



ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

Sixty-sixth session
13-19 May 2010
Incheon, Republic of Korea

**MANAGEMENT ISSUES: EVALUATIONS: REPORT ON EVALUATION
ACTIVITIES OF ESCAP DURING THE BIENNIUM 2008-2009 AND
OUTCOME OF THE EVALUATIONS OF APCICT AND SIAP**

(Item 4 (a) of the provisional agenda)

REPORT ON THE EVALUATION OF SIAP

Note by the secretariat

Addendum

The Executive Secretary is pleased to transmit the report on the Statistical Institute for Asia and the Pacific (SIAP), as prepared by Ms. Denise Anne Lievesley, for the information of the Commission. In that regard, it is noted that the report is referred to by the author as an “evaluation report”. The ESCAP secretariat notes that, although the report does not fully meet the norms and standards for evaluation in the United Nations system, it provides an insightful analysis and as such has merit as an expert opinion paper to guide the future operations of SIAP. The report is issued without formal editing.

REPORT ON THE STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC (SIAP)

*By Ms. Denise Anne Lievesley,
Dean of the School of Social Science and Public Policy
King's College, London, United Kingdom*

22 February 2010

Contents

Section	Page
1 Introduction	3
1.1 Background.....	3
1.2 Purpose	3
2 Scope of the evaluation	3
2.1 Criteria.....	3
2.2 Issues to be addressed.....	4
3 Methodology	5
3.1 Overall Approach	5
3.2 Note on the SIAP Stakeholder Community	6
3.3 Interviews and Surveys.....	6
3.4 Activities and Schedule	7
4 SIAP's current situation	7
4.1 Background to SIAP.....	7
4.2 Scale of operations	8
4.3 Institutional Arrangements	9
4.4 Financial situation	9
4.5 Training courses	9
4.5.1 TMA-based 'long' training courses.....	9
4.5.2 TMA-based short-term courses	10
4.5.3 Outreach Programme	10
4.5.4 Distance training courses	11
5 The 2003 evaluation	11
6 Review of current activities.....	13
6.1 Role of SIAP.....	13
6.2 Staff resources	14
6.3 Student resources.....	15
6.4 Relevance	16
6.5 Effectiveness and sustainability.....	17
7 Teaching methods	18
8 Opportunities.....	20
8.1 New training	20
8.2 The statistician as a professional	20
8.3 SIAP as the centre of a network	20
9 High-level issues	21
9.1 Advocacy	21
9.2 Relationship with UN ESCAP.....	21
9.3 Governance.....	22
10 Gender.....	22
11 Concluding remarks	22
12 Recommendations.....	23

1 INTRODUCTION

1.1 Background

This evaluation of the work of the Statistical Institute for Asia and the Pacific (SIAP) is intended to serve as the basis for the ESCAP's assessment of SIAP's performance at the Commission's sixty-sixth session in 2010. The Terms of Reference (TOR) for the evaluation were finalized in October 2008 by the Programme Management Division (PMD) of ESCAP in consultation with the evaluation reference group comprised of representatives from SIAP, and ESCAP Statistics Division and endorsed by the SIAP Governing Council at its 4th session in November 2008, Chiba, Japan (STAT/SIAP/GC(4)/7 page 11).

1.2 Purpose

The main purpose of this report is to evaluate the operations and work programme of SIAP with a view to ascertaining how the Institute can be strengthened to better serve the needs of members and associate members of ESCAP in future. As such, it aims to be formative and forward-looking.

The previous evaluation completed in 2003 has served as the starting point for the current report, which assesses the extent to which the earlier recommendations have been implemented and how well SIAP is adapting its objectives and approaches amid the very significant and rapid changes in the Asia-Pacific region. The current evaluation takes account of SIAP's work and performance as reported in the annual sessions of SIAP's Governing Council with a particular focus on the most recent period culminating in the Governing Council's fifth session held in Phuket, Thailand from 16–17 November 2009. It also identifies ways of increasing SIAP's responsiveness to new training needs in the region.

The findings and recommendations of the evaluation will be reflected in the SIAP Implementation Plan and future updates of the institutional Strategic Plan. The report will be reviewed by the Commission at its 66th session and by the SIAP Governing Council at its 6th session.

2 SCOPE OF THE EVALUATION

2.1 Criteria

The specific objectives of the evaluation, which covers the six-year period from 2004–2009, are:

- i) to assess the relevance, effectiveness and sustainability of SIAP programmes;
- ii) to formulate concrete, action-oriented recommendations to increase the responsiveness of SIAP to the changing needs of countries, the effectiveness of its programmes and to ensure the sustainability of the Institute, for consideration by ESCAP and the SIAP Governing Council.

The main questions addressed under each of the evaluation criteria are:

- **Relevance**

- To what extent did SIAP programmes and activities meet the needs of member and associate Member States?

- To what extent was the work of SIAP aligned with the work of ESCAP, as reflected by their respective programmes?
- **Effectiveness**
 - To what extent was the Governing Council effective in guiding the priorities and work programme of SIAP?
 - To what extent were the activities of SIAP effective in achieving the results contained in SIAP's and ESCAP's programmes of work, including in enhancing statistical capacity of participating countries?
 - How effective was SIAP's collaboration with the ESCAP backstopping division (the Statistics Division), and other operational divisions?
 - To what extent was gender equality reflected in activities and results?
- **Sustainability**
 - To what extent did SIAP collaborate with other international organizations, including UN Country Teams or UN regional organizations in planning and implementing activities?
 - To what extent did SIAP partner with regional or national training institutes to sustain statistical training programmes?
 - To what extent did SIAP training initiatives take into account and build upon the comparative advantages and on-going activities of partner organizations or agencies?
 - To what extent does SIAP's programme implementation support the financial sustainability of the Institute?

2.2 Issues to be addressed

A detailed cost-benefit analysis was beyond the scope of this report but cost effectiveness and efficiency have been taken into account in reviewing SIAP's programmes, with particular attention to opportunities for the delivery of training in a wider variety of ways using technology. Some of the approaches in this rapidly evolving field were only in their infancy in 2003 and this evaluation considers how SIAP has embraced such developments as well as suggesting how its strategy might take these forward.

The various issues inevitably have to be prioritised and in keeping with the main thrust of the evaluation, greater attention is given to the strategy with regard to relevance and financial sustainability. Given the recent financial shocks to the Japanese economy, it is particularly pertinent to ascertain the extent to which SIAP's stakeholders (the Japanese Government, ESCAP and Member States) feel that they are receiving value for money.

