

International Statistical Education Newsletter

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EDITORIAL

Several times in the past it has been necessary to divide an article between successive issues of ISEN (and sometimes the editor has persuaded an author to reduce his article in order to squeeze it into one issue), and the Education Committee agreed that it would be more sensible to arrange occasional larger issues: this is the first of them. With this possibility, which allows greater flexibility for authors, the usual invitation is extended again: anyone who has news, views, or anything else to say on statistical education which seems appropriate for ISEN should get in touch. In particular, let the editor have any information about training of trainers and about links: if enough material emerges a special issue will be devoted to these topics.

EDUCATION COMMITTEE

Report on Meeting of the ISI Statistical Education Committee, Amsterdam, August 16 and 19, 1985.

The meeting on August 16 began by approving the minutes of the Voorburg meeting in December 1984. The Committee then agreed some modifications in the way visiting teachers are appointed to ISEC Calcutta, and went on to agree to help organise a meeting of Directors of International Statistical Training Centres (ISECs), provided that it was clear, after enquiry, that this was desired. A second edition of the Almanac of ITSCs is to be prepared. Various recent and future meetings were discussed; particularly ICOTS II, a meeting held in Nagoya in conjunction with the Bernoulli Society conference, and a UNESCO meeting in China on Science and Technology. It was agreed that a Round Table would be organised in 1988 on the Training of Statisticians for Teaching in Schools.

The report 'Calculators and Statistical Calculations: An International Enquiry', by L. Rade was discussed and

it was noted that copies had been passed on to calculator manufacturers.

The continuing publication of ISEN was approved, and two possible future publications noted - an Annotated Bibliography of Publications on Statistical Education and a Directory of Workers in Statistical Education Around the World. A Directory of Short Courses, and a volume on the Training of Statisticians Around the World were both in preparation.

Finally the Committee reviewed the work of the three Task Forces (on the Teaching of Statistics at School Level, on Tertiary and Technical Education in Statistics, and for the Organisation of Conferences), and appointed Deputy Chairmen: G. Noether, B. Afonja, and M. Landwehr respectively. It also agreed on the need to do everything possible to involve all interested members of ISI in the work.

The meeting on August 18 was announced as open to all who were interested. Only a few came, but those that did put forward a number of useful ideas concerned with supporting other activities, such as ways in which teaching material might be produced.

NEWS AND ANNOUNCEMENTS

ISI Competition for Young Statisticians

Young Statisticians from Developing Countries are invited to submit papers for possible presentation at the next two ISI sessions (Tokyo and Paris); winners receive all expenses to attend the session concerned. More details may be obtained from the Director of the Permanent Office.

Guide Syllabuses

The UNECA has coordinated the production of Guide Syllabuses for (i) middle-level and (ii) in-service training for the Statistical Training Programmes for Africa. Copies are available on request from K. T. de Graft Johnson, Chief, Statistics Division, United Nations Economic Commission for Africa, Africa Hall, P.O. Box 3001, Addis Ababa, Ethiopia.

A booklet by A.G. Howson, B.F. Nebres and B.J. Wilson, published by the International Commission on Mathematical Instruction, with this title discusses the general considerations involved. Further details may be obtained from the Secretariat, Centre for Mathematics Education, University of Southampton, Southampton SO9 5NH, UK.

Calculators and Statistical Calculations: An

International Enquiry.

Further information about the results of this

REPORTS FROM ROUND THE WORLD

THE UNITED NATIONS STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC (SIAP), TOKYO.

by Tito A. Mijares, Project Manager/Director, SIAP.

Historical Brief

The need to establish a centre to bring about regional co-operation in statistical activities among countries of Asia and the Pacific was recognized as early as 1964. The Conference of Asian Statisticians at its sixth session recommended the appointment of an expert group to make a study of a suitable plan for securing facilities for training statisticians at the professional level. The Expert Group had noted the universal shortage of statisticians in the region especially in the government service. In order to meet the urgent demands for professional training in statistics, the Group had recommended the setting up of a statistical training institute.

The recommendation of the Expert Group was endorsed in 1966 at the twenty-second session of the Economic and Social Commission for Asia and the Pacific (ESCAP) [formerly, the Economic Commission for Asia and the Far East (ECAFE)]. Following Resolution 75 (XXIII) in 1967, accepting the offer of the Government of JAPAN (GOJ) to provide host facilities, the United Nations Development Programme (UNDP) was requested to provide assistance for establishing the Institute. An agreement between the UNDP and the GOJ for the establishment and operation of the Asian Statistical Institute (ASI) was signed in September 1969, followed by a Plan of Operation which was signed by twenty ESCAP member and associate member governments, the UNDP and the ESCAP, as the Executing Agency. As the host country, the GOJ designated the Administrative Coordination Agency (former Administrative Management Agency) as the Co-operating Agency.

