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 longer 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 ISIC Calculus, and went on to agree to help organise a meeting of Directors of International Statistical Training Centres (ISICs), 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 ICTS 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 1986 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 Chairman: G. Moether, B. Afonja, and H. 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 16 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.
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 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 recommended the setting up of a Statistical Training Institute.

The recommendation of the Expert Group was endorsed in 1966 by 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 host the Institute, the United Nations Development Programme (UNDP) 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 governments, the UNDP and the ESCAP Executive Agency of the host country, the GOJ designated the Administrative Coordination Agency (formally the Co-operating Agency).

The increasing need for 'a much wider range of timely and reliable data for planning and monitoring social and economic 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 an academic statistician', there was an urgent need to equip professionals with training in various statistical practices. The Institute was set up therefore with two broad major objectives:

1. 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
2. To assist in the promotion and strengthening of statistical training capabilities and programmes in the ESCAP region through exchange of research and experience through collaboration in statistics development with national and other international agencies or institutions.

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

Financial Resources

The ASI started operation on 3 June 1970. During the initial period (First Five-Year Phase) which ended on 30 September 1975, the Government Counterpart contributions amounted to $US330,733. The GOJ contributions in kind was $US1,385,911 and UNDP contributed $US2,702,900. During the Second Phase (October 1975 - 30 September 1980), these contributions were respectively, $US793,000, $US82,6 million (approx.), and $US1.299 million. The UNDP, started with the Third Phase (1 October 1980 - 30 September 1985) and following the Organisation's global policy limit contributions to regional institutions only programme support, progressively withdrew from the institutional support of the Institute (now renamed the United Nations Statistical Institute for Asia and the Pacific (SIAP)). The GOJ however, increased ten-fold its contributions to complement member Government contributions and maintain at the same level the institutional support to the Institute.

For the Fourth Phase (1 October 1985 - 30 September 1990), contributions from UNDP were for the GOJ to contribute $US5,587,600 in addition to $US81,100,000 on the side of UNDP, while no indications were given. 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 of major funding:

1. There are the regular programmes, fellowships of which are awarded by the GOJ through the Japan International Cooperation Agency (JICA). These are also programmes supported by the UNDP which, during the first two phases, supported about half of the fellowships in the regular programmes but, which later went to the third phase, have been used for fellowships at the Statistical Development Centre and consultants and lecturers training of Trainers' courses in request countries of the region. The third type of programme consists of Advanced Courses/Seminars on special topic with fellowships provided by the Netherlands through its Studies-in-the-Region (SIR) Programme Fund.

2. Guest Lecturers are employed to conduct courses for periods ranging from one to four years. The Government of the UK has been providing short-term guest lecturers, on non-reimbursable basis as well as the GOJ. Occasional
The course, which was introduced in 1981 and run for three months, is conducted for ten participants receiving fellowships provided by the JICA. One or two participants receiving fellowships from other sources might also be admitted to this course.

The participant is given an introduction to data processing and the PL/I programming language. Its main objective is to make participants aware of how data processing methods and related concepts can be systematically applied. While there are more attractive characteristics of other programs in terms of educational value and logical perception, PL/I programming language is based on non-reimbursable and is used to incorporate many elements similar to FORTRAN or COBOL with multiple participants to acquire knowledge sufficient for many complicated programming applications.

Knowledge of capabilities and limitations of computers will enable them to understand 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. A sampling of the advanced courses for 1987 is outlined below:

(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 courses enjoy an atmosphere in which issues are addressed and a forum for the exchange of country experiences and the exchange 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 were provided by the Government of the Netherlands. Under its Studies-in-the-Region (SIR) Programme.

The courses were conducted during the last fifteen years. Briefly classified the number and topics covered were as follows:

<table>
<thead>
<tr>
<th>Advanced Country Courses</th>
<th>Courses</th>
</tr>
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<tbody>
<tr>
<td>Basic Statistical Operations and Evaluation (censuses, surveys, sampling, etc.)</td>
<td>11</td>
</tr>
<tr>
<td>Special Statistics for Development planning</td>
<td>9</td>
</tr>
<tr>
<td>Statistical Framework and Organization</td>
<td>3</td>
</tr>
<tr>
<td>Data Processing and Management</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
</tr>
</tbody>
</table>

(d) Country Courses/Training of Trainers

To meet the current particular needs of requesting countries, the Institute 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 general interest in the topic as well as those with specific 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 and was 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 with 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) to develop countries of the region to study (mainframe)

The UNFPA had supported for five years a lecturer at SIAP on demographic and social statistics during the third phase. Geographical advice from such specialized international organizations as the United Nations, UNESCO, ILF, 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/Training of Trainers. Occasionally short-term lecturers were provided by the World Bank.

Regular Staff

The Institute’s regular training staff assigned to 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 economic accounting, statistical operations, statistical methods and sampling, economic statistics, agricultural statistics, demographic and social statistics and statistical computing. The teaching staff are drawn from 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 ten 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 eight 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 states 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, Statistics and Mathematics are given to participants without the background.

The participants, who are selected from intermediate and more senior level officials of national statistical office, are introduced into the overall statistical system of the system of regional 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 their 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 orderly made 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 services. The 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
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 training. Programme Proposed During the Fourth Phase

As the pace of economic and social development continues to increase in Asia and the Pacific region, the demand for information is rising at an increasing rate. 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 complexity and scope. Relevance, quality, accuracy, adequacy and timeliness of data 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 both 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 are emerging from issues of statistical development are being incorporated to meet the needs of middle-level and senior statisticians who are being nominated by Governments to participate in these courses. 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 one-semester, two-month course in microcomputing is planned to be introduced in 1987 for about ten participants from the region.

In 1985, selected topics from the general statistics course will be prepared by the SIAP staff and audio/video taping. These include 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 staaff for the Advanced Course/Seminar as well as from Country Courses will be integrated into lectures and 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 were 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 was inadequate in assessing and defining total national product. 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 needs for training of Island countries and other less developed countries in the region will 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 type 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, dependent 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 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.

Annex: 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.