In addition it is essential to take account of the changing landscape of statistical training in the region. As well as the emergence of new technologies already mentioned, other factors to be considered include:

- The establishment of new national training centres in a number of countries
- The reports of a proposal for a global statistical training centre to be located in the region

- The effects which the development of statistical expertise by some Member States might have on their participation in SIAP.

3 METHODOLOGY

This document presents the results of the evaluation, and is based on a desk review of documents provided to the consultant, visits to ESCAP and SIAP, and telephone and electronic interviews with key stakeholders.

3.1 Overall Approach

The methodology adopted in this evaluation conforms to the norms, standards and procedures outlined in the ESCAP Monitoring and Evaluation System. SIAP's performance to date has been assessed in selected areas, in order to inform decision-making and hopefully to enhance the overall governance, accountability and management of SIAP as well as suggesting how the Institute might evolve in the light of its strengths and weaknesses.

Prior to the formal launch of the evaluation, PMD identified and assembled all main reports and reference documents associated with SIAP. Of the many documents collected, a smaller number of key documents were identified by PMD, and these underwent a general desk review in support of the preparation of the work plan for this evaluation. Other documents have also been used as references as and when required. All documents have been stored on Compact Disks. Given the large amount of documentation available, desk and documentation reviews were carried out throughout most of the evaluation period.

Information for this review was collected by a mixture of face-to-face, telephone, pilot electronic questionnaires and electronic mail communications, synthesised with existing documentation. Wherever possible, information has been triangulated in an attempt to seek validation through cross-referencing different sources. However, it has also been important to reflect the opinions and perceptions of key stakeholders even though they might be inadequately informed or misunderstand a situation. One of the important issues is whether there is adequate awareness of the services provided by SIAP and a full appreciation of the constraints under which they operate.

In particular one of the difficulties encountered is the willingness of respondents (particularly statisticians in member States) to answer honestly. They had a tendency to give answers which they thought were required or which they perceived as ensuring that their own positions would remain unaffected by the evaluation. Several rounds of pilot electronic questionnaires did not elicit very valuable information, and subsequent personal contacts with the respondents indicated that 'politically correct or neutral' answers given in the electronic survey do not coincide with the opinions actually held as subsequently elucidated. This led to a change of approach away from large scale questionnaires to more telephone (and where feasible in such a short period of time) face to face interviews. Where information was collected by e-mail, the consultant sent these personally to recipients with open ended questions and an invitation to explore other related issues. This change took place during the first three months of the evaluation. As a result the number of stakeholders contacted is lower than was first envisaged but the information collected is felt to be much more helpful. This could be supplemented through re-analysis of the surveys of programme participants carried out directly by SIAP.

3.2 Note on the SIAP Stakeholder Community

Discussions took place with the reference group at the outset in order to agree on the composition of the SIAP stakeholder community. This stakeholder community is diverse, and decisions had to be made early on as to which stakeholder groups would be consulted. The stakeholders include those groups formally tied to the oversight, management and operations of the SIAP, together with SIAP staff, the Governing Council, the Government of Japan, as well as certain partner and service divisions within the ESCAP Secretariat most notably the Statistics Division in ESCAP. Other stakeholders not quite so formally tied to the SIAP may be the broader membership of ESCAP.

Stakeholders also comprise funding and operational partners, whether tied by formal agreements or not. A critical community are the direct beneficiaries of the products and services of SIAP (e.g. trainees, workshop attendees and so on). In the past these people were easily identified but with the advent of the development of e-learning materials it will become less easy to define recipients who may be statisticians across all levels of the statistical systems and beyond. The colleagues, supervisors and managers of training participants may also be defined as indirect beneficiaries of the training. Some of them are also stakeholders in the sense that they have invested resources directly in the training.

In theory users of the statistical services and products are also indirect beneficiaries of the raising of capacity of the statistical capacity within a country but this group cannot be expected to be able to comment usefully on the SIAP's performance.

Other stakeholders are the community of training providers at national, sub-regional and regional levels. They include fellow UN agencies, universities, and independent agencies. They are a diverse group and one of the challenges has been to compile a sampling frame of such organisations from which to select respondents.

3.3 Interviews and Surveys

The main source of information was through unstructured interviews and consultations with the identified stakeholders. As indicated above the use of structured data collection proved to be rather less valuable than hoped and changes occurred to the plans as a result of this piloting. Some group discussions took place such as with groups of training participants at SIAP. Particular attempts were made to interview members of the SIAP Governing Council on a face to face basis and if not then by telephone.

Face to face interviews were conducted with 32 individuals (excluding SIAP and ESCAP staff), and telephone conversations took place with 9 individuals. E-mails were sent to 112 people of whom 36 responded. Unsolicited e-mails were received from three additional people. Group discussions were held in SIAP with training participants, in the Republic of Korea with senior statisticians and in Senegal with representatives of training institutes. The selection of Senegal and the Republic of Korea is explained in section 3.4 below.

All respondents have been promised anonymity and so this report for ESCAP does not identify the comments of any individuals.

3.4 Activities and Schedule

The evaluation was conducted over a five-month period from October 2009 to the end of January 2010, with substantial analytical activities taking place between November 2009 and mid-January 2010.

The consultant visited ESCAP in October 2009 and took advantage of two missions which were already in her plans to conduct interviews and consultations for this evaluation. These were to the Republic of Korea for the OECD World Forum on measuring the progress of societies and to Senegal, West Africa for the tenth anniversary conference of PARIS21 (Partnerships in Statistics for development in the twenty first century – a network relating to statistical capacity building). At both meetings there were relevant participants from ESCAP Member States and from international and regional agencies with expertise in statistical training. In addition the consultant has participated in two European statistical meetings where she has taken the opportunity to explore the current provision for statistical training in that region.

Unfortunately, the consultant's visit could not be accommodated until the beginning of January. As a result, her meetings with Japanese officials had to be combined with her only visit to SIAP for this evaluation all of which had to be compressed into a two-week period around this time. However, the consultant has visited the Institute on a number of occasions and has even taught on SIAP courses in the past so she is familiar with SIAP's work.

Despite the delays in her crucial meetings in Japan, the deadline for the completion of the evaluation has not been extended.

