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### UNITED NATIONS STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC

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> WORKING PAPER - SIAP ANNEX 2

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ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC

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### TRAINING NEEDS IN OFFICIAL STATISTICS IN THE ASIAN AND PACIFIC REGION (Item 6 of the provisional agenda)

#### Introduction

- 1. SIAP organized in May 1999 a survey with two objectives in view. First, the survey was intended to arrive at an inventory of the training needs in the ESCAP region with regard to the statistical subject-areas falling under the competence of the Institute. The second objective of the survey was to gather information on the existing statistical training programmes undertaken by national and (eventually) international bodies. The results of the second part of the survey is reported in a separate analysis and contained in the document STAT/SIAP/GB(5)/4.
- 2. This document provides a report on the first part of the summary namely, that relating to the training needs in official statistics in the Asian and Pacific region. Section I provides an overview of the technique of analysis and the basis for categorizing, first, the responding countries by subregional areas, and second, the subject areas by broad headings. Section II contains the analysis of the survey results, while Section III is devoted to the conclusions emerging from the analysis.
- 3. SIAP will take the results of the survey in preparing the course curriculum for its Tokyo Metropolitan Area-based courses, as well as in planning its outreach programme. The Governing Board may wish to review the contents of this report and advise the Institute on the priorities to be accorded to the various subject areas in the future work programme.

#### I. Response analysis

#### Overview of countries and regions

- 4. The survey-questionnaire was sent by mail and fax to the heads of the national statistical organizations (NSOs) in the region. From the 53 forms which were sent out, 45 responses were received. However, this document is based on the response of 42 Asian and Pacific developing countries. Only one 'reminder' was transmitted to organizations after the passing of the submission deadline. In statistical terms this 'response-rate' is really satisfying, the more so because the addressees evidently have high workload. SIAP is encouraged and grateful for this cooperation, which once again illustrates the importance which the NSOs of the region attach to the Institute. The only disappointing factor was that the majority of non responding countries were located in the Oceania subregion.
- 5. The filled-out statements on training needs of the 42 developing country NSOs came from 43 national organizations. The Philippines returned 2 forms: one by the National Statistical Coordination Board and the other by the National Statistics Office. In the analysis, these two responses are consolidated. The 42 developing countries were grouped into 3 subregions on basis of the United Nations classification (update as of 17 June 1999). The subregional classification of responding countries is contained in Annex 3.4. In terms of subregional breakdown, the first two subregions, namely East and South-east Asia and South-central and West Asia, are fully covered, while Oceania shows a representative, though incomplete, picture.

#### Overview of subject-areas

- 6. In the questionnaire, a list of statistical subject-areas for courses was given, with the possibility of flexibility to add on 'new' subjects. A relatively large number of new subjects were mentioned by the respondents. An exhibit of the full details of subject-list (grouped by broad headings and including 'new' subject-areas) and the requesting countries is given in 3 separate tables according to the subregions as Annex 3.1A, 3.1B and 3.1C.
- 7. Parts of some of the new subjects are *de facto* (at least to a certain level) included in the existing list or existing courses. Nevertheless, the 'new' subjects mentioned by the NSOs in the survey provide indicative information on training requirements in emerging fields and therefore need to be carefully taken into consideration.
- 8. A relatively large number of requests were recorded for 'environmental statistics' as an emerging domain for statistical education within the NSOs (mentioned by 7 countries). Under the broad heading of 'economic and social-economic statistics', 5 'new' subjects were added by the respondents. One of these

(agricultural production indices: 3 requesting countries) is a specialization within agricultural statistics, while the other are really new statistical domains, like 'energy statistics' and 'investment and financial statistics'.

9. Under the heading of 'national accounts', 5 additional subject-areas were mentioned by the NSOs. This may be considered as deepening of the general area, with special interest for 'capital accounts' and 'balance of payment statistics'. The category of 'social statistics' showed 2 new specialization subjects (both mentioned by 2 countries): 'health statistics' and 'human settlement statistics'. Two new topics were also added to the group 'analysis and interpretation': 'small area estimation' and 'analysis of census data'. The new subject areas in the two last categories ('statistical processing and electronic data processing') are mainly further specializations, like 'business registers', 'classifications', 'GIS' and 'IMPS' as well as more generic subjects as 'census organization', 'international cooperation' and 'computer hardware and software'.

