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Contents

1. <u>Paris ISI Session (September 1989)</u>	2
1.1 General Report by the President, Colm O'Muircheartaigh	2
1.2 Executive Director's Report to the General Assembly (B. Grais)	7
1.3 Scientific Secretary's Report (Ugo Trivellato)	11
1.4 Report of the Nomination Committee, by A. Lery	13
1.5 Report of the Programme Committee, L. Biggeri	15
1.6 Report of the Terminology Committee, G. Brackstone	17
1.7 General Assembly (Paris, september 4 th, 1989)	18
1.8 Council Meetings (August 31, september 5, 1989)	20
1.9 Meeting of Local Representatives, (september 1st, 1989)	22
1.10 Committees : Chairpersons	23
2. <u>Cairo ISI Session (1991)</u>	23
2.1 Status Report of the Programme Committee	23
2.2 List of topics for invited papers	24
2.3 List of topics for contributed papers	26
3. <u>Florence ISI Session (1993)</u>	26
4. <u>An updated list of Local Representatives</u>	26
5. <u>Announcements</u>	31
5.1 Meetings	31
5.2 Publications	32
6. <u>Country Reports</u>	34
6.1 Australia	34
6.2 Canada	35
6.3 Japan	36
6.4 Denmark	37
6.5 Mexico	37
6.6 New-Zealand	38
6.7 Philippines	38
6.8 Syria	39
6.9 Turkey	40
6.10 United States	42
7. <u>Papers Abstracts</u>	43
7.1 Authors : Hsien-Muig Hung and Wayne A. Fuller.....	43
7.2 Author : Edward Gbur	44
7.3 Author : Roderick J.A. Little	44
7.4 Authors : D. Holt and C.J. Skinner	45
8. <u>Question/Answer</u>	46

1. Paris ISI Session (september 1989)

1.1 General Report by the President, Colm O'Muircheartaigh

Introduction

During the last two years the Association has been reasonably successful. Not all of our plans have come to fruition but here is evidence that there is considerable potential in the developments that have been implemented. Our scientific programme is gradually being strengthened and our communication with our membership is improving.

Recruitment/Membership

Graham Kalton, a Vice-President of the Association, took over responsibility for membership matters and carried out a review of procedures and documentation. He revised the IASS information sheet and application form and wrote a letter to IASS local representatives to ask them to recruit new members. Copies of this material were distributed from Paris by the Secretariat. Subsequently he wrote direct to local representatives asking them to submit country reports to the Survey Statistician and encouraging them to recruit new members. This was followed up, demonstrating good survey methodology practice, with two reminder letters and a subsequent announcement in the Survey Statistician about recruitment.

The Secretariat will report on the success of the membership drive. In the light of this and other evidence, the Council and the General Assembly should consider the terms of appointment of local representatives so that inactive local representatives can be replaced.

I would like to record my appreciation of all the work done in this area by Professor Kalton. Not only are the new materials well designed and attractive, but the membership in general and the local representatives in particular benefitted considerably from having a member of Council who took specific responsibility for this area.

I suggest that it would be desirable to have a member of Council take on this task of overseeing membership matters during each term of office.

Scientific Programme

1987 Conference on Telephone Survey Methodology

The Association was co-sponsor with the American Statistical Association (ASA) and the American Association for Public Opinion Research (AAPOR) of the 1987 International Conference on Telephone Survey Methodology. The conference was held from November 8-11 in Charlotte, North Carolina. More than 400 participants attended the conference, which was an outstanding success.

As co-sponsor, the IASS underwrote a proportion of the costs of the conference. As the conference was a financial as well as an intellectual success, the Association now derives a corresponding proportional share of the profits from the conference itself and from royalties on the monograph based on the invited papers at the conference. To date the Association has received US\$10 000. The Organising Committee for the conference has expressed the hope that these funds might be spent on activities consonant with the objectives of the conference - perhaps on a critical review of survey methods and the improvement of data quality.

1990 International Conference on Measurement Errors in Surveys

A Successor to the 1987 International conference is being planned for 1990. The topic of the conference will be Measurement Errors in Surveys ; the organising committee is chaired by Paul Biemer of New Mexico State University. The Association has once again agreed to be a joint sponsor of the conference, this time in conjunction with its previous partners - the American Statistical Association and the American Association for Public Opinion Research - and the American Marketing Association. As before, an edited monograph will be published on the basis of the invited papers from the conference. The conference will take place in Tucson, Arizona, USA From November 11-14, 1990.

The Association has agreed to underwrite a proportion of the financial risk involved in running the conference, and will participate in the profits of the conference, if any. I am confident that the risks are low ; I feel also that this is a useful contribution by the Association to the field.

Joint Conference with the Institute of Statisticians (UK)

Discussions have been taking place with the Institute of Statisticians (UK) to sponsor jointly a conference in July 1990 at the University of Essex on Survey Methodology. Given the failure of the past attempts of the Association to organise regional conferences between ISI sessions, this seems a good opportunity to provide a forum for research papers in the survey methods field. At the time of writing this report (July 1989), details of the collaboration are not yet finalised. I hope to be able to report on progress to the Council and General Assembly in September.

Workshop for Developing Countries

Following the successful workshop for survey statisticians from developing countries organised at the time of the Tokyo ISI sessions, it had been planned to hold a similar workshop preceding the ISI sessions in Paris. The President-Elect, Barbara Bailar, devoted a great deal of effort to this endeavour and applications were received from potential participants. The scheme foundered, however, because of our failure to raise funds to finance the workshop.

I would like to express our appreciation to Barbara Bailer for her work on this project. It is clear that if we intend to organise such workshops in the future the critical element will be the availability of funding. It is apparently not practicable to raise funds on an ad hoc basis for each such workshop separately. It will therefore be necessary to approach the issue of fund-raising systematically on a long term basis. I agree with, and would like the Council and General Assembly to support the suggestion made by Dr Bailer that we should set up a working group to undertake this task. This could be separate from the organisation of the workshops themselves, which would remain the province of the Workshop Committee.

Short Course on Variance Estimation for Complex Surveys

On the initiative of Ugo Trivellato, the Scientific Secretary, a short course has been organised for August 28, immediately before the ISI Session. The course will be given by Wayne Fuller of Iowa State University and Kirk Wolter of the A.C. Nielsen Company, and special exemption of fees and costs of textbook and software has been arranged for participants from developing countries.

I am delighted that it has been possible to provide this short course at the Paris meetings. I feel that this is an area in which the Association has great potential for providing benefits to the membership. We are grateful to Drs Fuller and Wolter for providing their services without cost to the Association, and to Dr Fuller for providing free copies of the software to participants from developing countries. It will provide a report of the course itself to the Council and General Assembly in September.

I would like to propose that the Association should, if possible, provide at least one short course in conjunction with each ISI Session. The Association has an obligation to its membership to assist in the dissemination both of good practice and of recent developments in the field, and short courses are an excellent way of discharging this responsibility.

Workshops for Francophone Statisticians from Developing Countries

The Association had agreed to sponsor, in collaboration with INSEE and SOEC, a workshop/seminar for statisticians from developing countries in Niamey, Niger from 16-22 November 1988. Regrettably the workshop was cancelled at the last moment by the Niger authorities.

The workshop has been rearranged for Lome, Togo, in October 1989. The Association has transferred its sponsorship to the rearranged workshop.

Collaboration with IAOS

Informal discussions took place with Vera Nyitrai, President of the International Association of Official Statisticians, about the possibility of jointly sponsoring a conference on topics of common interest in the years between ISI Sessions. I feel that this is something we should pursue vigorously as a combined conference would be better attended than one held separately by either organisation, and we have many common concerns.

Country Reports

Graham Kalton encouraged the production of Country Reports by the Local Representatives. As a result of his efforts a number of such reports were received, and these reports were more comprehensive than usual. If this trend continues, we will need to reconsider the form in which these reports should be disseminated.

The Secretariat and the Editor of the Survey Statistician have raised the idea that perhaps a new approach might be taken to the publication of these reports. They feel that the reports might best be published separately from the Survey Statistician ; one possibility is that a volume containing all the Country Reports should be produced and published annually. We would of course need to consider the best format and timing for such a publication, and also what additional costs might be incurred by the Association.

IASS Secretariat

I would like to express the appreciation of the Association to INSEE for its support to the Association. As you will all know, INSEE not only provides the central secretariat for the Association but also helps in a variety of other ways. In particular we value (i) the Survey Statistician ; (ii) the special volume containing relevant papers from the ISI sessions which is produced and distributed by INSEE to all IASS members ; and (iii) the support of INSEE and ENSAE in providing facilities for the short course on variance estimation.

Without this generous support the Association would not be able to function. We appreciate this continuing commitment and I suggest that the General Assembly formally convey this appreciation to the Director General of INSEE.

Xavier Charoy has been Executive Director of the Association for the past four years and has given great service to the Association during that time. It would be appropriate for the Council and the General Assembly to record its appreciation of his commitment and dedication to the Association. Personally, during my terms as President-Elect and President I found it a pleasure to work with him and I would like to add my appreciation to that of the Association.

At the end of 1988, M. Charoy was posted to New Caledonia to take responsibility for the Census to be conducted there. As a result, it was necessary to appoint an acting Executive Director for the period until the Paris Session. We were particularly fortunate that M. Bernard Grais of INSEE was willing to take the post of Deputy Executive Director and acting Executive Director for this period. He has since that time been invaluable in his work for the Association. As M. Charoy's term of office was due in any case to end at the Paris Session, we hope that M. Grais will accept the position of Executive Director in succession to M. Charoy at that time.

The Council and General Assembly are invited to endorse this proposal.

Mme Anne-Marie Vespa-Leyder has continued to serve as Administrative Assistant to the Association. We value her contribution highly.

Other Acknowledgements

Two other national statistical offices provide assistance to the Association by providing special subscription terms to our members and we would like to express our appreciation to them. These are Statistics Canada for their journal Survey Methodology and Statistics Sweden for their journal of Official Statistics.

The Chairs of the Committees of the Association will present their own reports at the Session. The work done by them and their committees is vital to the Association and I would like to express our appreciation to them. The continued success of the Association depends critically on their work.

Finally I would like to extend our congratulations to Denise Lievesley, a long standing member of the Association and Local Representative for the UK, on her appointment as Director of the Permanent Office of ISI. We look forward to working with her in her new role.

Conclusion

Apart from the administrative assistance provided to us by INSEE, the success of our efforts depends entirely on the willingness of the Officers, the members of the Council and the Local Representatives to contribute their time and energy to the work of the Association. In this report I have outlined only the main features of our work in the past two years. If I have inadvertently omitted to acknowledge some of the contributions, I can only plead in mitigation that this report would have been too long if all were mentioned explicitly.

It has been an honour and a privilege for me to have been President of the Association and I look forward to continuing to serve the IASS in the future.

1.2 Executive Director's Report to the General Assembly
(B. Grais)

ACTIVITIES OF THE SECRETARIAT

Since the IASS* was created on January 1, 1974, the services of its Secretariat have been provided by the Institut National de la Statistique et des Etudes Economiques (INSEE).

