. Sri Lanka is on track to meeting most of the Millennium Development Goals as revealed by UNDP as an early achiever on 10 of the 21 indicators, including those related to the goals of universal primary education and gender equality. I would like to talk about this exciting future of Sri Lanka. I believe that professionals could do better qualitative contributions to our dream of being “**Miracle of Asia**”. I expect that you will not only be a partners but drivers of this progress”.

Hon. Dinesh Gunawardana also stated that being a developing country, still we suffers a large numbers problems such as, low productivity in agriculture couple with rural poverty and regional disparity, high prevalence of malnutrition despite significant achievements in health sector, youth

unemployment and low returns to higher education, improper usage of foreign remittances and increasing number of crimes and vehicle accidents”

“In order to find solutions, first we need to understand the problems. Even though we do not want to employ any Statistical Analysis, we need numbers or statistics to understand the severity and prioritize these issues. Then we need your advanced statistical analysis. We, politicians need your professional support to identify and solve these problems that we confront today. In other words, we need appropriate policy information” he elaborated.



Prof. Ranasinghe delivering keynote speech

In conclusion he said “Our statisticians are contributing significantly for the advancement the discipline and your knowledge is par with the statisticians in the developed world. I take this opportunity to express my regard and respect to Statistics professionals in this country who have the potential to move for greener pastures. We appreciate your Institute’s yeoman service to this land to improve the quality of this mother nation.”

Mrs. Chandrika Fernando, Secretary of the Institute of Applied Statistics delivered the vote of thanks.

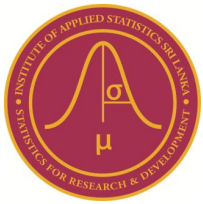
**Do you know that your career opportunities
get boosted with qualifications in Statistics?**

Qualifications in Statistics opens a gateway to career opportunities available in many sectors including Government and Semi-Government Organizations, Business, Industry and Non-Governmental Organizations.

We invite you to consider Statistics
when making the choice of study areas.

We, at the **Institute of Applied Statistics, Sri Lanka**
help you to acquire qualifications in Statistics
by conducting short courses, seminars and programs leading to professional qualifications in Statistics.

We are at your service:



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Printed matter

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