### II. Analysis of the needs by course-subject and region

- 10. In the annexes 3.1A, 3.1B and 3.1C, all the individual answers with regard to the needs of courses by region are displayed. A summary table is given in Annex 3.2. All subjects are grouped by statistical domain and sorted in descending order of the overall number of need-indications in each domain.
- 11. Before starting discussion on the results, it is important to emphasize that the outcomes have to be considered in the right perspective. Offering a 'shopping list' of interesting subjects and asking the NSOs for their training needs without a direct fee to be paid could have induced an over-estimation of the actual demand. But, even discounting for this aspect, some interesting conclusions may be drawn from the survey.
- 12. Another point that should be noted concerns the breakdown into course subjects. This is especially with regard to the broad headings of 'analysis and interpretation', 'statistical processing', and 'electronic data processing' when there are serious overlaps between some of the subjects within each category, and the selection by the respondents was consequently sometimes made more or less arbitrarily. For analytical reasons, therefore, in each of the 3 subregional groups, a combination of some subjects is considered in the summary table (Annex 3.2). The combinations (indicated as subtotal) seem to be quiet logical, but may, of course, also be subject of discussion. Double counting in the combinations was avoided by counting each respondent as one indicating either one or both subjects.
- 13. One last remark is that in the analysis of this report, the number of potential participants per course as indicated by the NSOs in the survey is not discussed in detail. Several countries indicated a rather a low number and this could be interpreted as their needs for participation in Tokyo Metropolitan Area-based or regional

courses. Other countries gave indications going up to 70 participants per course, and this possibly refers to either country-focused or longer term programmes. A summary table of the scores by subregion, is given in Annex 3.3.

#### **III. Conclusions**

- 14. The following 'statistical' conclusions on the demand for statistics courses, as reflected in Annex 3.2, can be drawn from the survey:
  - (a) In the subject-matter directed broad headings of 'social statistics' and 'economic statistics' (first two), there is a relatively broad spread over the subjects in the regions East & South-East Asia and South-Central & Western Asia. Oceania showed special emphasis on 'price statistics' and 'external trade statistics'.
  - (b) 'National accounts' as a category scores relatively high in training needs, with exception for the region East and South-East Asia.
  - (c) The scores for the category 'analysis and interpretation' were exceptionally high, especially the combination (subtotal).
  - (d) The combination (subtotal) score under the category 'electronic data processing' was also very high. The trend seems to be that the 'horizontal' (process related) areas are getting as much importance as the subject-matter areas.
  - (e) The category of 'statistical processing (excluding the electronic data processing)' was especially high in the region South-Central & West Asia; the two other regions showed somewhat lower figures.
- 15. The strategic directions for providing statistical training by SIAP may be found in the following general conclusions:
  - (a) The need for statistical education in the ESCAP region is relatively high. Observing the total number of potential participants (more than 5,000) illustrates conclusively the important role of SIAP in meeting a substantial requirement in statistical training of the region. Any reduction in the work-programme of SIAP could have consequences on the capacity building and hence on the quality and comparability of statistics in the Asian and the Pacific region.
  - (b) Further diversification is necessary in SIAP's work-programme, that is, a shift from general courses, to specialized training courses in emerging fields. Of course, this diversification can only be seen in the light of the available budgets and human resources and the priority settings.
  - (c) The results of the survey provide a good reference point for determining the work-programme

of the Institute in the coming years. It also provides an indication of the adjustments to be induced gradually into the curriculum of the Institute's courses and training activities, in response to the regional needs and priorities as expressed by the countries.

# NEEDS WITH REGARD TO SIAP-COURSES - RESPONDING COUNTRIES -

East & South-East Asia	South-Central & West Asia	Oceania
Brunei Darussalam	Afghanistan	Cook Islands
Cambodia	Armenia	Nauru
China	Azerbaijan	Niue
Hong Kong, China	Bangladesh	North Mariana Islands
Indonesia	Bhutan	Palau
Lao PDR	India	Papua New Guinea
Macau	Islamic Republic of Iran	Samoa
Malaysia	Kazakhstan	Solomon Islands
Myanmar	Kyrgyzstan	Tonga
Philippines	Maldives	Tuvalu
Republic of Korea	Nepal	
Singapore	Pakistan	
Thailand	Russian Federation	
Viet Nam	Sri Lanka	
	Tajikistan	
	Turkey	
	Turkmenistan	
	Uzbekistan	
14 countries responded	18 countries responded	10 countries responded