The Secretariat is currently made up of the following members : the Executive Director, X. Charoy, appointed by the Board of the Association in 1985 ; the Deputy Executive Director, B. Grais ; the Editor of the Association's bulletin "Le Statisticien d'Enquêtes/The Survey Statistician", G. Roy ; the Executive Secretary, Mrs. A.M. Vespa-Leyder and a Secretary, Ms. F. Anselmi. The Executive Director, Deputy Executive Director, Editor and administrative secretary provide their services on a voluntary basis. The salaries of Ms. Anselmi is paid by INSEE and her services made available to the Secretariat of the Association on virtually a full-time basis.

The position of Deputy Executive Director was created as an interim measure following the departure of Mr. Charoy for professional reasons. Since December 1988, therefore, the duties of the Executive have in fact been performed by Mr. Grais.

The Secretariat performs the ongoing administrative and management functions of the Association (collecting dues, updating the membership list, organizing elections, etc...). It prepares edits and distributes "The Survey Statistician" and the Association's other publications, organizes the biennial sessions and other activities, looks after correspondence with Executive members, the Council and the country representatives.

INSEE also provides substantial assistance in the form of free services (office of the telephone, postage for correspondence and publications, printing the Association's bulletin, directory and various other publications). Once again, we would like to thank the Director General of the Institute, Mr. Milleron.

PUBLICATIONS

a - The Association's main publication is its official bulletin, "The Survey Statistician", published in June and December every year (sometimes slightly delayed). Thus, four issues have been published since the Tokyo Session ; issue 18 of December 1988 contained the minutes of the council and General Assembly Meetings and the Reports submitted to the Assembly.

"The Survey Statistician" is published in English and French and sent to Association members in their preferred language, as indicated when joining. Since the June 1987 issue, translation has been provided free of charge by Statistics Canada.

Furthermore, the "Instituto Nacional de Estadística" (INE) of Madrid has provided a Spanish-language version for members speaking this language, since issue 13 of June 1986.

We would like to thank the Directors General of Statistics Canada and the INE for their contributions to the Association's work.

b - Since the Amsterdam session, Statistics Canada's bilingual review, "Techniques d'enquêtes/Survey Methodology", has been adopted as the Association's technical publication. Members are entitled to a preferential subscription rate (two issues a year), which is reduced by half for developing countries, with the difference being made up by the Association. Subscription fees are paid to the Secretariat at the same time as membership dues and then forwarded to Statistics Canada.

c - The Secretariat sends the "ISI Newsletter", published three times a year, to all members of the Association who are not also members of the International Statistical Institute.

d - As a follow-up to the Tokyo Session, a collection of papers presented at the ISI-IASS joint sessions has been sent to all members. The proceedings of the ISI convention were distributed only to ISI members and to Association members who attended the session.

e - A new edition of the Association's membership directory was being printed when this report was drafted.

ACTIVITIES

In addition to the ISI's biennial convention, in which the Association regularly participates, notably by organizing joint sessions for the presentation of papers, the IASS endeavours to promote seminars, conferences and other types of programs, alone or in collaboration with other organizations.

In 1987 the IASS was a co-sponsor, with the American Statistical Association and the American Association for Public Opinion Research, of the International Conference on Telephone Survey Techniques held in Charlotte, North Carolina, U.S.A., November 8-11, 1987. This meeting was very successful and a collection of papers presented to the Conference was published by Wiley. The Organizing Committee transferred to the Association its share of the conference's financial surplus. The Association is also entitled to a share of the proceeds from copyrights on published papers. The Organizing Committee expressed the wish that these funds be used in a way consistent with the objectives of the Conference, i.e. the critical review of survey methods and the improvement of the quality of surveys.

More recently, the Association agreed to sponsor a seminar on the theme "Adéquation entre demande et production de données statistiques dans les pays en voie de développement" [Striking a balance between demand and production of statistical data in developing countries], to be held in October 1989 in Lomé (Togo). This seminar is being organized by the French National Statistical Institute (INSEE), with the assistance of the Statistical Office of the European Communities, and will be attended by statisticians from some 25 French-speaking African countries. The seminar was originally scheduled to be held in 1988 in Niamey. However, the venue had to be changed for reasons beyond the control of the organizers.

The Association also organized, on August 28, 1989, on the eve of the ISI convention, a short course on the topic "Estimation of variance in complex surveys".

As this report was being drafted, approximately 40 participants were expected to attend, mainly from developing countries. Participants from these countries were exempted from registration fees and received a free copy of the PC CARP program and the accompanying instruction manual.

We would like to thank all those who assisted in organizing these events, thereby contributing in the most effective manner to the development of the Association's activities and reputation.

MEMBERSHIP

In May 1989, when the Association's membership list was drawn up, there were 1,071 individual members, of whom 219 were also members of the ISI.

The geographic breakdown is as follows :

- Sub-Saharan Africa	172
- North Africa and Middle East	41
- Asia (except the Middle East)	169
- Oceania and Pacific	35
- North America	233
- Latin America and Caribbean	125
- Western Europe	272
- Eastern Europe	24

TOTAL 1,071.

Note the excellent coverage of Western Europe, North America and Sub-Saharan Africa ; the poorer coverage of Asia, North Africa, the Middle East, Latin America and the Caribbean ; and the very low figure for Eastern Europe.

There are also 14 institutional members, which are for the most part national statistical institutes. These organizations deserve thanks for assisting the organization through the payment of dues of 2,000 F.F. (reduced to 800 F.F. for developing countries).

The number of registered members on file is approximately 6 % below what it was just before the Tokyo session. However, it is difficult to make an exact comparison, since much depends on the date on which the file is purged for non-payment of dues for more than three years.

This apparent decline in membership is not borne out by the figures on receipts of dues. However, to be on the safe side, efforts to keep former members and recruit new ones should be pursued vigorously. In future, the Secretariat would be well advised to establish a system for monitoring the Association's membership more closely and with greater precision.

FINANCIAL REPORT

The following are the accounts for 1987 and 1988.

<u>Recettes</u>	1987	1988
- Dues (including subscriptions to "Survey Methodology")	101 078,55	104 152,12
- Investment income	3 348,24	3 872,64
- Sale of address labels	1 000,00	-
- Reimbursement of the advance to the "french-speaking ISI members group"	35 000,00	-
- Return of funds allocated for Tokyo	9 980,00	-
- Overpayment by Statistics Norway	-	8 879,46
- Remainder financial participation in Dakar Seminar (1987)		1 280,00
TOTAL	150 406,79	118 184,22
<u>Dépenses</u>	1987	1988
- Current Secretariat expenditures	2 643,84	3 286,25
- Exceptional Secretariat expenditures (Tokyo)	4 272,00	-
- ISI Newsletter	9 847,27	9 123,69
- Printing	10 757,02	2 695,78
- Travel and meetings (Tokyo)	66 415,00	1 760,00
- Travel and meetings	-	1 738,00
- Allocation for Tokyo	10 087,76	-
- Advance to the "french-speaking ISI members group"	35 000,00	-
- Reimbursement to the ISI of Statistics Norway's contribution	-	8 972,24
- Participation in Niamey Seminar	-	10 065,23
- Financial investment	-	128 257,60
- Exchange premiums and other bank charges	520,82	6,43
TOTAL	139 543,71	165 905,22
BALANCE (surplus of revenue over expenditure)	10 863,69	- 47 721,00

It will be noted immediately that revenue from dues is on a rising trend compared to 1986 and 1987. Hence, the systematic follow-up effort and the policy of recruiting new members, notably through local representatives, appear to be producing results and have halted the decline in membership noted at the last General Assembly. Payments for subscriptions to "Survey Metodology" are included in dues revenue.

The large increase in total revenue recorded in 1987 is fictitious and is due to the reimbursement by the "French-speaking ISI members group" of an advance provided to facilitate their participation in the Tokyo convention, and to the repatriation of funds transferred earlier by the Association to Tokyo for the organization of the session.

On the expenditure side, there were increases in 1987 for travel and meetings, due to participation in the Tokyo Convention, and in 1988 for financial investments made on behalf of the Association. Excluding this last item, the surplus of revenue over expenditure would have been 80 536,00 F.

As of July 15, 1989, the bank and postal accounts had a positive balance of 230 903,36 F. Financial investments were estimated at 188 125 F.

1.3 Scientific Secretary's Report (Ugo Trivellato)

According to the guidelines agreed upon at the General Assembly and Council meetings in Tokyo in 1987, I was involved, in various degrees, in the following planned activities :

- Statistical summaries ;
- Short course ;
- Coordination of events for the Paris ISI Session ;
- Conference and seminars.

Here is a concise report on these items.

STATISTICAL SUMMARIES

Since the General Assembly in 1985, a panel of monitors was created, under the supervision of the Secretary General. Each of them reads one of the major statistical journals to select papers which should be drawn to the attention of IASS members. In addition to keeping the network of monitors working, particular attention has been placed in identifying papers that may be of interest to statisticians in developing countries and practicing statisticians in Government Agencies. The purpose is to bring articles to the attention of members (not to provide a full account of the content) and to ease possible contacts between members and authors. We have regularly published 5 to 7 brief summaries in each issue of "The Survey Statistician".

I am very grateful to the monitors who have agreed to support the Association in this way, and especially to K. Wolter for sharing the burden of coordinating the network.

SHORT COURSE IN VARIANCE ESTIMATION IN COMPLEX SURVEYS

I am pleased to report that the IASS sponsored a one-day short course on "Variance estimation in complex surveys" by W. Fuller and K. Wolter, held in Paris on August 28, 1989, immediately before the ISI Session.

This is the first initiative of the IASS in the area of short courses. The general purpose of short courses is to provide training in topics of interest for IASS members and other survey statisticians. The 1989 short course covered methods for estimating variances for statistics such as means, proportions, ratios, regression coefficients and statistics arising in the analysis of two-way contingency tables. The use of the program PC CARP for computing variances of statistics from complex sample designs on a personal computer was demonstrated, and instruction given in the use of the program.

At the time of writing this report, the number of participants to the short course is expected to be around 40 people, mainly from developing countries. Thanks to the provisions under which PC CARP was implemented, and to a significant financial effort from the IASS, survey statisticians from developing countries were exempted from the registration fees and received a copy of the program and instruction materials at no cost.

Special credits are due to W. Fuller and K. Wolter for donating their time as instructors, and to B. Grais and the INSEE for organizational support.

COORDINATION OF EVENTS FOR THE PARIS ISI SESSION

Two years ago, in Tokyo, it was agreed that the IASS should try to organize three events for the ISI Session in Paris, namely : (a) a workshop for survey statisticians from developing countries ; (b) a short course : (c) a "Questions-and-Answers" meeting.

I regret to inform you that, despite the remarkable efforts of B. Baillar, the workshop had to be cancelled because it has proved not possible to raise funding for it. (A timely announcement of the cancellation was given through the "ISI Newsletter" of Feb. 1989 and the network of Local Representatives).

As a partial remedy, much effort was placed in supporting participation of statisticians from developing countries to the short course (see (II) above).