Objectives

The increasing need by the government for a much wider range of timely and reliable data for planning and monitoring economic and social development had heightened the dearth of professionally trained statisticians in most countries of the ESCAP region. Although there were a growing number of universities offering courses in statistics and turning out academic statisticians, there was an urgent need to equip professional workers in government statistical services with practical training in statistics.

The Institute was set up therefore with two broad major objectives:

- (i) To help improve statistical standards as bases for formulating and administering projects on economic and social development through training and research in applied statistics and data processing; and
- (ii) To assist in the promotion and strengthening of statistical training capabilities and programmes in the ESCAP region through exchange of research and experience and through collaboration in statistical development with national and other international agencies or institutions.

enquiry may be obtained from L. Rade, Department Mathematics, Chalmers University of Technology, 5-96 Goteborg, Sweden.

UNESCO Coupons

Readers in countries with non-convertible currency may like to be reminded of the existence of UNESCO coupons, available in many countries, which can be purchased in local currency and used to pay for book journals, equipment etc. and for subscriptions educational or scientific institutions.

Financial Resources

The ASI started operation on 3 June 1970. During the initial period (First Five-Year Phase) which end on 30 September 1975, the Governments Counterpart Contributions amounted to \$US330,733. The GOJ contribution in kind was \$US1,385,911 and UNI contributed \$US2,202,900. During the Second Phase (October 1975 - 30 September 1980), these contributions were respectively, \$US793,000, \$US2.6 million (approx.), and \$US1.299 million. The UNDP, starting with the Third Phase (1 October 1980 - 30 September 1985) and following the Organization's global policy limit contributions to regional institutions only programme support, progressively withdrew from the institutional support of the Institute [now named the Statistical Institute for Asia and the Pacific (SIAP)]. The GOJ, however, increased ten-fold its contributions to complement member Government contribution and maintain at the same level the institutional support to the Institute.

For the Fourth Phase (1 October 1985 - 30 September 1990), the contributions of the UNDP, the GOJ and other member Governments are not yet officially known as of this writing. However, proposals submitted for the GOJ to contribute \$US3,578,600 in cash and Y1.241 million in kind, mostly for fellowships, support staff, lease of building space and computer facilities equipment and others. Other Governments' contributions were proposed to reach \$US1,100,000. On the side of UNDP, while no indications were given in levels, the financial support of new programmes to be undertaken in addition to expanding the existing one could be substantial, if approved.

Programmes (by Major Funding Source)

The programmes of training at the SIAP may be categorized into three types by major source of funding. There are the regular programmes, fellowship of which are awarded by the GOJ through the Japan International Cooperation Agency (JICA). There are also programmes supported by the UNDP which, initially during the first two phases, supported about half of the fellowships in the regular programmes but which lately, since the third phase, have been used to finance fellowships at the Statistical Software Demonstration Centre and consultants and lecturers at the Training of Trainers courses in request in countries of the region. The third type of programme consists of Advanced Courses/Seminars on special topic with fellowships provided by the Government of the Netherlands through its Studies-in-the-Region (SIR) Programme Funds.

Guest Lecturers

The Institute is manned by a regular staff (see below). However, many other Governments contribute to the Institute's various training programmes by the provision of short-term or long-term lecturers either on full or partial non-reimbursable basis. During the early phases, the Governments of the Netherlands, France and the Federal Republic of Germany had seconded to the Institute lecturers for periods ranging from one to four years. The Government of the United Kingdom had been providing short-term guest lecturers on non-reimbursable basis as well as the GOJ. Occasional

guest lecturers also on non-reimbursable basis have been provided by the Governments of Australia, Canada, India and U.S.A.

Aside from the UNDP, other international organizations extend support to SIAP from time to time. The UNFPA had supported for five years a lecturer at SIAP on demographic and social statistics during the third phase. Regional advisers from such specialized international agencies as the FAO, UNESCO, ILO, WHO, UNICEF, and others would deliver lectures on relevant topics at the Institute's seminars. The Asian Development Bank (ADB) frequently sends short-term lecturers to the Institute's regular programmes as well as to the Advanced Course/Seminars on non-reimbursable basis and occasional short-term lecturers were provided by the World Bank.