## NEEDS WITH REGARD TO SIAP-COURSES - SUMMARY -

	East & Sou	th East Asia	South-Cent	rol & Woot	Oggar	nia (10	тота	AL (42
	(14 resp		Asia (18 re		respon			idents)
	number of	%	number of	%	number of	%	number of	%
	countries	countries in region	countries	countries in region	countries	countries in region	countries	countries
SOCIAL STATISTICS		iii iegioii		III legion		III legion		
Demographic and Vital Statistics	9	64	13	72	7	70	29	73
Human Development Indicators	10	71	13	72	3	30	26	65
Gender Statistics	10	71	11	61	4	40	25	63
Poverty Alleviation Programme	7	50	13	72	1	10	21	53
Social Statistics	5	36	11	61	5	50	21	53
Human Settlement Statistics	0	0	2	11	0	0	2	5
Health Statistics	2	14	0	0	0	0	2	5
ECONOMIC SOCIAL STATISTICS EXCL								
NATIONAL ACCOUNTS								
Price Statistics	6	43	14	78	7	70	27	68
Household Income and Expenditure Statistics	9	64	11	61	5	50	25	63
Statistics on the Informal Sector	8	57	12	67	4	40	24	60
Labour Force Statistics	8	57	11	61	4	40	23	58
Construction Statistics	7	50	13	72	3	30	23	58
Food and Agricultural Statistics	6	43	10	56	5	50	21	53
External Trade Statistics	5	36	9	50	6	60	20	50
Distributive Trade Statistics	6	43	9	50	2	20	17	43
Industrial Statistics	5	36	10	56	2	20	17	43
Environmental Statistics	1	7	5	28	1	10	7	18
Agricultural Production Indices	1	7	2	11	0	0	3	8
Investment and Financial Statistics	2	14	1	6	0	0	3	8
Services Statistics	1	7	1	6	0	0	2	5
	0	0	1		0	0	1	3
Energy Statistics	0	0	1	6	0	0	1	3
Damages Survey  NATIONAL ACCOUNTS	0	U	1	6	U	0	1	3
	0	57	1.4	70	7	70	20	72
National Accounts Statistics	8	57	14	78	7	70	29	73
Income and Capital Accounts	0	0	4	22	0	0	4	10
Input Output Tables	0	0	3	17	0	0	3	8
Unobserved Economy and GDP	0	0	1	6	0	0	1	3
Natural Resource Accounting	1	7	0	0	0	0	1	3
Balance of Payment Statistic	0	0	1	6	0	0	1	3
ANALYSIS AND INTERPRETATION								
Analysis of Survey Data	12	86	15	83	7	70	34	81
Analysis and Interpretation of Statistics	10	71	15	83	6	60	31	78
Subtotal of 2 subjects above		93	16	89	9	90	38	90
Forecasting	8	57	10	56	6	60	24	60
Leading Indicators	7	50	10	56	4	40	21	53
Seasonal Adjustments	7	50	11	61	4	40	22	55
Small Area Estimation	1	7	1	6	0	0	2	5
Evaluating Census data	2	14	0	0	0	0	2	5
STATISTICAL PROCESSING EXCL EDP								
Quality Control in Statistical Processing	11	79	13	72	3	30	27	68
Dissemination of Statistics	8	57	12	67	5	50	25	63
Sample Design and Survey Organization	7	50	12	67	5	50	24	60
Statistical Operations and Procedures	9	64	10	56	5	50	24	60
Subtotal of 2 subjects above	10	71	14	78	7	70	31	74
Business Registers	0	0	2	11	0	0	2	5
Classifications	1	7	1	6	0	0	2	5
Census Organization	0	0	1	6	0	0	1	3
Total Quality Management	0	0	1	6	0	0	1	3
International Statistical Cooperation	0	0	1	6	0	0	1	3
ELECTRONIC DATA PROCESSING (EDP)								
Innovative Data Collection and Dissemination	10	71	13	72	3	30	26	65
Statistical Computing	6	43	11	61	8	80	25	63
Subtotal of 2 subjects above		79	15	83	9	90	35	83
Geographic Information System (GIS)	1	7	1	6	0	0	2	5
Use of IMPS per data processing	0	0	1	6	0	0	1	3
Computer Software & Hardware	0	0	0	0	1	10	1	3
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# NEEDS WITH REGARD TO SIAP-COURSES - EAST & SOUTH-EAST ASIA -