4 SIAP'S CURRENT SITUATION

4.1 Background to SIAP

SIAP was established 40 years ago as response to a critical shortage of personnel trained in official statistics in most of the developing countries in Asia and the Pacific. Twenty countries in Asia and the Pacific and the United Nations Development Programme (UNDP) established the Asian Statistical Institute in Tokyo in 1970. The establishment of the Institute was called for by ECAFE at its 23rd Session in Tokyo, Japan in April 1967. It was planned to be an international centre to bring about regional co-operation in the training of government statisticians from the developing countries of the region. In 1977 it was renamed the Statistical Institute for Asia and the Pacific (SIAP) and in 1995 the Institute was accorded the legal status of subsidiary body of ESCAP, with a Governing Board to review operations and to approve the annual and long-term programs of work of the Institute.

The objectives of SIAP were most recently described in ESCAP resolution 61/2. Statute of the Statistical Institute for Asia and the Pacific in 2005 as follows: "to strengthen, through practically oriented training of official statisticians, the capability of the developing members and associate members and economies in transition of the region to collect, analyze and disseminate statistics as well as to produce timely and high quality statistics that can be utilized for economic and social development planning, and to assist those developing members and associate members and economies in transition in establishing or strengthening their statistical training capability and other related activities".

SIAP has traditionally delivered statistical training in two main ways – via Tokyo based courses and via an outreach programme (courses run in countries). More recently SIAP has embarked on distance learning of two types – via video links in real time and by placing material on the Web. The Institute not only helps develop statistical capability, but also contributes to international comparability of data through the promotion of internationally agreed standards, methodologies and frameworks of official statistics.

As reported on the website, the functions of SIAP are as follows:

- Training of official statisticians, utilizing existing centres and institutions for training available in member States;
- Networking and partnership with other international organizations and key stakeholders;
- Dissemination of information.

4.2 Scale of operations

To-date, 11,778 government officials/statisticians from 124 countries have been trained by SIAP. The vast majority of these participants (98%) are from the ESCAP member States, compared with 236 participants (2%) from non-ESCAP countries. The focus has been particularly on staff from statistical offices in developing countries.

In the year to 30 September 2009 the Institute trained 535 participants from 49 countries through the organization of Tokyo Metropolitan Area (TMA) courses, outreach programme and distance training. Of these 58 participants were trained in TMA courses, all of them provided with fellowships by JICA. Most of the participants (92 per cent) came from member and associate member States of ESCAP.

SIAP is located in the JETRO-IDE building in Makuhari, Chiba Prefecture on the outskirts of Tokyo in a pleasant and well-equipped building provided by the Japanese government.

The Tokyo Metropolitan Area courses are all conducted in Makuhari by the SIAP faculty members assisted on occasions by guest lecturers and invited experts. The Outreach Program courses are all conducted in training facilities within countries other than Japan. Some of these courses are co-hosted with training centres within national statistical offices. The offices may assist by providing lecture rooms, accommodation, transport and meals. In general SIAP faculty deliver the courses but they are often assisted by experts and resource persons some of who may be provided by the host government. In this way in-kind assistance is provided to SIAP.

With the TMA-based courses ranging from 2-6 months in duration and the Outreach Program courses from 1-4 weeks (mainly 2 weeks), the TMA-based courses represent, in training days, the bulk of the training that is delivered. Details of the number of courses, participants and their countries of origin are available from the annual reports of the Governing Council to the UN ESCAP Commission.

Given the size of the Region and the extent of the requirement for statistical capacity building, SIAP's permanent staff is extremely small with just six professional staff comprising the Director, Deputy Director, and four lecturers/statisticians. In addition,

SIAP has four General Service staff and further support from ten officials assigned by the Ministry of Internal Affairs and Communications (MIC) of the Government of Japan. MIC is the ministry within which the Office of Director General for Policy Planning (Statistical Standards) and the Statistics Bureau of Japan is located.

4.3 Institutional Arrangements

As explained above SIAP has been a subsidiary body of ESCAP since 1995 when Commission Resolution 51/1 set out the Statute of SIAP at its Fifty-First Session. The SIAP Statute created a Governing Council comprising representatives of the host country Japan and eight other member countries of UN ESCAP elected by the Commission. The Executive Secretary of ESCAP (or her representative) attends Governing Council meetings in non-voting capacities. Representatives from a number of other member countries and international agencies attend Council meetings as observers.

The Governing Council is charged to review the administration and financial status of the Institute and the implementation of its programme of work. The Executive Secretary of ESCAP submits an annual report, as endorsed in draft form by the Council, to the Commission at its annual sessions. The Council also reviews and endorses annual and long-term workplans consistent with the programme of work.

The Director of SIAP is selected and appointed by UN ESCAP, however the Governing Council may suggest candidates for the position.

4.4 Financial situation

The Statute states that the resources of SIAP can consist of voluntary contributions in cash and in kind from: the Government of Japan, other Governments, United Nations agencies and specialised agencies, and other sources. The SIAP funds are held in a trust fund established under the Financial Regulations and Rules of the United Nations.

The majority of the financial contributions to SIAP are from the Government of Japan through three sources of funding - direct and in-kind assistance from the Ministry of Internal Affairs and Communications and assistance from JICA for participants on the Tokyo Metropolitan Area courses.

Of the total (cash) financial income to SIAP of 1,906,882 US dollars in 2008, US dollars 1,681,080 (88%) was provided by Japan. For further details of the latest funding position see the Report of the director of SIAP to the Governing Council Fifth Session, 16-17 November 2009, Phuket, Thailand, reference GENERAL STAT/SIAP/GC(5)/2.

4.5 Training courses

As mentioned in Section 4.1 training is delivered in two main ways, namely Tokyo Metropolitan Area based (TMA) courses and via an outreach programme with courses run in countries. In order to give a current picture of the training programme of SIAP the following courses were held in the year from October 2008 as reported to the fifth governing Council of SIAP:

4.5.1 TMA-based 'long' training courses

In the year from October 2008, four TMA-based courses conducted jointly with JICA were completed and given below:

- The fourth group training course in modules on fundamental Official Statistics, of duration 6 months;
- The fifth group training course in application of information and communications technologies to production and dissemination of official statistics, of duration 2 months;
- The fifth group training course in analysis, interpretation and dissemination of official statistics, of duration 2 months;
- The area-focused training course in collection and analysis of official economic statistics for central Asian countries, of duration 2 months

4.5.2 TMA-based short-term courses

Two additional country courses in specialized topics were organized at SIAP:

- Country course on survey design, poverty analysis and data dissemination with ten participants from the Bangladesh Bureau of Statistics was successfully conducted in collaboration with this national government department
- SIAP/UNIDO workshop on empirical country analysis to support the Formulation of Viable Policies for the Sustainable Economic and Industrial Development.