A serious, but unsuccessful attempt was also made to organize a "Questions-and-Answers" meeting at the ISI Session, with questions answered from, and discussed with, a panel of experts. An announcement of the meeting, with a call for questions, was placed in "The Survey Statisticians" of Dec. 1988 and in the "ISI Newsletter" of Feb. 1989. Unfortunately, no appreciable demand for such meeting emerged from IASS members. It is unclear to me if information on the meeting has not been disseminated widely enough -or through the right channels-, or if the need for a "Questions-and-Answers" meeting does not really exist.

CONFERENCES AND SEMINARS

I am pleased to report that the IASS co-sponsored the International Conference on Telephone Survey Methodology (Charlotte, North Carolina, U.S.A., November 8-11, 1987) jointly with the American Statistical Association and the American Association for Public Opinion Research. This was a very interesting and successful meeting, with more than 400 participants. A book containing the invited papers presented at the Conference has been recently published.

Unfortunately, a couple of other regional meetings in which the IASS was directly involved had to be cancelled for extraneous reasons. Difficulties encountered by the Association in promoting and sponsoring regional meetings are quite understandable (IASS's financial resources are extremely limited) ; they are disappointing as well. The General Assembly and the next Council will have to consider this matter very carefully.

1.4 Report at the Nominations Committee, by A. Lery

Composition of the Committee :

Chairman : Mr. Alain LERY (France)

Members : Mrs. Lelia BOERI DE CERVETTO (Argentina)
Mrs. Awa THIONGANE (Senegal)
Mr. T.B. JABINE (USA)
Mr. Adam MARTON (Hungary)
Mr. Claudio QUINTANO (Italy)
Mr. SICRON (Israel)
Mr. David G. STEEL (Australia)
Mr. Robert TORTORA (USA)

Procedures

a. Organization of the Nominations Committee

The Chairman of the Nominations Committee, appointed during the Session in Tokyo, tried to form a Committee that was representative of the various regions of the world. In that process, he benefitted from the suggestions of the IASS President and of the Executive Secretary.

b. Establishment of a Preliminary List of Potential Candidates

Each Committee member suggested possible candidates for the various positions to be filled :

President-Elect
Vice-President
Scientific Secretary
Council Member

It was understood that potential candidates had to be members of the Association. A consolidated list was established comprising 7 potential candidates for the position of President-Elect, 9 for the position of Vice-President, 6 for the position of Scientific Secretary and 40 for the position of Council Member.

c. Vote of the Nominations Committee Members

- The Chairman asked the Committee members to vote in order to choose candidates for the general election :

2 for the position of President-Elect
4 for the position of Vice-President
2 for the position of Scientific Secretary
12 for the position of Council Member

- The votes were counted by the Chairman of the Committee and a list of candidates was drawn up as a result.

d. Contacts with the Candidates

- For each position, the Chairman wrote to the candidates that had received the largest number of votes and asked them if they would agree to stand in the Elections. The period of their term of office was explained.

- If the candidate agreed to run in the election, he/she was asked to send a short Curriculum Vitae (150 words) that would then be attached to the ballot papers to be sent to IASS members.

- If the candidate refused, or did not answer in time, the next candidate on the list was contacted.

e. Notifying the IASS Secretariat

On February 1, 1989 the list of candidates and their CVs were forwarded to the IASS Secretariat. The responsibility of the Nominations Committee ended there.

Suggestions to Improve the Procedures

a. It would be desirable to organize the next Nominations Committee during the upcoming Session. A meeting to state precisely the modus operandi of the Committee could be held prior to the closing of the Session.

b. IASS, along with the Chairman of the Committee, should prepare general instructions to give to the Committee members for their search for candidates. In effect, the Statutes of the Association contain several articles that impose certain restrictions (see articles 6.2, 6.3, 6.14, and 6.15).

c. The geographic representation of candidates still needs to be improved and Committee members should be asked to suggest more female candidates.

d. It is desirable to obtain a more complete preliminary list of candidates than the one established following current procedures.

Acknowledgement

I would like to thank the IASS Chairman, his Executive Director and Mrs. Vespa-Leyder, as well as all the members of the Nominations Committee, for their suggestions and their contributions.

1.5 Report at the Programme Committee, L. Biggeri

Composition of the Committee :

Chairman : Mr. L. BIGGERI (Italy)

Members : Mrs. C. CHARRE DE TRABUCHI (Argentina)
Mr. W.A. FULLER (U.S.A.)
Mr. W.J. KELLER (Netherlands)
Mr. H. KUDO (Japan)
Mr. H. LEMEL (France)
Mr. A. MARTON (Hungary)
Mr. F. MEHRAN (Switzerland)
Mr. G. NATHAN (Israel)
Mr. H. WU (China)
Mr. D. HOLT (U.K.) Scientific Secretary
Mr. G. KALTON (U.S.A.) Chair of the 1987
Programme Committee

Procedures

The work for the 1989 IASS Paris Programme began in the first months of 1986 sending to many IASS members a letter asking suggestions on topics, organizers and authors both for invited paper meetings and for selected topics of contributed paper meetings. The letter, asking to specify the methodological and/or empirical aspects of the proposal, was sent to the members of present and previous IASS Council, IASS Committees and 1987 Programme Committee ; to the Regional and Country IASS Representatives ; to the more active IASS members (135 members). Besides invitations to submit suggestions were placed in Survey Statisticians and in ISI Newsletter.

With the active collaboration of the Committee members, we received a lot of suggestions ; in fact 45 members replied with about 140 proposals. This is certainly a very valuable result. However there were a great deal of duplications, many topics were more suitable for the meetings of other ISI Sections and some topics were either on 1985 and on 1987 Programmes.

A first list of the suggested topics was prepared (ranking them approximately into ten groups) and the Committee carried out an initial evaluation of the suggestions received ranking them to identify the "favourite" ones. In this way a consolidated list of suggested topics was prepared and the Committee determined its final recommendations for IASS 1989 Programme at meetings in the ISI Session in Tokyo. These recommendations were then made to the ISI Programme Coordinating Committee. The work in this Coordinating Committee was very hard, more than in previous Sessions, taking into account the need to satisfy also the requests of the new emerging Section (IAOS), in some cases quite similar to those of IASS. The very good coordinating work done by R. Pyke and I. Escoufier allowed to achieve a surely valid programme for the IASS.

Programme

The following meetings for invited papers in the 1989 Session have been organized under the responsibility of the IASS. The names of the organizers follow the meeting titles.

- Data Collection and Estimations for Informal Economies, J. CHARMES (France)
- Methodology of Household Budget Surveys, V.K. VERMA (India)
- Methodology of Agricultural Surveys, E.O. Boateng (Ghana)
- Reduction of Memory Errors in Retrospective Surveys, D. SIKKEL (Netherlands)
- Estimation and Analysis of Panel Survey Data, L. FABBRIS (Italy)
- Quality Improvement of Survey Questionnaires, T.WALCZAK, J. KORDOS (Poland)
- Survey Evaluation with Special Reference to Non-Sampling Errors, D. TREWIN (Australia).

Besides the IASS had to cooperate in the following meetings :

- Methods for the Analysis of Complex Socio-Economic Data, under the responsibility of ISI
- Automation of Survey Data : Collection and Processing, under the responsibility of IAOS.

In addition a number of Selected Topics contributed paper sessions have been organized on topics of interest to IASS members, including :

- Applications of Variance Component Analysis in Sample Surveys, J.N.K. RAO (Canada)
- Methodology for Nutritional Status Surveys in Developing Countries, B.A. CARLSON (USA)
- Model Based Estimation for Sample Surveys
- Sampling for Rare populations and Other Special Issues in Developing Countries, H. WU (China)

- Longitudinal Surveys and Methods for Analysis of Longitudinal Data, G. MARLIANI (Italy)
- Development of Statistics for Developing Countries, L. KISH (USA).

All the IASS organizers received information and copy of the letters containing the suggestions on the topic made by the IASS members. So the programme for the invited paper meetings includes participants (organizers, speakers and discussants) from a wide range of countries, including : Argentina, Australia, Cambodia, Canada, China, FRG, France, GDR, Ghana, Hungary, India, Italy, Israel, Iran, Lesotho, Netherlands, Malaysia, Polonia, Sweden, UK, USA.

Some problems have been met to get in touch possible organizers and invited participants and for follow up the work done by each designed organizer. Therefore, the real availability of the invited persons should be one of the most important criteria for choosing the organizers and other participants in invited paper meetings of the future Sessions.

1.6 Report of the Terminology Committee, G. Brackstone

During the 1987 Tokyo sessions the retiring Chair of the IASS Terminology Committee reported on the Committee's work and on the difficulties of conducting this work by correspondence. The Board decided to continue the endeavour for a further period.

No substantive progress has been made in the past two years. A letter to Committee members reviewing the status of the Committee's work and discussing the process followed by the Committee elicited only one response, confirming the previous Chair's experience.

However, I do believe a process or consideration of terminology has evolved that the Board might wish to consider pursuing under a different model than a Terminology Committee. The process consists essentially of five steps :

1. Identification of a "sector" requiring terminological clarification or standardization (examples of sectors would be "longitudinal surveys" or "precision and accuracy").
2. Preparation of a discussion article proposing terminology and definitions for the sector.
3. Publication of the discussion article in the Survey Statistician, and circulation to interested agencies, inviting comments.
4. Preparation of a final proposal on Terminology for the sector in light of comments for publication in Survey Statistician.
5. Official adoption by IASS of the proposed terminology.

If this is an acceptable process (and the Board may wish to debate whether it wants to include step 5), one can address how best to manage it.

A necessary would be the appointment of an interested Terminology Officer whose responsibilities would include :

- Liaison with IASS members to identify "sectors" requiring attention (step 1 above).
- Commissioning individuals to prepare discussion papers (step 2) and subsequently final proposals (step 4) for individual sectors.
- Arranging for publication and circulation of discussion papers (step 3).
- Arranging for official adoption of Terminology by IASS (step 5).
- Keeping members informed, and dealing with enquiries, on terminology through a Terminology Column in Survey Statistician or by other means.

Clearly the Terminology Officer would need to be motivated to pursue this type of work, though the process says nothing about the speed with progress should be made. In commissioning discussion papers, the Officer would have the whole membership to call upon, not just members named to a Committee. Organized sessions (not Committee meetings) to discuss particular sectors as part of the scientific program of IASS meetings might also be considered. The involvement of the international statistical organizations with in the United Nations should also be pursued.

These are some ideas for an alternative modus operandi. They presume that clarification of terminology is an important function of IASS I believe it is. I do not believe that continuation with the present Committee approach holds much promise.

1.7 General Assembly (Paris, september 4 th, 1989)

Results of the elections - Nomination of the Executive Director.

The outgoing President, Mr. Colm O'MUIRCHEARTAIGH, opens the meeting at 2.30 p.m and informs the General Assembly of the results of the elections, which took place by correspondence, according to the statutes of the Association, between February and May 1989. He announces that Mr. Bernard GRAIS has been nominated by the council as Executive Director of the Association in place of Mr. Xavier CHAROY who had to leave France for professional reasons. This nomination is approved by the Assembly.