Regular Staff

The Institute's regular training staff assigned by the United Nations consist of the Project Manager/Director, the Deputy Director (Training) and five statisticians/lecturers to give instruction on six or seven subjects covered in the general statistics course. These are in national accounting, statistical operations, statistical methods and sampling, economic statistics, agricultural statistics, demographic and social statistics and statistical computing. The teaching staff are drawn by the United Nations from a select mixed group of academics and practitioners with high educational background and/or considerable practical experience. In addition, there is an Administrative Officer supported by two administrative support staff also funded from cash contributions of countries in the region.

The Institute is further supported by a regular staff headed by the Project Co-Manager/Deputy Director (Administration) with twelve other Japanese nationals assigned by the GOJ as part of its in-kind contribution. They co-operate with the Institute on administrative matters, especially those requiring liaison with local authorities.

Training Courses

(a) The General Statistics Course

This is the center-piece of the Institute's training programme. Originally, the duration of training was for ten months during the First Phase but was later reduced to six months beginning with the eighth course in 1977-1978 during the Second Phase. Normally the course is conducted from October each year to March the following year for thirty participants through fellowships awarded by the GOJ and nominations from member and associate member Governments in the ESCAP region.

With slight modifications from year to year, the course covers seven subjects as mentioned above. Special introductory topics in requisite Economic Analysis and Mathematics are given to participants without the background.

The participants, who are selected from intermediate and more senior level officials of a national statistical office, are introduced into the overall statistical framework of the system of national accounts, which shows the inter-relations of various sets of data produced or compiled from a typical national statistical system. In statistical methods and sampling, participants are exposed to principles governing the proper use of tools for collecting and interpreting data or statistics produced. The module on statistical operations is the key element of the course where topics drawn from other modules are set and oriented with practical ways to solve problems ordinarily met in preparing for and conducting field operations and surveys. Topics in economic, social and agricultural statistics increase the perspective and depth of participants' appreciation for the wide range of areas that are dealt with in government statistical service. An introduction to statistical computing further exposes participants to advances of computer technology and data processing.

Fifteen general statistics courses have been conducted during the last fifteen years.

(b) Automatic Data Processing (ADP)

The Group Training Course in ADP for Statisticians also starts in October every year concurrently with the

Course, which was introduced in 1981 and runs for three months, is conducted for ten participants receiving fellowships provided by the JICA. One or two participants receiving support from other sources might also be admitted to this course.

The participant is given an introduction to data processing and the PL/I programme language. Its main objective is making participants aware of how data processing methods and their fundamentals can be systematically applied. While there are more attractive characteristics of other programs in terms of educational value and logical conception, PL/I programming language, which is believed to incorporate many elements similar to FORTRAN or COBOL, will enable participants to acquire knowledge sufficient for many complicated programming applications.

Knowledge of capabilities and limitations of computers will facilitate understanding the implications of ADP in survey and other project designs and thus enhance the dialogue between statisticians and ADP specialists.

Six courses of this type have been conducted since 1981.

(c) Advanced Courses/Seminars

Two courses are usually conducted every year between April and September, each for a duration of four to six weeks. The course is organized for the more experienced senior statistical officials in particular subject-matter fields. The course-seminar type of atmosphere in the way issues are addressed provides a forum for the exchange of country experiences and the exposure of participants to new developments emerging in the field.

The courses had been introduced as early as the first phase along with the general statistics course with fellowships provided by the UNDP. During the second phase and later years, funds for 11-14 fellowships in each course were provided by the Government of the Netherlands under its Studies-in-the-Region (SIR) Programme.

Twenty-five such courses have been conducted during the last fifteen years. Broadly classified the number and topics covered were as follows:

	Advanced Courses	Country Courses
Basic Statistical Operations and Evaluation (censuses, surveys, sampling, etc.).....	11	16
Special Statistics for Development planning.....	9	10
Statistical Framework and Organization.....	3	8
Data Processing and Management.....	2	2
Total:	25	36

(d) Country Courses/Training of Trainers

To meet the current particular needs of requesting countries, the Institute designs and conducts the course jointly with local statistical authorities for a period of four to six weeks. The programme is usually developed in consultation with the country concerned and is generally aimed at the needs of more senior officials who have a general interest in the topic as well as those with special interest. Thirty-six country courses have been conducted in the past three phases on topics that might be grouped under the categories shown in section (c) above.

The Training of Trainers course started in 1981 is supported by the UNDP. It is also conducted in requesting countries although training on various training techniques was aimed at trainers in statistical operations. UNDP supports the external consultants or lecturers at no cost to the requesting Governments; however, local costs including the provision of local lecturers has to be borne by the requesting Government. Beginning 1985, the two programmes have been combined to obtain optimum benefit for the country and the increase cost effectiveness more than by conducting in the country the two types of courses separately.