4.5.3 Outreach Programme

This programme consisted of short-duration regional/sub-regional and country training courses/workshops on specialized topics in statistics. A total of 317 participants from 42 countries benefited from the training courses organized by the Institute in collaboration with national partner institutions and international organizations. The following regional/sub-regional training workshops were completed:

Regional/sub-regional training courses/workshops

- The seventh management seminar for the heads of national statistical offices in Asia and the Pacific, 13–15 October 2008, Shanghai, China, in collaboration with the National Bureau of Statistics of China and UNSD.
- The fourth sub-regional Course on statistics for the Pacific island developing countries, Nadi, Fiji, 27 October–14 November 2008.
- SIAP-UNECE sub-regional course on new challenges for countries in transition, Tehran, Islamic Republic of Iran, 20–24 December 2008.
- Training workshop on survey planning, questionnaire design and field operations, Manila, Philippines, 15–19 December 2008.
- The third regional course on integrated economic accounts, Manila, Philippines, 15–19 June 2009. The course was organized in collaboration with the IMF head office in Washington and the IMF regional office for Asia and the Pacific.
- The fourth regional course/workshop on statistical quality management and fundamental principles of official statistics, Daejeon, Republic of Korea, 21–25 September 2009. The course was conducted in collaboration with Statistics Korea.

Country courses

Country courses are an important component of the Institute's training programme to strengthen the statistical capacity of specific countries, and to meet their particular needs.

- Country course on national accounts, Colombo, Sri Lanka, 18–24 December 2008.
- Country course on environmental statistics, Tehran, Islamic Republic of Iran, 20–24 December 2009.
- Country course on introduction to STATA software, Ulaanbaatar, Mongolia, 12–16 January 2009.
- Country training workshop on MDGs and use of administrative data systems for statistical purposes, Koror, Palau, 19–23 January 2009.
- Country course on demographic statistics, Jakarta, Indonesia, 18–22 May 2009.
- Country course on the 1993 System of National Accounts, Manila, Philippines, 15–19 June 2009.
- Country course on sampling designs for household and enterprise/establishment surveys, Putrajaya, Malaysia, 6–10 July 2009.
- Country course on multivariate statistics, Colombo, Sri Lanka, 21–25 July 2009.
- Research-based training course, Ulaanbaatar, Mongolia, 28 September–2 October 2009.

4.5.4 Distance training courses

The Institute conducted short distance-learning training courses using JICA-Net services in Tokyo and in JICA overseas offices. One of the aims of this training is preparation for the TMA courses in order to increase their effectiveness.

- Introduction to SNA (Bangladesh, China, Ghana, Mongolia, Lao People's Democratic Republic, the Philippines and Vanuatu).
- Introduction to STATA software (Bangladesh, China, Mongolia and Thailand)
- Introduction to STATA software (Bangladesh, China, Ghana, Lao People's Democratic Republic, Mongolia, Philippines and Vanuatu).

5 THE 2003 EVALUATION

The last evaluation of SIAP was conducted in 2003 by Tim Skinner, recently retired from employment at the Australian Bureau of Statistics. He made 51 recommendations under ten main headings. SIAP staff assured the consultant that they have taken very seriously the recommendations in the 2003 Review and briefed her fully on the extent to which each of them has been implemented. Recommendations for any additional actions arising in this section are picked up in later sections of the present evaluation.

- *SIAP's activities should be significantly expanded to better meet the statistical training needs of the region*

SIAP has conducted surveys of needs and is thus making efforts to better understand the training requirements and current provision in the region. As a result of this SIAP has expanded its portfolio of courses in line with the recommendations but there remains scope for increasing partnership with other agencies and for enhancing the training for senior statistical staff. SIAP's focus on developing countries is considered later in this report.

- *SIAP needs to sharpen its focus on UN ESCAP priority themes*

Efforts have been made to better integrate the work of SIAP into the statistical programme of UN ESCAP through improved contact between the Institute and the Statistics Division in ESCAP but there is potential to create greater synergy.

- *SIAP should position itself to be the natural coordination agency for statistical training in the region*

Consultations with statisticians in Member States and in other UN agencies in the region suggest that this has not been achieved, indicating the need for still closer cooperation with ESCAP as well as a more vigorous approach by SIAP to advocacy for statistical training.

- *Ensure the financial sustainability of SIAP*

SIAP has been very successful in retaining the support of the Japanese government, and moderately successful in persuading other countries to contribute subventions or in-kind support. However the financial position remains fragile both because of its high dependency on the Japanese contributions and the impact of the global economic crisis.

- *A more strategic and systematic approach to planning and evaluation*

SIAP's production of regular plans is to be welcomed but there remains scope for longer term thinking about its strategic direction. What role does the SIAP Governing Council think SIAP should fulfil in say five and ten years time?

- *Strengthen partnerships through better consultation arrangements*

The SIAP Director has made significant efforts to consult national statistical agencies and other stakeholders in the development of the work programme. Nevertheless countries' engagement and ownership of SIAP's work remains very variable, as identified by SIAP staff as well as by statisticians in Member States.

- *A stronger focus on assisting statistical training capability*

Since SIAP's staffing remains very small, it is essential that steps be taken to expand its influence through more extensive use of courses designed to train the trainers. In addition more cost effective methods of teaching must be accelerated.

- *Move quickly into distance education and e-learning*

Some initiatives have been undertaken in this area but SIAP will need to give this an even higher priority given the potential of such methods to deliver teaching in a region as vast as this.

- *The TMA-based courses should be made more flexible*

It was reported by SIAP staff that a decision has been made to reduce the length of the six month TMA course to four months. SIAP may wish to consider and to discuss with stakeholders whether this is a sufficiently radical change, and how greater flexibility can be introduced into a course which has not kept pace with the changing nature of statistical training.

- *The SIAP faculty*

It is important that SIAP staff have an opportunity to update their statistical experience and to learn from other training institutions. Whilst the SIAP faculty remains small it is regrettably difficult to provide them with research and continuing professional development opportunities.