After the election and this nomination the composition of the Council is as follows, for the period 1989-1991 :

President : Mrs. Barbara BAILAR (U.S.A.)
President elect : Mr. Graham KALTON (U.S.A.)
Executive Director : Mr. Bernard GRAIS (France)
Vice-Presidents : Mr. David HOLT (United Kingdom)
: Mr. Lars LYBERG (Sweden)
Scientific Secretary : Mr. David A. BINDER (Canada)

Council Members :

1989 - 1991 : Mr. Gordon BRACKSTONE (Canada)
: Mr. Beverley CARLSON (U.S.A.)
: Mr. Jacques CHARMES (France)
: Mr. Ben KIREGYERA (Uganda)
: Mr. Kinichiro SATO (Japan)
: Mr. Heinrich STRECKER (F.R. Germany)

1989 - 1993 : Mr. Jelke G. BETHLEHEM (Netherlands)
: Mr. Isidor P. DAVID (Philippines)
: Mr. Luigi FABBRIS (Italy)
: Mr. Gad NATHAN (Israël)
: Mr. Olupero G. ODUMUYE (Nigeria)
: Mr. Wesley L. SCHAIBLE (U.S.A.)

Presentation of the reports

The various reports which are attached to the present record, are presented respectively by the outgoing President (C. O'MUIRCHEARTAIGH), the Scientific Secretary (U. TRIVELLATO), the Executive Director (B. GRAIS) and the Committee Chairpersons.

Approval of the accounts for 1987 and 1988

Mrs. B. BAILAR and Mr. U. TRIVELLATO, nominated by the Council for auditing the association accounts, presented in the Executive Director's Report, declare they examined them and found true and sincere. Discharge is given by the Assembly to the Executive Director.

Miscellaneous

The short course on "Variance estimation for complex surveys" taught by W. FULLER and K. WOLTER has been a success for its interest, but everyone regrets the too small number of attendants.

Mr. G. KALTON who has been responsible of the network of Local Representatives suggests that a member of the Council be in charge from now of that network, and that a fixed term be attached to the function of Local Representative.

Concerning the countries with non-convertible currency, the same two proposals as in Tokyo are made :

- the creation of corporate members : national organizations becoming IASS members
- the opening of a bank account in the country with local currency, which could be used by holding conferences in the country.

The meeting is closed by the ingoing President, Mrs. Barbara BAILAR, at 4.30 p.m.

1.8 Council Meetings (August 31, September 5, 1989)

Administration :

Mr. B. GRAIS is nominated by the Council members to replace Mr. X. CHAROY as Executive Director of the association.

Mrs. B. BAILAR and Mr. U. TRIVELLATO were nominated as auditors and they examined and agreed with the association accounts.

Membership issues :

It was agreed that a system for monitoring the rate of recruitment should be set up by the Secretariat ; that a member of the Council would be delegated authority to appoint Local Representatives ; that Local Representatives would be sought in those countries without any, and that the term would be fixed, renewable subject to successful execution of duties.

In countries with a second Local Representative, one of them would be the Head and would send the country report to the Secretariate ; this report must be short (half a page), up-to-date, and mention the address of the person who can inform about the subject.

It was agreed that every effort should be made to make materials about IASS available for advertising at other conferences of interest to members. (More issues of the Survey Statistician should be printed and sent to the Local Representatives) Special assemblies of IASS members might be held at the conference. The list of the Local Representatives must be published in the Members Directory.

The initiative of IASC with respect to ISI subscriptions should be supported.

Publications :

The Survey Statistician should be used as a focus for communications and to establish network for information exchange on specific topics.

The abstracts should be developed and will be taken in charge by D. BINDER, Scientific Secretary of the association.

Elections :

It was agreed that the actual count of votes would be revealed only to the President and Executive Director.

IASS should endeavour to hold the elections earlier ; all candidates must be notified immediately after the count of the names of the successful candidates.

Short course in Variance estimation for complex surveys :

This short course, organized and sponsored by the association, and taught by Prof. W. FULLER and K. WOLTER, has been successful for its interest, in spite of a too small attendance.

Mr. BINDER suggests a replicate course in French language.

Scientific programme :

IASS should endeavour to provide a strong programme of scientific meetings at each ISI session, both through the Invited Paper meeting and through Special Topic Contributed Paper meetings.

IASS has demonstrated its competence at organizing short courses and workshops ; it should continue to offer at least one short course at each ISI session.

Cairo would be a good geographical place to hold a workshop because of its proximity with developing countries.

The ISI has planned two short courses in Cairo ; maybe would it be suitable to organize a joint short course with the ISI.

Fund raising :

A long-term strategy to raise funds to permit financing workshops should be devised and undertaken.

Workshops :

A workshop in Lomé (Togo) is being held in October 1989, sponsored by the IASS.

IASS Committee :

Two Chairpersons have been nominated : A. MARTON for the Nominations Committee and N. CHINAPPA for the Programme Committee.

The Terminology Committee can be dismissed and a person can be appointed, in charge of terminologic problems, or a committee can be created for a more delimited sector.

1.9 Meeting of Local Representatives (September 1 st, 1989)

The following topics were discussed at the meeting of local representatives :

Recruitment of new members

Local representatives reported on the recruitment methods they have been using in the drive to increase the IASS membership. Methods have included placing announcements about the Association in the newsletters of statistical and allied societies, disseminating information about the Association at meetings and conferences, and personal communication with potential members. Difficulties in recruiting have included the payment of dues from countries with non-convertible currencies, and a feeling that the IASS needs to increase the services it offers to its members in order to make membership more attractive. It was suggested that it would be useful if local representatives could be provided with copies of recent issues of Survey Methodology and the Journal of Official Statistics. They could then show these journals to potential members and display them at meetings, along with the Survey Statistician and the IASS booklet of invited papers.

Collection of dues

No simple general solution is evident for the difficulties with the payment of dues created by currency exchange regulations in a number of countries. A method that has proved effective in one country is for the local representative to collect the dues and then arrange for a single payment to IASS. Other suggestions made were that it would simplify payment in some countries if the dues could be paid every second year and that payment by credit card might sometimes avoid high currency conversion charges.

Country reports

Local representatives are urged to submit brief country reports to the Survey Statistician on a regular basis. In countries with more than one local representative, one representative should take overall responsibility for the country report, and should collect items for the report from the other representatives. There should be a single report for each country.

Meetings

The IASS is sponsoring a seminar in Lome (Togo) in October, 1989. Interest was expressed in local activities of various types, e.g., regional meetings, shorter meetings, and meetings focused on special topics. It was suggested that a mechanism be established to inform local representatives of survey statisticians who plan to visit their countries. This might enable a local representative to arrange for the visitor to give a talk during the visit. IASS members travelling abroad and willing to give a talk are encouraged to contact the local representatives in the countries they are visiting.

1.10 Committees : Chairpersons

Chairpersons have been nominated for the following committees :

1991 Programme Committee : K. WOLTER (U.S.A.) (unchanged)
1993 Programme Committee : N. CHINAPPA (Canada)
Nomination Committee : A. MARTON (Hungary)

The Terminology Committee has been dismissed. In the future, a person could be appointed in charge of terminological problems, or a new committee created for a specific area.

Lars LYBERG (Sweden), vice-President of the IASS, will be the new coordinator of the IASS Local Representatives network.

2. Cairo ISI Session (1991)

2.1 Status Report at the Programme Committee

MEMBERSHIP

I.P. David (Philippines)
G. Forbrig (GDR)
Xu Gang (China)
B. Grais (France)
A.M. Hallouda (Egypt)
R.J. Little (USA)
L.E. Lyberg (Sweden)
A.J. Scott (New Zealand)
K.M. Wolter (USA), Chair

ACTIVITIES

The committee began work by compiling a comprehensive list of possible topics. Committee members exchanged letters proposing and evaluating the merits of the topics. In addition, the committee received a number of proposals directly from IASS members. Notification of our work and a solicitation for topics was published in the IASS newsletter.

These various activities resulted in a list of approximately eighty topics. After evaluating the topics on their merits, on the degree of overlap with previous topics, and on the degree of balance between developed and developing countries, the list of eighty was narrowed to seventeen topics in two categories. The first category represents high-priority topics. The second category represents additional topics, some of which were highly rated but appear in the program for the 1989 Paris meeting. The committee is presently in process of further narrowing the list of seventeen.

We understand the ISI program committee may allocate approximately four to six invited-paper topics to the IASS. Of course, any topic not selected for the invited paper program may be suitable for a topic-contributed-paper session.

LIST OF SEVENTEEN TOPICS

First Category

Longitudinal Analysis of Labor Force Data

Survey Sampling in Marketing

Survey Nonresponse with Emphasis on Nonresponse Development During the 1980's

Children's Health Surveys

Survey Quality Assurance Measures

Evaluating from Household Surveys the Social Consequences of the Structural Adjustment

Public Opinion Surveys

Application of Qualitative Methods Including Cognitive Laboratories to Survey Research

Econometric Analysis Based on Survey Data

Fisheries and Marine Resources Survey

Second Category

Agricultural Surveys in Developing Countries

AIDS Surveys

Sampling Problems in Environmental Studies

Postenumeration Surveys

The Effect of Market Deregulation on the Quality of Economic Statistics

Training of Survey Statisticians to Work in Developing Countries

Survey Work in the USSR

2.2 List of topics for invited papers

1. Invited Papers by the President
2. Statistical issues in assessing the quality of health care
3. Release of microdata — the right to information and the right to privacy
4. Statistical aspects of global environmental issues

5. Statistical process control
6. Application of statistical methods to financial analysis and business decision making
7. From Statistical Methods to Statistical Science-new directions in the training of statisticians
8. Epidemiological studies of industrial pollutants
9. Statistical methods for measuring and analysing infectious diseases
10. Models and statistical methods for sand and shale formations
11. Comparable indicators of quality of life in developing countries (with special emphasis on the Arab countries)
12. Development of official statistics in Egypt (IAOS)
13. New issues in the field of official statistics (IAOS)
14. Data and methods for measuring structural changes in city and regional economics and people (IAOS)
15. Survey sampling in marketing (IASS)
16. Evaluating from household surveys the social consequences of the structural adjustments (IASS)
17. Non-response (new methods and world wide trends) (IASS)
18. Quality assurance measures for surveys (IASS)
19. Effect of Market Deregulation on the quality of economic statistics (IASS/IAOS)
20. Using PC's and workstations in developing countries (including surveys and censuses) (IASC)
21. Alternative user interfaces for statistical systems/packages (IASC)
22. Processing of the 1990 round of population censuses (IASC)
23. Integration issues for data sharing between organisations (IASC/IAOS)
24. Geographic information systems in surveys (IASC/IASS)
25. Information in statistics (Bernoulli)
26. Applications of empirical processes (Bernoulli)
27. Reliability and replacements (Bernoulli)
28. Non-standard asymptotics (Bernoulli)
29. Variance functions and natural exponential families (Bernoulli)
30. Surveying and assessing marine populations (Bernoulli/IASS)
31. Bayesian statistics and Monte Carlo methods for high dimensional data sets (Bernoulli/IASC)

2.3 List of topics for contributed papers

- . Marketing in official statistics
- . Statistical methods in chronic disease epidemiology
- . Design and analysis of clinical trials
- . Benchmarking for surveys
- . Tourism statistics
- . Statistics of service industries
- . Foreign trade statistics
- . Training of statisticians in developing countries
- . Longitudinal analysis
- . AIDS Surveys
- . Agriculture surveys in developing countries
- . Analysis of survey data
- . Use of artificial intelligence in survey processing
- . Objects oriented techniques for data management and software development
- . Software for geographic and spatial data
- . Dynamic and interactive graphics methods
- . Applications of new technology
- . Computationally intensive model fitting
- . Image processing and image analysis

3. Florence ISI Session (1993)

From B.N. Chinnappa, Chairperson of the Programme Committee :

As the Chairperson of the Program Committee for the 1993 meeting of the IASS I invite suggestions on topics to be discussed at that meeting and on organizers for the topics. A balance is sought between theoretical and applied topics, as well as on problems faced by developing countries. Topics that have been suggested so far include Small Area Statistics, Response Errors, Census Evaluation, Environmental Surveys, Training Survey Statisticians, Problems in Implementing Surveys in Developing Countries (field problems ; processing problems). Please write to : Mrs. B.N. Chinnappa, Director, Business Survey Methods Division, R.H. Coasts Bldg., 11 th Floor, Section "A", Ottawa, Ontario, KIA 0T6, Canada. Thank you.