(e) Statistical Software Demonstration Centre

The Institute gives fellowships for one month under the UNDP-supported fund to pairs of nominees (a statistician and a computer analyst) from developing countries of the region to study (mainframe)

statistical software packages, for adaptation and use in their country. A library of about thirty packages are available at the Centre which is located at SIAP.

Since 1982 when the activity was introduced, some 41 individuals from 10 countries have participated in software studies.

Programme Proposed During the Fourth Phase

As the pace of economic and social development continues to increase in Asia and the Pacific region, increasing demands from various users for information and data especially by development planners will continue to grow unabated not only in number and greater detail but also in increasing comprehensiveness and analytic complexity in scope. Relevance, quality, accurateness, adequacy and timeliness of data will remain important problems in statistical development. However, a more important issue behind them is the training and experience that statisticians would have to be equipped with in order to produce the requisite statistics of such characteristics and reliability.

Existing training programmes in SIAP will continue and be improved on. New ones will also be introduced.

The curriculum of the general statistics course is being updated, both in content and in presentation. New topics and applications emerging from issues of statistical development are being incorporated to meet the needs of more middle-level and senior statisticians who are now being nominated by Governments to participate in the course. With the acquisition of more microcomputers in 1986, the module on statistical computing would be improved by introducing participants to microcomputer-based statistical processing and data analysis.

A new separate two-month course in microcomputing is planned to be introduced in 1987 for about ten participants from the region.

During 1986, selected topics from the general statistics course will be prepared by the SIAP staff and audio/video taping. One or two topics from statistical operations, statistical methods and demographic and population statistics will be produced

on an experimental basis. These will be improved further in 1987. Additional topics in national accounting, agricultural statistics, sampling and economic statistics will be considered in 1987 also for A/V production. Printed materials will also be produced as companion training materials for the A/V lectures produced.

While the experimental materials are initially to complement lectures at SIAP's general statistics course, they would also be disseminated to countries requesting general statistics type of country courses and would further be improved as appropriate to make them more effective. Limited research fellowships will be extended to statisticians from selected countries for translating the English A/V tape version of such lectures into local language.

Starting 1987, materials prepared by the Institute's staff for the Advanced Course/Seminars as well as from Country Courses will be integrated into lectures aimed at more senior level statisticians. They are planned to be produced also in audio/video tapes. Special lecturers and experts will be hired to prepare materials for lecture series on special statistical topics of current interest in the ESCAP region. Regional Advisers from ESCAP's substantive Divisions -

and Population and Social Development - will be invited to deliver lectures for taping.

In 1985 an expert group meeting/workshop on developing statistics for household economic activities was jointly organized by the Statistics Division of ESCAP and the Institute. It had long been the experience by the developing countries in the region that the current system of national accounts constructed annually by countries has been inadequate in setting and defining issues applicable to a number of developing countries. A large amount of activities are carried out at the household level which are inadequately, and quite inappropriately, included in the estimation of the gross national product. During the fourth five-year phase of the Institute, follow-up meetings and training seminars on some aspects of the subject will be covered in greater depth in the hope that some fundamental recommendations in the revision planned for the system in 1990 could be made.

Special attention to needs for training of Island countries and other statistically less developed countries in the region would be given during the fourth five-year phase. Most statistical services in these countries are too small to justify requests from the Government for country courses on specific topics. However, it would be practical to conduct sub-regional types of statistical training which would be of common interest in countries of the sub-region. Once a year such sub-regional type of training is planned, depending on requests from those countries.

Towards the later part of the fourth five-year phase, the Institute will attempt to reach selected universities in some countries for a possible three-way link-up among the national statistical office, the university and SIAP for strengthening statistical education and training. The Institute is of the view that while academics tend to be theoretical, great benefits could be derived in the long run by exposing them to the diverse statistical training needs and applications commonly met in official statistical services of government.

While a significant number of participants had been trained by SIAP during these last fifteen years since the Institute's establishment in 1970, the dearth of skilled statisticians in government services is still continuously being felt and the gap through the years has been increasingly experienced. Training programmes having multiplier effects would be given more attention to answer these needs. They might be appropriately labelled "outreach" programmes of the Institute to statistically less developed countries in the region.

Annexe: A grand total of 2204 participants had attended courses of one kind or another by September 30, 1985. A very few came from places as far afield as Nigeria, Saudi Arabia and Egypt, but the very great majority came from the Asian and Western Pacific area: more than one hundred each from Bangladesh, China, India, Indonesia, Nepal, Pakistan, Philippines, Republic of Korea, Sri Lanka and Thailand. Country Courses were the largest single component.

Note: The opinions expressed in this article are those of the author and do not necessarily reflect those of the organization to which he belongs.