6 REVIEW OF CURRENT ACTIVITIES

6.1 Role of SIAP

To date SIAP has focused on training for statisticians in developing countries. Given the rapid development of many countries in the region the question arises as to whether SIAP should also be providing services for more advanced statistical systems. All statistical agencies are operating in a fast changing world and must therefore become learning organizations with the agility to adapt in response to new demands and opportunities. The 2003 Report recommended that SIAP become the natural co-ordination agency for statistical training in the region. Although not of the highest priority, this issue ought to be on the agendas of ESCAP's Statistics Committee and the SIAP Governing Council since it has clear implications for the long term strategy of both ESCAP and SIAP. Statisticians in the more developed statistical systems in the region expressed interest in exploring this idea, perhaps based on models such as the Training of European Statisticians employed elsewhere in the world.

SIAP offers training places to statisticians from outside the ESCAP region funded by JICA. The Japanese Government is content for this to happen provided that this does not deprive statisticians within the region of training opportunities. However some statisticians in ESCAP Member States are concerned about this practice which they feel is not part of SIAP's core remit. This dates back to the period prior to SIAP becoming a subsidiary body of ESCAP in 1995. The contention which the inclusion of statisticians from outside the region causes needs to be confronted and resolved. It could be simply a matter of clarifying misunderstandings among some ESCAP member states concerning the use of resources and also communicating the fact that 98% of participants have come from ESCAP Member States since the Institute's inception.

The fact remains that the long TMA courses are not filled by participants from ESCAP Members States. The reason why the places on the long courses are not filled

should also be better understood. Interviews with national statistical staff in the region pointed to a variety of reasons for this including

- absence by staff members for several months presents a significant challenge to some national statistical offices
- anxiety as to whether the staff will return to the statistical office at the end of the training
- reluctance of potential participants to leave their families for such a length of time
- questions as to whether the training provides value for money as well as whether the training material is up to date

JICA's funding of participants on SIAP courses is essential but the reasons for collaboration between SIAP and JICA need to be explained to ESCAP Member States. The inconsistencies between SIAP regional roles and JICA's global remit need to be constructively resolved perhaps in consultation with the Japanese Government.

Concurring with the conclusions of the 2003 report about the need for more strategic thinking and closer alignment of SIAP's role with ESCAP stakeholders expressed the view that the development of SIAP's strategy should be conducted in close collaboration with ESCAP. Incorporation of SIAP's programme into the broader statistical programme is a necessary but not sufficient condition for integration. Whenever ESCAP develops new programmes consideration could be given to any potential implications for statistics especially capacity building. ESCAP and SIAP staff could share information gathered from missions to Member States in order to improve the understanding of the national capacities and needs. National stakeholders would welcome greater coherence of the work of SIAP and ESCAP since they feel there is sometimes duplication in the information they supply.

6.2 Staff resources

Given the huge size and diversity of the region, and the importance of sound statistics for development, SIAP's staffing levels remain abysmally low despite the recommendations of the 2003 report. This inhibits SIAP's capability to develop new courses and new modes of delivery. It also restricts staff development opportunities.

This points clearly to the need for a financial strategy of greater depth than that included in the annual plans. Representatives from ESCAP Member States have expressed their confusion at the mixed messages they receive as to the need for additional funds. The written documents have sometimes been undermined by very tentative requests and by messages that the funding is currently secure. Countries reported to the consultant that they had increased their contributions but they were from a very low base and with little appreciation of the true needs of SIAP. The consultant received several complaints about the lack of transparency concerning the financial situation of SIAP from Member States.

A financial strategy should address the need for broadening the sources of funds – both in cash and in-kind – and should explain what might be achieved with a stronger financial base. A more ambitious approach should be taken than hitherto, but requests for additional funding must be accompanied by better information on the value of the statistical training. Such a document should also highlight the need to supplement internal faculty through partnerships with appropriate experts in external

organizations, such as higher education institutions and public sector research institutions.

Even were SIAP to grow significantly it will still be tiny compared to the needs of the region. Thus the philosophy must be not attempting to undertake everything itself but rather to act as a catalyst, stimulating developments in the region. This implies paying much more attention to sharing training materials, training the trainers, and promoting existing training opportunities which might be offered by other organizations. For example SIAP, with ESCAP's assistance, might compile an intelligence system on the specialist skills and expertise of the statistical agencies in the region which could be tapped to build the capacity of neighbouring countries (the model employed by the 'Training of European Statisticians'). This could also include establishing a means for countries to support one another through staff exchanges, mentoring and sharing resources.

The limited staff resources require that careful consideration is given to the efficiency of their deployment. The resources for teaching 18 students every day for four months are considerable, and thus the balance between TMA and country-based courses must be kept under review. A priority must be the improvement of the quality and extent of the feedback about the courses collected not only from the participants but also from their supervisors. Research is needed to find ways of gathering such information which reduce the risk of positive spin. This is part of the broader issue of ensuring that statisticians within countries share responsibility for building an efficient statistical training system. Perhaps an opportunity might be taken of a meeting which involves Heads of National Statistical Offices in the region, to discuss with them how more helpful information might be collected in the future.

6.3 Student resources

Statisticians consulted across the region support the decision made by SIAP to reduce the length of the TMA basic course from six to four months, and questioned whether even four months is too long. Even at four months the absence of a participant from their home base has a significant impact especially in small countries. It behoves SIAP to ensure that they are using this time effectively. This raises the issue of the time spent by participants travelling between their accommodation and Makuhari every day. The students pointed out to the consultant that the total three hour journeys are extremely tiring. A further problem is the fact that this prevents them from making full use of the IT and library facilities in SIAP, exacerbated by the restrictions on remote access to the SIAP's IT facilities. This needs to be addressed.

Recommendation – to SIAP: To resolve the problems of a) long journeys between students' accommodation and Makuhari; and b) the inability of students to access SIAP library and IT facilities out of office hours and remotely

The consultant also received a number of complaints about the extravagant use of time when some lectures had to be translated into English by an interpreter. Perhaps the material being delivered to students might be translated in written form for the students rather than requiring them to sit through the interpretation. Students also requested that they might be involved in preparing and presenting more of the material. Several of them feel that they are required to be too passive for too much time.