4. An updated list of Local Representatives

ARGENTINE

MRS Clyde CHARRE DE TRABUCHI

French 2740
1425 BUENOS AIRES

MRS Clara BADLER

Bd Orono 610 P2°
2000 ROSARIO

BANGLADESH	MR. Siddiquer RAHMAN	Director, BBS 19, Outer Circular Road Rajarbagh DHAKA-17
BELGIUM	MR. Louis LOHLE-TART	Rue Americaine, 81 B.1050 BRUXELLES
BOTSWANA	MRS F. MODISE	Central Statistical Office Private Bag 0024 GABORONE
BRAZIL	MRS E. PINHO DE CASTRO SILVA	Rua Tabapua 308 Apto 52 04533 SAO PAULO SP
	MR. Wilton DE OLIVEIRA BUSSAB	Universidade de Sao Paulo Instituto de Matema- tica e Estatistica CP 20570 AQ IQUATEMI SAO PAULO 01451
CANADA	MR. Gordon BRACKSTONE	78 Charing Road NEPEA ONTARIO K2G4C9
CHINA	MR. Hui WU	State Statistical Bureau BEIJING
COTE D'IVOIRE	MR. Bakary DAHO	Direction de la Statistique 01 BP V 55 ABIDJAN 01
CUBA	MR. Luis SILVA	Instituto Superior de Ciencias Medicas de la Habana Vice Rectoria de Invest.e Posgrado Avenida 25 N. 15005 PLAYA, HABANA 16
CZECHOSLOVAKIA	MR. Vaclav CERMAK	Severozapahni 11. n°18 Praha 4 14100

DENMARK	MR. Finn MADSEN	Danish National Institute of Social Research Borgergade 28 DK 13000 KOBENHAVN-K
FRANCE	MR. Jean-Michel REMPP	INSEE 18 Bld Adolphe Pinard 75675 PARIS CEDEX 14
GERMANY (D.R.)	MR. Gotthard FORBRIG	Wilhelm Pieck Universität Klement Gottwald St. Nr.6 ROSTOCK 1 2500
GERMANY (F.R.)	MR. Heinrich STRECKER	Rosenst. 11 D 8130 STARNBERG
GHANA	MRS Elizabeth A. ALLOTEY	Industrial Census Coordinator Ghana Statistical Service P.O. BOX 1098 ACCRA
HUNGARY	MR. Adam MARTON	Central Statistical Office Keleti K. N° 5-7 BUDAPEST 1525
INDIA	MR. J. ROY	Indian Statistical Institute 203 Barrackpore Trunk Road CALCUTTA 35
INDONESIA	MRS Sri Budianti SUKMADI	Central Bureau of Statistics J.L. DR Sutomo 8 P.O. BOX 3 JAKARTA
ISRAEL	MRS Malka KANTOROWITZ	Central Bureau of Statistics HAKIRYA - Romena JERUSALEM
ITALY	MR. Claudio QUINTANO	Via Plinio il Vecchio N° 43 Castellamare di Stabia 80053

	MR. Andrea GIOMMI	Dipartimento Statistico Universita di Firenze Via Curtatone 1 FIRENZE 50123
JAPAN	DR. C. HAYASHI	Instituto of Statistical Mathematics 4-6-7 Minami-Azabu Minato-Ku TOKYO 106
KENYA	MR. Philip GACHUKI	Central Bureau of Statistics P.O. BOX 30266 NAIROBI
LEBANON	MR. François FARAH	M.A.S.S. B.P. 208 HAZMIEH
LIBYA	MR. Farouk EL BISHITI	Statistics Dept. Faculty of Science Al Fateh University P.O. BOX 13574 TRIPOLI
MALI	MR. Bakary SACKO	ESPR C/O ODEM SEVARE MOPTI
MEXICO	DR. Edmundo F. BERUMEN TORRES	INEGI Insurgentes Sur 795 12 Piso MEXICO D.F. C.C.03810
NETHERLANDS	MR. S.J.M. DE REE	28, Vuurbloem Str. 2317 LEIDEN
NEW-ZEALAND	MR. Stephen KUZMICICH	Department of Statistics Private Bag 85 Molesworth Street WELLINGTON
NIGERIA	MR. O.O. AJAYI	Federal Office of Statistics P.M.B. 12528 LAGOS

NORWAY	MR. I.B. THOMSEN	Central Bureau of Statistics Dronningsgate 16 OSLO
PAPUA-NEW GUINEA	MR. John SHADOW	National Statistical Office P.O. Wards Strip
PERU	MRS Leonora LAGUNA	581 Belisario Flores LIMA 14
PHILIPPINES	MR. Burton ONATE	University of the Philippines at Los Baños College, Laguna PHILIPPINES (3720)
SENEGAL	MME Awa THIONGANE	Direction de la Statistique B.P. 116 DAKAR
SPAIN	MRS Carmen ARRIBAS	Instituto Nacional de Estadística Paseo de la Castellana 183 28016 MADRID
	MRS Iztueta Azkue ANJELES	Instituto Vasco de Estadística-Servicio de Metodología y Diseño C/DATO 14-16 01005 VICTORIA- GASTEIZ (ALAVA)
SWEDEN	MR. Lars LYBERG	Statistics Sweden P/STM 115 81 STOCKHOLM
SYRIA	MR. A. MALEK AL AKHRAS	Office of the Prime Minister-Central Bureau of Statistics DAMASCUS
TRINIDAD-TOBAGO	MR. Carl ATHERLEY	Central Statistical Office 23 Park Street PORT OF SPAIN

TURKEY	MR. Oztas AYHAN	Department of Statistics Middle East Technical Univ. ANKARA 06531
UNITED KINGDOM	MR. Roger THOMAS	OPCS St. Catherines House 10 Kingsway LONDON WC 2B 6JP
U.S.A.	DR. Daniel KASPRZYK	4906 Colonel Contee PL UPPER MARLBORO MD 20772-2875

5. Announcements

5.1 Meetings

* Lomé Workshop, 1989

A workshop on "The matching of Production to the Demand for Statistical Data in Developing Countries", has been organized jointly by IASS and the French National Statistical Institute (INSEE) with the help of Eurostat. This workshop took place successfully in Lomé (Togo) from 11 to 17 October 1989. It benefited to government statisticians from some nineteen French speaking African or Pacific countries.

The proceedings of the session will be published in the course of the next half-year. A few copies in French will be available, free of charge, for IASS or ISI members. Please write to :

INSEE
Division des études et méthodes statistiques
pour le développement
18, boulevard Adolphe Pinard
75675 - PARIS Cedex - France.

* International Conference on Survey Design, Methodology and Analysis, Colchester, 1990.

The IASS is sponsoring an International Conference organized by the Institute of Statisticians on Survey Design, Methodology and Analysis from 4 th to 7 th July 1990 at the University of Essex, Colchester, England.

If you are interested in receiving further information, please write to :

Tessa KONRATH,
Institute of Statisticians
50 Fitzroy Street
London W1P 5HS - England.

* International Conference on Measurement Errors in Surveys, Tucson, 1990.

The IASS is co-sponsoring with the American Association for Public Opinion Research, the American Statistical Association (Section on Survey Research Methods) and the American Marketing Association, an International Conference on Measurement Errors in Survey, which will be held on November 11-14, 1990, in Tucson, Arizona, U.S.A. A monograph will be prepared for and initially presented at the Conference.

For further information, please write to the Organizing Committee Chair. :

Dr Paul P. BIEMER
Department of Experimental Statistics
Box 30 003, Dept. 3130
New Mexico State University
Las Cruces, NM 88 003, U.S.A.

* Census Bureau's 1990 Annual Research Conference Announced .

The Census Bureau's 1990 Annual Research Conference (ARC 1990) will be held March 18-21, 1990, at the Holiday Inn Crowne Plaza in Arlington, Virginia, only 1/2 mile from National Airport and three blocks from Metro. ARC 1990 will comprise a mix of topics such as economic classification, evaluation of census outreach, weighting, imputation, and measurement error. For further information contact :

Ms. Maxine Anderson-Brown
ARC Conference Coordinator
Office of the Director
Bureau of the Census
Washington, DC 20233, 301/763-1150.

* International Conference on Measurement Errors in Surveys.

Tucson, AZ, USA ; November 11-14, 1990..

Paper submission information from Paul Biemer, Dept. of Exp. Statistics, Box 30003, Dept. 3130, New Mexico State University, Las Cruces, NM 88003-0003, U.S.A. ; Phone (505) 646-2937, Fax (505) 646-5975. Registration information from Lee L. Decker, ASA, 1429 Duke St., Alexandria, VA 22314-3402, U.S.A. ; Phone (703) 684-1221, Fax (703) 684-2037.

5.2 Publications

* In 1987 a seminar on empirical life history analysis and panel studies was held in Stockholm. The seminar was initiated by the Nordic Contact Working Committee on Problems of Statistical Methodology. Professor Jan Hoem was chairman of the organizing committee.

A few copies of the proceedings in English is available for members of IASS and will be distributed free of charge, on a first, come first served basis.

Please write to :

Ib Thomsen
Central Bureau of Statistics
P.B. 8131 Dep. N-0033 OSLO 1. NORWAY

* Survey Methodology Journal (SMJ), A Journal of Statistical Development and Applications in Surveys, publishes articles dealing with various aspects of statistical development relevant to a statistical agency. Emphasis is placed on the development and evaluation of specific methodologies as applied to data collection or the data themselves.