6.4 Relevance

The challenge to SIAP is how to ensure the relevance of its courses given the region's expanse and diversity in terms of stage of development, size of countries, languages, cultures. Considerable efforts have been made to obtain needs analyses from countries and translate them into relevant training. This work must continue. Structured questionnaires are of limited value in eliciting the needs of statistical agencies, which have a tendency to accept the status quo, and thus personal contacts will be helpful. To this end responsibility for the needs analysis should be shared between SIAP and ESCAP. Consultation with PARIS21 and other training agencies can help to supplement such information.

Recommendation – to SIAP: To continue its work on ensuring the relevance of its courses by sharing with ESCAP responsibility for obtaining training needs analyses from countries and by consultation with PARIS21 and other training agencies to supplement this information

A further challenge is that of selecting appropriate students for the courses. Students must be at the right level and be appropriately motivated and committed to statistics. This is a particular problem for the long TMA courses as an inappropriate selection has detrimental impacts not only on that participant but also on the rest of the cohort for the duration of the course. It is therefore essential that SIAP staff are fully involved in the selection of students and have the power of veto if they feel that countries or the funding agencies are not applying the correct criteria for the selection.

The use of a skills based approach (ref. Annex 3 of STAT/SIAP/GC(5)/3) which has been adopted by SIAP for the selection of students, receives the general support of the statisticians consulted in this review but there are concerns about the lack of consultation in its development and the fact that it does not relate to existing frames of skills and competencies already in use. Thus the consultant would recommend that it needs to be further developed and tested with a range of countries. At present it does not adequately distinguish between different levels of expertise because of an over-concentration on technical skills.

Recommendation – to SIAP: To further develop the skills based approach for the selection of students in order to achieve a better distinction between different levels of expertise

Courses must be timely in terms of participants' careers, and in developing the skills based approach consideration will need to be given as to whether and how to incorporate the career stage into the selection of course participants. Some previous participants complained that this had not been adequately addressed when they were selected for courses.

Countries must take greater responsibility and ownership of the selection process for their participants, and SIAP needs to be more robust with countries to minimize the risk of inappropriate selections. An opportunity should be sought when senior statisticians from countries in the region are gathered to raise awareness of these issues. SIAP must discuss this with JICA because of their role in funding many participants.

Recommendation – to countries: To take greater responsibility and ownership of the selection process for their participants in SIAP courses

Recommendation – to SIAP: To be more robust with countries to minimize the risk of inappropriate selections

Recommendation – to SIAP: To discuss problems with current selection procedures with JICA

Recommendation – to SIAP: To raise awareness among senior statisticians from countries in the region, whenever they are gathered together, of the importance of planning the training needs of their staff

6.5 Effectiveness and sustainability

It is the consultant's view, having talked to a wide range of stakeholders, that SIAP must grow or it will atrophy. The current plans focus too much on incremental change rather than conveying an understanding of the bigger picture and how SIAP might contribute to the statistical capacity of the region over the next five to ten years. Thus SIAP's strategic plan must discuss potential for expansion of its role and should include a compelling case for additional resources. This has implications for raising the income from Member States and for ensuring the sustainability of the income from Japan.

There must be more than exhortations to countries to increase their contributions, a viable plan needs to present arguments with evidence about the value of SIAP courses. Currently there is an over-emphasis on the input indicators (such as how many participants have attended courses) and very limited information on the difference made to the statistical systems through the training provided by SIAP. Case studies on the value and impact of SIAP training should be harnessed. A small number of success stories could be very useful.

In order to build greater ownership by member countries information is needed on SIAP's unique selling points. It would be very valuable for SIAP to initiate a debate about how decisions should be made as to the role it should play vis a vis other players in the region also involved in statistical capacity building. Heads of national statistical agencies in the region could tell the consultant very little about how the priorities for SIAP were determined and how they might influence them. Whilst it is clear that the Governing Council can include representatives of only a small number of countries, greater opportunities should be sought to consult more widely.

Many universities have built good systems of involving their alumni and would probably be happy to share their experience with SIAP staff. Keeping in touch with past participants on courses is an important part of tracking their careers and feeds into measures of success. It is also critical to build a strong constituency who will fight for improved resources in the future and who will engage with SIAP's development. Although SIAP staff say that they recognise the importance of involving SIAP alumni several past participants expressed the view that they had not been involved to the degree they would like.

Improved information on the competitive advantage of SIAP and the value of its work is needed in order to justify to Japanese taxpayers and to convince its politicians that public funds are being wisely spent. This is especially important in the light of the impact on the Japanese economy of the financial crisis. If SIAP staff feel uncomfortable in playing this advocacy role perhaps a senior statistician in the region might act as their champion.

Recommendation – to SIAP: To include in its strategic plan a strong case for additional resources

Recommendation – to SIAP: To work with countries to increase their contributions by presenting a viable plan with evidence about the value of SIAP courses

Recommendation – to SIAP: To build greater ownership by member countries by providing them with information on SIAP's unique selling points.

7 TEACHING METHODS

SIAP largely uses traditional face-to-face lectures for the delivery of material. During the consultant's short visit to Tokyo, she was given outlines of the courses, sat in on part of a lecture on the six-month TMA course and heard from students what they felt about this course. A number of students also wrote to the consultant after her visit.

The consultant was impressed by the conscientious attention paid by the lecturers to the preparation of their material, an observation echoed by the students themselves.

The students comment on the high quality of the material but many have difficulty with the nature and volume of material to be assimilated. Accordingly SIAP may wish to consider reducing the use of conventional lectures through other methods of delivery. This might include, for example, greater emphasis on student-centred approaches in which core material is provided via the web for the students to study at their own pace. Face-to-face sessions with lecturers could then increasingly be used for a variety of other purposes for example covering aspects which students are finding difficult, working through exercises on the topics covered or conducting seminars in which students give presentations to their classmates.

Recommendation – to SIAP: To consider reducing the use of conventional lectures through other methods of delivery

A strong case can be made for bringing in experts in pedagogy perhaps on a consultancy basis, to advise SIAP on the use of different modes of teaching, learning and assessment and how to determine the optimal mix for a given course.

Recommendation – to SIAP: To consider bringing in experts in pedagogy to advise SIAP on the use of different modes of teaching, learning and assessment and how to determine the optimal mix for a given course.

SIAP's excellent IT facilities at Makuhari comprising a classroom of 35 PCs is ideally suited to the web-delivery of course material. As this environment does not currently appear to be under pressure, there could be scope for deploying a number of different approaches better suited to the students' requirements as articulated in their comments to the consultant.

Recommendation – to SIAP: To consider deploying a number of different approaches better suited to the students' requirements, including greater use of the IT facilities in the classroom

SIAP's e-library of course material is a good first step in this direction though the usual cautions regarding electronic material are worth restating. The initial investment of resources to create high-quality electronic material is significant and a

return in financial terms may be difficult to realise. Thus before embarking on such developments for a particular curriculum, thorough searches should be carried out for appropriate material which may already exist elsewhere. There is no virtue in re-inventing the wheel – better to adapt good material developed by others than to start from scratch. Indeed given that there are other regional statistical training centres and universities (particularly open universities) which are developing relevant distance learning material, the consultant would recommend that key partnerships are sought by SIAP for two or three joint projects.

Recommendation – to SIAP: To seek appropriate high-quality electronic material from elsewhere before embarking on its own development of such material for a particular curriculum

Recommendation – to SIAP: To establish key partnerships with other regional statistical training centres and universities (particularly open universities) which are developing relevant distance learning material

SIAP is to be commended on its pilot project using satellite communications to deliver lectures in real time to students in their home countries. This facility has so far largely been deployed for some courses including induction material to students preparing to attend SIAP's 6-month courses in Tokyo. The ability for students to interact directly with the lecturer is a particularly powerful feature.

While undoubtedly impressive, such real-time ("synchronous") distance teaching poses a number of questions. Firstly, it requires students to attend centres in their own countries which have appropriate facilities to participate in the broadcasts. Secondly, the participation of students in several locations requires considerable coordination especially if they are in multiple time zones - which is quite possible in the ESCAP region spanning as it does time differences of about 12 hours. Thirdly, students in countries without such centres cannot participate unless the not insignificant costs of establishing them can be found.

Other more scaleable approaches are rapidly reaching maturity mostly based on web technology. These are very much part of the growing trend towards "student-centred" learning. Among the more promising are Virtual Learning Environments (VLEs) which although not offering synchronous audio- and video-interactions between student and lecturer, provide rich environments for e.g.:

- delivering interactively-accessible material
- asynchronous student-student, student-lecturer and group interactions
- online self-testing and assessment

The advantages here are

- the cost for each student is little more than the provision of access to the internet at modest bandwidth
- VLEs can be deployed both for remote and local teaching

Such approaches could be very relevant to SIAP as it reviews its modes of delivery and the consultant recommends that SIAP investigates them thoroughly for possible deployment on its courses.

Recommendation – to SIAP: To investigate various scalable approaches to modes of delivery for possible deployment on its courses.

In conclusion there is considerable scope for deploying a variety of approaches to teaching and learning, especially given the size of the region, the spectrum of training needs and the high rates of economic progress in many ESCAP member countries.

8 OPPORTUNITIES

8.1 New training

SIAP has responded to the recommendation in the 2003 report to better meet emerging requirements of member states by expanding its training courses to cover topics such as MDGs, national accounts and poverty measurement. This process of updating the portfolio needs to continue to include new substantive areas (e.g. environmental statistics), new methodologies (e.g. register-based systems) and new challenges (e.g. developing policy analysis skills). The possibility of forging new partnerships with non-statistical organisations which have relevant subject expertise to enhance the curriculum should be explored.

Recommendation – to SIAP: To explore the possibility of forging new partnerships with non-statistical organisations to enhance the curriculum

8.2 The statistician as a professional

As with many professions, there is a growing demand in some countries both from employers and from statisticians for recognised qualifications at the end of initial training as well as for continuing professional development. SIAP needs to acquire good intelligence of this emerging requirement in the region and to seek ways of providing appropriate certification. One way of achieving this would be to build relationships with professional statistical associations both at national and international levels.

Recommendation – to SIAP: To acquire good intelligence of the emerging requirements for recognised qualifications at the end of initial training as well as for continuing professional development and to consider how to build relationships with professional statistical associations both at national and international levels

8.3 SIAP as the centre of a network

Even with an increased staff complement, it is unrealistic to expect SIAP to be able to meet more than a small fraction of the region's statistical training needs. Hence, it will be imperative to build stronger relationships and to share resources (e.g. distance training materials) with national statistical training centres and with centres in other regions of the world. Through the UN, SIAP has unparalleled opportunities to network across the region and beyond but the impression that stakeholders have is that SIAP is rather conservative and cautious in its approach and that it does not embrace partnership with other statistical training centres. SIAP needs to be a more active participant in the PARIS21 initiative (Partnerships in Statistics for Development in the 21st century) which provides opportunities for sharing resources.

The involvement of other UN agencies in the SIAP Governing Council meeting is welcomed by such agencies which have expressed an eagerness for SIAP to gather together and share information on the training provision and needs of the region.

Recommendation – to SIAP: To strengthen its position as the centre of a network by building stronger relationships and sharing resources with national statistical training centres and centres in other regions of the world and by becoming a more active participant in the PARIS21 initiative (Partnerships in Statistics for Development in the 21st century).

SIAP's remit is to support statistical capacity building in the ESCAP region. In this context, it must represent the region's interests by taking an active role in and influencing global developments in statistical education, such as the statistics training centre in China being proposed by the UN in New York.

Recommendation – to SIAP: To represent the region's interests by taking an active role in and influencing global developments in statistical education, such as the proposed statistics training centre in China.

9 HIGH-LEVEL ISSUES

9.1 Advocacy

SIAP itself needs to develop its skills in advocacy for statistics and for statistical training. This would provide the Japanese Government and ESCAP with powerful ammunition in support of SIAP. Essential elements of the case will be much better impact measures, greater transparency on the use of resources and better utilisation of SIAP's facilities (e.g. sharing its teaching facilities with other organisations). It should be noted that to date the material provided by SIAP on its performance is mainly focused on input data. However, in developing impact measures, qualitative case study material can also be persuasive.

Advocacy does not need to be done by SIAP alone but could be a shared responsibility with:

Heads of NSOs in the region, ESCAP staff and SIAP alumni. Japanese statisticians can also play an important role through their creative publicity for the census, their celebrations of World Statistics Day and other high profile statistics events. The consultant accordingly recommends that SIAP discusses such opportunities with the Office of the Director General of Policy Planning (Statistical Standards) of the Japanese Government.