SMJ is published biannually in both English and French. A special feature recently introduced in the Journal is to include a 'Special Topic Section' containing 4-5 articles. Special topics are as follows :

June 88 : Census Coverage Errors
December : Software Developments
June 1989 : Statistical Uses of Administrative Data
Dec. 1989 : Data Analysis (including the first discussion paper in the SMJ)
June 1990 : Historical Developments and Emerging Issues in Censuses and Surveys
Dec. 1990 : Time-dependent Statistical Methods
June 1991 : Telephone Survey Developments

Authors are invited to submit manuscripts in either English or French to Survey Methodology. All manuscripts are refereed. Three copies should be sent to Editor, Survey Methodology, Methodology Branch, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Annual subscription for the two issues of SMJ is \$30.00 in Canada and \$35.00 elsewhere. However, as a result of an agreement between IASS and Statistics Canada, members of IASS can subscribe to this publication at the reduced price of US \$16.00 (US \$8.00 for members from developing countries). In order to receive this reduced price IASS members must order (or renew) their subscription through IASS Secretariat, c/o INSEE, 18, boulevard Pinard, 75675 Paris Cedex 14, France.

The number of subscribers through IASS has been steadily increasing and currently there are about 200 members subscribing to SMJ. Subscribers for 1989 will receive the June 1989 issue in Oct-Nov 1989 and the December 89 issue will be mailed around March 1990. In order to avoid delays, please send notice of any change in your mailing address at the earliest to F. Mayda, Production Manager, SMJ Statistics Canada, 4-C2, Jean-Talon Bldg., Ottawa, Ontario, K1A 0T6, Canada.

* Social conditions : a research on poverty in Argentina.

A research on poverty in Argentina has been completed during the last years in the National Institute of Statistics and Censuses (INDEC). This is a particularly enlightening study on the social consequences of the structural adjustment in a developing country. Further information can be obtained from : Alberto Minujin, UNICEF, Avda. Rivadavia 2358-4°, 1034 BUENOS AIRES, Argentina. Mr. Minujin was at that time advisor to the INDEC.

We publish hereunder the introduction of a paper written by Alberto Minujin, describing the project :

"The design, monitoring and evaluation of social policies requires the availability of information on different aspects of a country's social situation, particularly about the more vulnerable and risk-exposed population groups. In spite of this obvious requirement, the availability of information concerning these problems in developing countries is usually scarce, outdated and unreliable.

In order to improve this situation in Argentina, a research was completed in the National Institute of Statistics and Censuses (INDEC) endeavoring to gauge and locate on the Argentine territory the problems of unsatisfied basic needs, using the records of the 1980 Population Census. A project was later developed under the name Investigación sobre la pobreza en la Argentina (IPA ; in English : Research on poverty in Argentina), devoted to a deeper study of such questions. Starting with these tasks, the idea is to establish a system of poverty indicators in which census-, survey- and continuous statistical data will all be integrated".

6. Country Reports

6.1 Australia

Expert Systems for Seasonal Analysis and Checking Sample Design

The Australian Bureau of Statistics has recently developed the ERSATS (Expert Re-analysis of Seasonally Adjusted Time Series) system which is a Knowledge-based system which, in its current form, is designed to allow users who have limited experience in seasonal adjustment techniques to re-analyse their time series after the addition of one year of data. Using an ABS enhanced version of the X11-ARIMA package the system can diagnose the adjustment of a series as acceptable for publication or indicate problems in the adjustment. Currently, approximately 6.5 staff years of seasonal adjustment experts' time is devoted to the adjustment of time series and yield approximately 1600 series for publication per year. The system has the potential to greatly increase the number of series adjusted and to enable a more timely and consistent adjustment of series, both for internal and external users. ERSATS runs on the ABS mainframe using ESHELI/X (Fujitsu's large hybrid

expert system shell) and UTILISP (University of Tokyo Interactive LISP). Work has recently commenced on using knowledge engineering techniques to assist sample design experts in checking suggested designs for potential anomalies. Initially investigations are focusing on comparing stratifications across States and industries.

10th Australian Statistical Conference/2nd Pacific Statistical Congress

These meetings will be held together in Sydney, 2-6 July 1990. Invited speakers include Professors George Box, Brad Efron, Hans Follmer, Alistair Mees, Alistair Scott and Adrian Smith. Special workshops and conference sessions on medical statistics, image analysis and the 1990/1 round of population censuses are being organised.

Youth Employment and Unemployment

A special edition of the Australian Journal of Statistics (Volume 31A) has been published containing 10 papers examining youth employment and unemployment. The papers are mainly based on analysis of the Australian Longitudinal Survey and cover

- Participation Analysis : What socio-demographic, education or previous labour market experiences influence or predict the labour market status of individuals ?
- Duration Analysis : What statistical distributions describe the times spent in the labour market states, and what socio-demographic, educational and previous labour market states influence the key features of these duration distributions ?

The volume has interesting substantive conclusions and provides a range of examples of the way survey data of this sort can be analysed.

For further information on any of these please contact Dr David Steel, PO Box 10, Belconnen, ACT 2616, Australia (Fax 062-531095).

6.2 Canada

Two new surveys of interest in Canada are the Survey of Literacy Skills used in Daily Activities and the Labour Market Activity Survey.

In response to concern about the economic and social costs of low literacy abilities among segments of Canadian society, Statistics Canada was asked to establish the broad framework for a direct national literacy assessment of the Canadian population, and then to undertake the development and testing required for its implementation in the fall of 1989. The objective of the survey is to develop a detailed literacy profile of the Canadian population. The proposed survey will be unique because it will not only collect information on socio-economic

characteristics and associated data related to parental origin and education of respondents, but will also ask respondents to assess their own reading and writing skills and will administer reading and writing tests designed to reflect real life tasks.

The Labour Market Activity Survey, which is longitudinal in nature, is designed to address a broad range of labour market policy and program concerns. The survey is expected to fill a number of identified gaps in Statistics Canada's program of labour market statistics, including data on wage rates, union membership and the concentration of employment. In addition, it will provide dynamic measures of the Canadian labour market which are conceptually consistent with other labour market surveys. The first two cycles of the survey were carried out in January/February 1987 and January 1988 respectively. The third cycle, based upon a new cohort of dwellings, was conducted in January 1989.

For further information on either of the above surveys, contact Mukund Nargundkar, Social Survey Methods Division, Statistics Canada, Ottawa, Ontario, K1A 0T6.

A symposium on "The Measurement and Improvement of Data Quality" will be held in Ottawa in October 1990. This is the seventh in a series of symposia which have been held by Statistics Canada since 1984. For more information contact Mary March or Robert Lussier, Statistics Canada, Ottawa, Ontario K1A 0T6.

6.3 Japan

BASIC SURVEY ON SERVICE INDUSTRIES

A comprehensive nation-wide survey on service industries under the head title has been conducted as of 1st July this year. The brief outline of the survey is as follows ;

(1) Coverage : The survey covered all of the private establishments to be classified into "Division L. Services" of the Standard Industrial Classification for Japan, but excluded medical and other health services and educational services for which statistics are currently provided. Domestic services were also excluded.

(2) Sampling of establishments : As regards the establishments with 10 or more persons employed, 100 % of the establishments were included in the sample, because of relatively large sampling error expected for the results. The other establishments were selected by area sampling using the 1986 Basic Enumeration Districts for Establishments. The sampling ratio of the Enumeration Districts was 1/6 and all establishments located in the sample Districts were enumerated. The total number of the establishments in the sample were about 500.000.

(3) Items investigated : In addition to such basic items as capital, numbers employed, sales, running expenses, wages and equipment investments, some items of special interests were introduced, namely date opened, kinds of industries demanded services and types of services provided and as for the establishments providing personal services in

amount of 30 % or more of respective total, business hours, regular holidays and busy days & months were investigated. The questionnaires entered by respondents were collected by enumerators.

6.4 Denmark

Conditions for Danish Families with Children in the Nineties

On the threshold to the nineties The Danish National Institute of Social Research starts on a survey which purpose is to throw some light on the conditions for families with children in the coming decade.

The sample will consist of about 3.000 persons aged 20-49 years, not families. The main reason for this is that although from the Central Person Register (CPR) we can extract names, date of birth and (registered) marital status, both unmarried couples and married people without a (registered) spouse on the address will cause unwanted trouble, both in sampling and interviewing.

In the CPR the children's person number is registered in the parents' records. Code for the address is easely controlled (same or different). Thus it is possible to divide the population (Danish citizens aged 20-49 years) in two strata or domains :

1. People with at least one child aged 0-14 years
2. Others.

The sample will be selected with probabilities in stratum 1 four times the probabilities in stratum 2.

The weighting problem caused by the double probability of selecting couples versus singles is well known. The weighting procedure will be based on evidence from the interviewing, not on the (in cases of unmarried cohabitation) questionable registration.

6.5 Mexico

Informal Economy Survey

The Informal Sector or Informal Economy has become a very debated issue in Mexico's economic statistical production. Most estimates are rough and their data sources of dubious quality. Thus, INEGI undertook two surveys in order to obtain first hand data on the subject. The first one was called Pilot Survey on the Informal Sector and took place in Mexico City between december 1987 and february 1988, with no random sample. The second one was more ambitious. We developed a strategy of the so called "combined surveys" : from the Employment Survey (which is a household survey), we selected a sample of 3 459 individuals considered to have economic activities with in the informal sector. We then proceeded to interview the population at their working places. If they were not available, we visited them at home for the interview. Nevertheless we

always looked for the appropriate person to answer the questionnaire, i.e. the business' owner. The sample had national representativity for urban areas with 100 000 or more inhabitants, and the survey was carried out between december 1988 and february 1989 in seven cities. In this way we have obtained for the first time, direct information on the informal economy. Finally, mention must be made of the fact that we did not impose an a priori definition of informal economy. However, we had three restrictions on selecting the sample : small businesses with up to six workers including the owner ; we left out economic activities such as agriculture, mining, those belonging to the government, professional services, domestic work, etc. ; we only selected employers and workers on their own.

6.6 New-Zealand

Details of Major New Surveys

No major new surveys are planned.

Meetings and Conferences of Interest

The Third International Conference on Teaching Statistics will be held at the University of Otago, Dunedin, from 19 to 24 August 1990. The key objectives include improving the quality of statistics instruction on a world-wide basis, fostering international cooperation among teachers of statistics and promoting the interchange of ideas about teaching materials, methods and content.

Major Reports and Publications of Interest

A series of reports on New Zealand's first Economy Wide Census (1987) will be released from October 1989 and will cover Agricultural Services, Forestry and Fishing, Mining and Quarrying, Manufacturing, Building, Construction and Transport, Distribution, Finance, Insurance and Business Services, and Educational, Social and Recreational Services.

A Review of Labour & Employment Statistics was published in September 1989. Reports, produced as part of a Review of Health Statistics, on Primary Health Care Statistics and Cancer Registration Statistics have also been published recently.

6.7 Philippines

Annual Visitor Survey (1987-1989) :

Department of Tourism is a continuing activity which stratifies the flights into six groups, by days, weeks/months of visitors (Filipinos and non-Filipinos). A two stage design is employed to estimate visitor characteristics, one of the most important is the ratio of expenditures by number of nights stayed which is a component of the Balance of Payments (BOP). The novel aspect is the changing nature of the target, frame, survey and inferential universes by cycle.

Joint Conference on Statistics (4-6 December 1989) :

7th Southeast Asian Statistics Seminar, 5th National Convention on Statistics, and the United Nations-University of the Philippines System Statistical Education Support Project Research Conference. Philippine International Convention Center, Manila, Philippines. Contact : National Statistical Coordination Board (NSCB), 7th Floor, Marvin Plaza Bldg., 2153 Pasong Tamo Street, Metro Manila, Philippines.

6.8 Syria

The Central Bureau of Statistics, during 1989, works on carrying out Specialized field surveys within specific periods and according to time schedule after following for allocated financial credit. Enlightened by discussions of the Consultative Board of Directors at C.B.S. It has been decided to carry out, at first, the Following Statistical surveys which are currently very important and which contribute largely to the collection of field data upon which national accounts of both agricultural and industrial sectors mostly depend, in addition to retail and wholesale prices indices of all Mohafazat on which illustrations of increase in prices depend beside pricing of various social and economic indicators.

* Surveys of planted areas of Wheat, Barely, Lentil and Chick-peas.

An Annual sample survey for estimating planted areas, productions and fields of crops carried out in cooperation with the Ministry of Agriculture and Agrarian reform and The General Union of peasants.

* Industrial survey of Private Sector Establishment and Institutions, carried out according to selected sample taken from the frame work available of 1981 census and its updating in assistance with Chambre of Commerce and Industry on condition that services of Computer will help in completing this framework.

* Index number of whole sale and retail prices survey which contains renewal of calculation procedures concerning whole sale and Retail prices index numbers in all Mohafazat in accordance with the directions of vice President, of the Prime Minister.

* Solar Energy Survey :

Aims at obtaining the following indicators of both public and private sectors.

- Raise in N^o of Licenced Establishments for producing solar heaters.

- Production energy by Mohafazat.
- Products and actual annual sales.

* Science and technology Statistical Survey :

Which aims at completing Statistics of science and technology, supplying a framework of Scientific technicians and engineers, classifying scientific engineers and technicians by economic sector and other sectors, supplying data on scientific and experimental developments and supplying data on other scientific activities.

* Index number Survey of cost of Residential building per square meter :

Which aims at computing evolutions of prices of production requirements and relative importance of cost of residential building as well as comparison of actual development added the cost for each phase of building and construction operations.

* Survey of average wages and actual work hours of building and construction sector :

Which aims at estimating central tendency and dispersion of variables relating to private and cooperative building sector.

- Working day for each building group.
- Actual work hours per day for each working group.
- Costs of finishing of Structure and all the fitting operations of building works per unit.

* Man power Survey 1989 :

Aims at measuring size of human power and force power besides employment and unemployment internal migration and characteristics of population demography and power force professional a structure and economic activities of power force.

6.9 Turkey

* Future Population Censuses

The first Turkish Census of Population was done in 1927, and starting from 1935 the General Census of Population was done every 5 years until 1985 on "de facto" basis. In 1989, a new law came into effect which has changed the pattern of future population censuses in Turkey.

Starting from 1995, future population censuses will continue every 10 years and will be carried out on "de jure" basis. Due to this recent development, there will not be a population census in 1990.

Inquiries about the census plans can be addressed to Census Division, State Institute of Statistics, Necatibey Caddesi, Ankara, Turkey.

* 1989 Turkish Population Survey

Turkish Population Surveys are carried out periodically since 1974 by the State Institute of Statistics. The last survey is now on progress. The field data collection was started on October 10, 1989 on de jure basis.

This nation wide survey is based on a stratified multistage cluster sample of 16 000 households.

The interesting feature of the survey is that the classical individual questionnaire is supplemented by additional questions which enables a very rare event (maternal mortality) to be determined by a network sampling methodology. One multiplicity rule, namely "siblings report one another" is used during the survey.

In addition to the conventional survey estimates, multiplicity estimates will be obtained on 5 regional basis. This is the first application of the network sampling technique to determine the maternal mortality in Turkey.

Further information may be obtained from Social Statistics Division, State Institute of Statistics, Necatibey Caddesi, Ankara, Turkey.

* International Conference on Health Econometrics

International Conference of the Applied Econometrics Association. Ankara - June 1990.

Hospital management (public and private sectors) : problem of informations, investment, human resources and relations between hospital and patient/consumers.

Medical drugs : original methods of specification, estimation and testing of cost-benefit and cost-effectiveness models applied to the economic evaluation of medical drugs strategies, and multicriteria methods.

Address : AEA - Chapitre Santé,
Université Lyon 1, Bât. 10
43, Bd du 11 Novembre
69622 VILLEURBANNE Cedex. France

6.10 United States

The Statistics of Income Division of the Internal Revenue Service (IRS) in the U.S. Department of Treasury has a number of studies underway which focus on different aspects of survey research. One recent application concerns the accuracy of the information provided by the IRS program of offering free telephone assistance on income tax questions for the U.S. taxpayer. For the last two years, a phone survey was conducted using a confidential set of 62 questions and placing approximately 1 500 test calls per week for eleven consecutive weeks of the tax-filing season. The sample included a core of questions asked every week in each of the 29 call sites in the continental United States and an additional set of questions distributed by week of the filing season, in accordance with call site size.

The survey is now being updated for 1990, when it will be conducted throughout the 16-week filing season. Several papers describing the design and estimation methods of this survey, as well as other IRS statistical studies, have been presented at recent American Statistical Association Meetings and have been compiled by IRS in their Methodology Report series. For copies of these papers or information about the series itself, write to Dr. Fritz Scheuren, Statistics of Income Division, P.O. Box 7534, Washington, D.C. 20044-7534.

The U.S. Bureau of the Census has established the Response Research Laboratory as part of its repertoire of questionnaire testing vehicles. The lab, which is housed within the Center for Survey Methods Research (CSMR), is a facility in which in-depth interviews, focus group sessions, observations, and other cognitive research techniques can be conducted. These techniques will be used in the lab, and in the field as well, to explore problems with the concepts, question wording, and other aspects of Census Bureau censuses and surveys.

Currently, two Census Bureau surveys are conducting research in the Response Research Laboratory. For the Current Population Survey, research geared toward problems associated with survey coverage as well as the understanding and interpretation of key questionnaire concepts is being conducted. For the Survey of Income and Program Participation, protocol analysis is being used to obtain information from respondents concerning how they arrive at answers to questions about what months they receive income from particular entitlement programs, and how much income they receive. For more information write to Dr. Elizabeth A. Martin, Chief, Center for Survey Methods Research, Washington Plaza, U.S. Bureau of the Census, Washington, D.C. 20233 U.S.A.

During the last few years, members of the American Statistical Association's Committee on Law and Justice Statistics and representatives of the Bureau of Justice Statistics in the U.S. Department of Justice have discussed ways of keeping users of National Crime Survey data up-to-date on new developments. A newsletter, NCS News, is one result of their efforts. The newsletter will regularly include information on current NCS activities of the Bureau of Justice Statistics, the Bureau of the Census, and the University of Michigan's Inter-university Consortium

for Political and Social Research. If you would benefit from receiving NCS News, contact Lee Decker, American Statistical Association, 1429 Duke Street, Alexandria, Virginia 22314-4322 U.S.A.

7. Papers Abstracts

7.1 Authors : Hsien-Ming Hung and Wayne A. Fuller

Title : REGRESSION ESTIMATION OF CROP ACREAGES WITH
TRANSFORMED LANDSAT DATA AS AUXILIARY VARIABLES

Journal : Journal of Business and Economic Statistics, October,
1987, Vol. 5, No. 4, pp. 475-482.

A primary source of data on crop acreages in the United States is the annual agricultural survey, called the June Enumerative Survey, conducted by the U.S. Department of Agriculture. In the June Enumerative Survey, an areaframe sampling design is used to create a stratified area cluster sample. Two levels of stratification are generally used. The first-level strata are individual states. Within each state, aerial photography is used to define secondary strata, based on the percentage of cultivated land. The total area within each stratum is divided into area frame units called segments. A simple random sample of segments is then drawn within each stratum. Each segment is a well-defined land area about one square mile in size. The acres devoted to each crop or land use are recorded for every field in each selected segment by field enumerators.

Another source of data that is potentially useful in the estimation of crop acreages comes from the United States land observatory satellite, Landsat. The satellite's scanner system measures the amount of radiant energy reflected from the earth's surface in different wavelength bands of the spectrum. Values are obtained for an image area of approximately one acre, which is called a pixel. The Landsat satellite has four multi-spectral scanner bands, one green, one red, and two near-infrared. A vector of four values corresponding to the four bands is recorded for each pixel. Using the four values recorded for each pixel, the U.S. Department of Agriculture has developed functions to classify each pixel into a crop type. This process is called the pixel classifier.

This paper investigates methods for improving June Enumerative Survey estimated crops by the use of Landsat data as auxiliary variables in a regression estimator. Besides the pixel classifier, various transformations of the Landsat data are used as auxiliary variables. For the type of sampling used in the June Enumerative Survey, improvement is about the same with any of the transformed auxiliary variables. All estimators used are model based yet design consistent.

Reprint requests should be sent to : Dr. Hsien-Ming-Hing,
Department of Mathematics and statistics, wichita State university, Wichita
KS 67208, U.S.A.

7.2. Author : Edward Gbur

Title : A COMPARISON OF ALTERNATIVE ESTIMATORS FOR REVISED
MONTHLY IMPORT STATISTICS

Journal : Journal of Business & Economic Statistics,
January 1989, Vol. 7, No. 1, pp. 21-25.

Each month the United States Bureau of the Census issues reports containing U.S. foreign trade statistics. In these reports the Census Bureau's goal is to produce accurate statistics on imports and exports at both the aggregate and detailed commodity level on a timely basis. Data for monthly tabulations are received on a flow basis from the U.S. Customs Service. Delays in collection of the required documents and in their processing and shipment to the Census Bureau can extend the time between actual importation and inclusion in tabulations to as much as a year. This carryover problem was thought to be relatively minor, involving perhaps 15 % - 20 % of the documents. It was discovered, however, that, in fact, in 1985 the carryover was closer to 45 % each month.

Because of this problem, two new policies were announced. First, revised estimates of total imports and exports would be published one month after the original estimates had appeared, and second, "true" monthly levels for each calendar year would be published after the fact when all of the necessary data were finally available. Detailed series would not be revised.

At the same time, the problem was attacked in two ways - by obtaining closer cooperation with Customs to speed up the flow of documents and by delaying the initial publication of the statistics to allow additional time to obtain the necessary data. As a result, revisions were discontinued in the spring of 1987.

This article describes and critically examines the Census Bureau's procedure for revision the import statistics. Two alternative estimators are then developed. The estimators of the month-to-month change in the import level corresponding to each of the estimators of the revised level are also studied. The development is sufficiently general to be applicable to any level of aggregation of import statistics. Both deterministic and stochastic elements are used in the development, but the problem of nonsampling errors is not addressed.

Reprint requests should be sent to : Dr. Edward Gbur,
Agricultural statistics Laboratory, University of Arkansas, Fayette ville,
AR72701 U.S.A.