Recommendation – to SIAP: To develop its skills in advocacy for statistics and statistical training, essential elements of which will be much better impact measures (including qualitative case study material), greater transparency on the use of resources and better utilisation of SIAP's facilities

Recommendation – to Heads of NSOs in the region, ESCAP staff and SIAP alumni: To share responsibility for advocating the cause of statistics, training and SIAP's role

9.2 Relationship with UN ESCAP

Considerable progress has made in improving communications between SIAP and ESCAP as reported by staff of both organizations, and confirmed by members of SIAP's Governing Council. However, although the SIAP programme is now incorporated into ESCAP's statistical programme, they seem to influence one another relatively little. Further opportunities must therefore be explored to fully integrate

statistical training with ESCAP's programmes, whilst maintaining SIAP's identity. ESCAP missions to Member States should as a matter of routine explicitly identify the statistical and information implications of the issues addressed by the mission, which should in turn be translated into training needs in collaboration with the Member State and SIAP.

Recommendation – to ESCAP and SIAP: To explore jointly opportunities for more closely integrating SIAP's statistical training mission with ESCAP's programmes

9.3 Governance

The aim should be to secure greater involvement of all member countries in the functioning and activities of SIAP in order to ensure that their needs are understood and met. Measures must also be taken to increase the commitment and real engagement of governing council members as there is some evidence that this is rather variable. To facilitate this objective, it is critical to ensure that the representatives at the governing council meetings are empowered to make decisions for their countries, and that there should be greater continuity of representation at governing council meetings, together with improved training of representatives. SIAP is a complex organization with a long history and it is very difficult for representatives to contribute constructively unless they are well-informed.

Recommendation – to ESCAP and SIAP : To secure greater involvement of all member countries in the functioning and activities of SIAP, to increase the commitment and real engagement of governing council members, to ensure greater continuity of representation at governing council meetings, together with improved training of representatives

Greater clarity is needed on the relationship between SIAP's governing council and ESCAP's Statistics Committee so that they can work creatively together to secure SIAP's role in the future. As part of the overall governance arrangements, there is likely to be a need for a "foresight" committee to work with SIAP staff on strategy. This might be explored by the current Bureau of the Committee on Statistics at ESCAP.

Recommendation – to ESCAP: To clarify the relationship between SIAP's governing council and ESCAP's Statistics Committee so that they can work creatively together to secure SIAP's role in the future

10 GENDER

The consultant was specifically asked to comment on the extent to which gender equality is reflected in SIAP's activities and results. She is pleased to report that 50% of the participants in the training courses are female and that SIAP promotes the engendering of censuses and other statistical data collection in a number of its courses.

11 CONCLUDING REMARKS

SIAP has made an important contribution to statistical capacity building, and therefore to statistical development, over the forty years of its existence. It performs well and course participants speak highly of the curriculum and the commitment of the staff. The extensive network of SIAP alumni are an important asset both to SIAP and ESCAP. The levels to which many of them have risen in their countries and

internationally attest to the quality of the SIAP training they received. The Japanese Government may be justly proud of SIAP's achievements.

12 RECOMMENDATIONS

Section	to	Recommendation
6.3	SIAP	To resolve the problems of a) long journeys between students' accommodation and Makuhari; and b) the inability of students to access SIAP library and IT facilities out of office hours and remotely
6.4	SIAP	To continue its work on ensuring the relevance of its courses by sharing with ESCAP responsibility for obtaining training needs analyses from countries and by consultation with PARIS21 and other training agencies to supplement this information
6.4	SIAP	To further develop the skills based approach for the selection of students in order to achieve a better distinction between different levels of expertise
6.4	countries	To take greater responsibility and ownership of the selection process for their participants in SIAP courses
6.4	SIAP	To be more robust with countries to minimize the risk of inappropriate selections
6.4	SIAP	To discuss problems with current selection procedures with JICA
6.4	SIAP	To raise awareness among senior statisticians from countries in the region, whenever they are gathered together, of the importance of planning the training needs of their staff
6.5	SIAP	To include in its strategic plan a strong case for additional resources
6.5	SIAP	To work with countries to increase their contributions by presenting a viable plan with evidence about the value of SIAP courses
6.5	SIAP	To build greater ownership by member countries by providing them with information on SIAP's unique selling points
7	SIAP	To consider reducing the use of conventional lectures through other methods of delivery
7	SIAP	To consider bringing in experts in pedagogy to advise SIAP on the use of different modes of teaching, learning and assessment and how to determine the optimal mix for a given course
7	SIAP	To consider deploying a number of different approaches better suited to the students' requirements, including greater use of the IT facilities in the classroom
7	SIAP	To seek appropriate high-quality electronic material from elsewhere before embarking on its own development of such material for a particular curriculum

Section	to	Recommendation
7	SIAP	To establish key partnerships with other regional statistical training centres and universities (particularly open universities) which are developing relevant distance learning material
7	SIAP	To investigate various scaleable approaches to modes of delivery for possible deployment on its courses
8	SIAP	To explore the possibility of forging new partnerships with non-statistical organisations to enhance the curriculum
8	SIAP	To acquire good intelligence of the emerging requirements for recognised qualifications at the end of initial training as well as for continuing professional development and to consider how to build relationships with professional statistical associations both at national and international levels
8	SIAP	To strengthen its position as the centre of a network by building stronger relationships and sharing resources with national statistical training centres and centres in other regions of the world and by becoming a more active participant in the PARIS21 initiative (Partnerships in Statistics for Development in the 21 st century)
8	SIAP	To represent the region's interests by taking an active role in and influencing global developments in statistical education, such as the proposed statistics training centre in China.
9.1	SIAP	To develop its skills in advocacy for statistics and statistical training, essential elements of which will be much better impact measures (including qualitative case study material), greater transparency on the use of resources and better utilisation of SIAP's facilities
9.1	Heads of NSOs in the region, ESCAP staff and SIAP alumni	To share responsibility for advocating the cause of statistics, training and SIAP's role
9.2	ESCAP and SIAP	To explore jointly opportunities for more closely integrating SIAP's statistical training mission with ESCAP's programmes
9.3	ESCAP and SIAP	To secure greater involvement of all member countries in the functioning and activities of SIAP, to increase the commitment and real engagement of governing council members, to ensure greater continuity of representation at governing council meetings, together with improved training of representatives
9.3	ESCAP	To clarify the relationship between SIAP's governing council and ESCAP's Statistics Committee so that they can work creatively together to secure SIAP's role in the future