7.3. Author : Roderick J.A. Little

Title : MISSING-DATA ADJUSTMENTS IN LARGE SURVEYS

Journal : Journal of Business and Economic Statistics,
July 1988, Vol. 6, No. 3, pp. 287-301. (with comments
and reply)

Missing data is a pervasive problem in sample surveys. Three general strategies for dealing with the problem can be distinguished -direct analysis of the incomplete data, imputation, and weighting complete cases. In the first approach, the missing values are left as gaps in the data set, and the treatment of missing data is deferred to the analysis stage.

This paper focuses on the second and third approaches of imputation and weighting. Both of these approaches create rectangular data sets convenient for subsequent analysis. Weighting is often used to handle unit nonresponse, in which entire questionnaires are missing because of noncontact or refusal to conduct the interview. Nonrespondents are dropped from the file, and weights are assigned to respondents that attempt to adjust for the selection bias created by the omission of nonrespondents. Imputation is often used to handle item nonresponse, in which an interview is conducted but responses to particular items are missing. Missing values are replaced by estimates based on the recorded information in the incomplete questionnaire.

Useful properties of a general-purpose imputation method for numerical data are suggested and discussed in the context of several large government surveys from the United States. Imputation based on predictive mean matching is proposed as a useful extension of methods in existing practice. This method uses regression to find the center or mean of the predictive distribution of the missing item given the set of observed items, adds noise to this mean to preserve the distribution, and then uses the mean with noise added to impute the missing item. Versions and approximations of the method are presented for unit nonresponse and item nonresponse with a general pattern of missingness. Extensions of the method to provide multiple imputations are also considered. Pros and cons of weighting adjustments are discussed, and weighting-based analogs to predictive mean matching are outlined.

Reprint requests should be sent to Dr. Roderick J.A. Little, Department of Biomathematics, School of Medicine, UCLA, Los Angeles, CA 90024, U.S.A.

7.4. Authors : D. Holt and C.J. Skinner

Title : Components of change in Repeated Surveys

Journal : International Statistical Review 57, pp. 1-18, 1989

It is common in survey analysis to break down the mean of a variable Y according to various sets of domains defined by various categorical variables e.g. mean income by sex, by age group, by region etc. This approach helps us to understand the sources of variability for Y . The aim of this paper is to extend this idea to understanding change over time. The paper begins by recalling an identity, well-known in demography, in which the change in the population mean of Y between two occasions is decomposed into three components :

- (a) the partial effect of changing domain means assuming no change in domain composition ;
- (b) the partial effect of changing domain composition assuming no change in domain means ;
- (c) the interaction between (a) and (b)

This decomposition provides a simple analysis of change at the aggregate level ; no attempt was made here to understand change at the individual unit level. Some empirical examples are included to illustrate the interpretation of the decomposition.

A framework is developed which allows for a non-stationary population in which some units join the population between occasions (births) and some units leave (deaths). Births and deaths are especially important in surveys of businesses and establishments but occur to some extent in most repeated surveys. Some simple sampling designs for fixed and non-stationary populations are considered.

The core of the paper consists of a comparison of alternative estimators of the components (a), (b) and (c). Both simple expansion estimators and composite estimators are considered. In particular it is noted that the gain in efficiency derived from composite estimation for estimating changes in domain means tends to be less than the gain for estimating changes in population means.

Finally, brief consideration is given to the issues of arithmetic consistency, effects of multi-stage designs, measurement error, non-response and time series methods.

Reprint requests should be sent to :
Prof D. Holt, Department of social statistics
University of Southampton
Southampton SO9 5NH, United Kingdom.

8. Question/answer

Conducted by Leslie Kish. Please send Questions to him (ISR - The University of Michigan, Ann Arbor, MI 48106, USA, TELEX 4320815, FAX 313-747-4575) or to IASS, Paris. Please indicate whether or not you want your name given with the question. This has become an open forum, and we shall gladly print (after refereeing) additions, modifications, discussions of past published answers. Contributors to answers will be acknowledged if they agree.

8.1 Question : What are "elusive populations" ? And what can one do about them ?

Answer : This term has entered the survey literature only recently, perhaps since 1986 [Sirken et al 1986 ; Sudman et al 1988] ; and its function and meaning are not clear. The term refers in general to populations which ordinary sampling frames, selection procedures, and survey methods fail to cover adequately. And those failures are not only occasional and accidental, as occurs often in survey practice, but massive and inherent in the elusive nature of the populations. "Elusive" refers to populations that are particularly difficult to locate, enumerate, observe, or interview. Fisherman and hunters may describe the behavior of fish and animals with the words "elusive" and "to evade". Descriptions of surveys contain dozens of specific problems, but for convenience I sorted them into ten major types, as enumerated below [Kish, 1988].

- 1) Rare items, small and scattered populations, and small domains.
- 2) Noncoverage, nonresponse, not-at-homes, refusals, and missing items pose separate but related problems. Not-at-homes are elusive passively, but refusals are actively elusive.
- 3) Mobile and nomadic populations and seasonal mobility ; diurnal mobility, "daytime" populations and de facto/de jure populations ; mobile activities.
- 4) Multiple events, waiting times, and observational units of variable sizes [Kish 1987, 7.4].
- 5) Network sampling of the $N_i (N_i - 1)/2$ relations among the N_i members of the i th group.
- 6) Multiple uses of area segments and of time segments.
- 7) Changing composition in panel studies of complex units : of families, firms, and communities.
- 8) Samples cumulated over time from changing, dynamic situations.
- 9) Changing variables in periodic surveys, censuses and indexes.
- 10) Trace sampling and unobtrusive observations. [Webb et al 1966].

For each of the above problems some treatments may be found with the help of indexes and key words. For example rare items and small domains have been defined and treated ; and so have nomads and mobile populations, though less extensively. For nonresponses there exists a vast literature, of course. However, there exists no common framework for the treatment of "elusive populations" in general. Hence it is not clear if this term of reference should survive or not ; if it does not serve either a practical or a theoretical need.

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- Webb EJ, Campbell DT, Schwartz RD and Sechrest L [1966], Unobtrusive Measures, Skobie, JL : Rand McNally.

8.2 Question :

When should we weight survey data ? When is it proper and important ? How should they be weighted ; and how to calculate the weights ? How to apply them in formulas and in statistical packages and software ?

A. "Weighting of survey data is usually a relatively simple process where in each sample respondent is weighted inversely to the probability of sample selection, with an adjustment for nonresponse".

B. "I cannot find justification for weighting in sampling theory, except for nonresponse".

Answer :

Questions like these seem to arise in practical problems I encounter almost every week. And the answers are often not obvious, clear-cut, and "a relatively simple process", as implied by the educated practitioner quoted in A. She was thinking perhaps of academic presentations, without the complexities that arise in practice. Nor should problems of weighting be waved aside, as by the sampling theorist, quoted in B above.

A great deal of weighting is done in practical work and explained in project reports and appendixes. However, for simple references I found only mine, and I shall gratefully cite useful references sent by readers. On the other hand, difficult academic discussions of "model-dependent" theory, which are abundant elsewhere, have no place in this modest, unrefereed column, and in the two page statement that follows.

Self-weighting samples often have considerable advantages in simplicity, in reduced variances, and in robustness (Kish, 1977). They are preferred when selection probabilities are equal (f) for all elements (EPSEM), hence without problems a and b ; also without large nonresponse c, and without adjustments d.

I. Four main sources (a - d) for weighting should be distinguished, because they have distinct effects [Kish, 1965, 1987].

a) Disproportionate sampling fractions can be introduced deliberately, either to decrease variances or costs with "optimal" allocation among strata, or in order to produce larger samples for separate domains. These differences in the sampling rates (f_h) should be large (factors of 2 or 5 or even 100) and must be compensated by inverse weights in the sample estimates to avoid bad biases in the statistics.

b) Inequalities in the selection frames and procedures may create unequal selection probabilities, if not adjusted during selection. These may be serious if they affect more than a small portion of the sample ; they can be corrected with the weights inversely proportional to those selection probabilities, if these have been carefully obtained and maintained.

c) Differences in nonresponse rates between parts of the sample can be compensated with unequal weights. With small nonresponses the differences between parts (subclasses) tend to be small and to result in negligible corrections. Corrections for noncoverage are difficult, because coverage rates often are unavailable.

d) Statistical adjustments can be made sometimes to reduce biases, or to decrease variances, or for standardization to some population base. These may be called post-stratification, or ratio or regression estimators.

e) Problems a - d concern single surveys, but for combining several surveys the problems of different population bases arise. Weights should reflect the relative population sizes of some model, in combining over domains, or over populations, or over periods.

II. Three basic methods of weighting can be easily distinguished.

A) Separately weighted statistics $\sum W_h \bar{Y}_h$ may be preferred for combining a few strata, or classes, or populations; especially for self-weighted statistics within them; and especially for simple statistics like means or totals.

B) Separate weights W_j for each element j , on the data tapes, and used for all statistics, is the most common and practical procedure, especially for modern computing. The weights may reflect a complex selection process and nonresponse in $W_j = 1/P_j r_j$. Averages must be normalized with the sum of weights; $\bar{Y}_w = \sum W_j Y_j / \sum W_j$.

C) Random duplication (replication) may be used to prepare self-weighting tapes. This may be more convenient than in weights, especially for item nonresponse and for complex, analytical statistics. It increases variances over individual weights, but this increase can be almost eliminated with "multiple replications".

III. We must always consider some reasons advanced against weighting.

A) Weighting introduces complications into computations; not as difficult for simple means as for complex, analytical statistics. Further more complications can often lead to annoying mistakes.

B) Weighting often increases variances and these should be balanced against the biases of self-weighted samples in $MSE = \sigma^2 + B^2 = \sigma^2 (1 + B^2/\sigma^2)$ [Kish, 1987, 12.6, 15.2]. The bias ratio B/σ can differ greatly for statistics and types of statistics; and it depends greatly on sample size. However, it is usually convenient to have a uniform decision for all statistics of a survey.

C) Hence comparisons of weighted with unweighted means, $(\bar{Y} - \bar{Y}_w)$, may be used to decide whether to weight it or not. The relative bias $(\bar{Y} - \bar{Y}_w)/\bar{Y}$ and the bias ratio $(\bar{Y} - \bar{Y}_w)/\text{ste}(\bar{Y})$ may be used.

D) Then there are "model-dependent" theoretical reasons against weighting in general.

IV. The importance of biases depends a great deal on the nature of statistics, and it can best be viewed perhaps in terms of bias ratios.

A) Simple aggregates, e.g. $\hat{Y} = y/f$, may be most sensitive to biases ; for example even modest and uniform nonresponses can destroy these estimates, if unadjusted. Differences $\hat{Y}_m - \hat{Y}_n$ or ratios \bar{Y}_m/\bar{Y}_n , in periodic studies, would be less affected.

B) Means \bar{y} seem to be less affected ; sample surveys seem to survive the prevailing terrible response rates only because the nonresponses (refusals and not-at-homes) do not differ greatly for most of the survey variables. Large biases result only from combinations of both differences in response rates and differences in survey variables within subclasses ; if either of those are uniform over subclasses the net bias may be small ; especially compared to sampling errors in small samples.

C) Differences $(\bar{Y}_c - \bar{Y}_b)$ between subclasses may be even less affected.

D) Analytical statistics pose difficult computational, methodological, and philosophical problems and questions.

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