	Brunei Darussalam	Cambodia	China	Hong Kong, China	Indonesia	Lao PDR	Macau	Malaysia	Myanmar	Philippines	Republic of Korea	Singapore	Thailand	Viet Nam	Nr need indications	% need indications
SOCIAL STATISTICS																
Demographic and Vital Statistics	1	1	1 1	-	-	l	-	l	1	1	-	1	-	1	9	64
Human Development Indicators	1	1 1	1	1 1	1 1	1 1	-	1 1	1 1	1	-	-	-	1	10 10	71 71
Gender Statistics	1	1 1	1	1	1	1	1	1	1	1	-	-	-	1	10 7	50
Poverty Alleviation Programme Social Statistics	1	1	1	-	-	1	-	1	-	1	-	-	-	1	5	36
Human Settlement Statistics	1	-	1	-	-	1	-	1	-	1	-	-	-	- 1	0	0
Health Statistics	1	_	_	_	_	_	_	1	_	_	_	_	_		2	14
ECONOMIC SOCIAL STATISTICS EXCL	1							1								17
NATIONAL ACCOUNTS																
Price Statistics	1	_	1	_	_	1	_	1	1	1	_	_	_	_	6	43
Household Income and Expenditure Statistics	1	_	1	1	_	1	_	1	1	1	_	1	1	_	9	64
Statistics on the Informal Sector	1	_	1	1	1	1	_	1	-	1	_	-	-	1	8	57
Labour Force Statistics	1	_	1	-	1	1	-	1	-	1	-	1	-	1	8	57
Construction Statistics	1	-	1	-	1	1	-	1	-	1	-	-	-	1	7	50
Food and Agricultural Statistics	-	1	1	-	-	1	-	1	-	1	-	-	-	1	6	43
External Trade Statistics	1	-	1	-	-	1	-	1	-	1	-	-	-	-	5	36
Distributive Trade Statistics	1	-	1	-	-	1	1	1	-	1	-	-	-	-	6	43
Industrial Statistics	-	-	1	-	-	1	-	1	-	1	1	-	-	-	5	36
Environmental Statistics	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	7
Agricultural Production Indices	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	7
Investment and Financial Statistics	1	-	-	-	-	-	-	1	-	-	-	-	-	-	2	14
Services Statistics	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	7
Energy Statistics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Damages Survey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
NATIONAL ACCOUNTS																
National Accounts Statistics	1	1	1	-	-	1	1	1	-	1	-	-	-	1	8	57
Income and Capital Accounts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Input Output Tables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Unobserved Economy and GDP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Natural Resource Accounting	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	7
Balance of Payment Statistics ANALYSIS AND INTERPRETATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
	1	1	1	1	1	1		1	1	1		1	1	1	12	86
Analysis of Survey Data Analysis and Interpretation of Statistics	1	1	1	1	1	1	1	1 1	1	1	-	1	1	-	10	71
Forecasting	1	1	1	1	-	1	1	1	-	1	-	1	1	1	8	57
Leading Indicators	1	-	1	1	1	1	-	1	-	1	-	1	-	1	7	50
Seasonal Adjustments	1	_	1	1	_	1	1	1	-	1	-	-	_	1	7	50
Small Area Estimation	_	_	-	-	1	-	-	-	_	_	_	_	_	_	1	7
Evaluating Census data	_	_	_	_	-	_	_	1	_	1	_	_	_	_	2	14
STATISTICAL PROCESSING EXCL EDP																- 1 1
Quality Control in Statistical Processing	1	_	1	1	1	1	1	1	_	1	1	1	1	_	11	79
Dissemination of Statistics	1	_	1	1	-	1	1	1	_	1	_	1	-	_	8	57
Sample Design and Survey Organization	1	_	1	-	_	1	-	1	_	1	1	1	_	_	7	50
Statistical Operations and Procedures	1	1	1	1	_	1	_	1	_	1	-	1	_	1	9	64
Business Registers	-	_	-	-	-	_	-	-	-	_	-	-	-	-	0	0
Classifications	-	_	_	_	_	_	_	1	_	_	_	_	_	-	1	7
Census Organization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Total Quality Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
International Statistical Cooperation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
ELECTRONIC DATA PROCESSING (EDP)																
Innovative Data Collection and Dissemination	1	_	1	1	_	1	1	1	_	1	1	1	_	1	10	71
Statistical Computing	1	_	1	-	-	1	-	1	-	1	-	-	1	-	6	43
Geographic Information System (GIS)	-	_	-	-	-	_	-	1	-	_	-	-	-	-	1	7
	l															0
Use of IMPS per data processing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	U

# NEEDS WITH REGARD TO SIAP-COURSES - SOUTH-CENTRAL & WEST ASIA -

	Afghanistan	Armenia	Azerbaijan	Bangladesh	Bhutan	India	Iran	Kazakhstan	Kyrgyzstan	Maldives	Nepal	Pakistan	Russian Federation	Sri Lanka	Tajikistan	Turkey	Turkmenistan	Uzbekistan	Nr need indications	% need indications
SOCIAL STATISTICS																				
Demographic and Vital Statistics	1	1	-	1	1	1	-	1	1	1	-	1	-	-	1	1	1	1	13	72
Human Development Indicators Gender Statistics	-	1	1	1	1	1	1	1	1	1	1	1	-	-	1	1	1	1 1	13 11	72 61
Poverty Alleviation Programme	_	1	1	1	1	-	1	1	1	1	1	1	-	-	1	1	1	1	13	72
Social Statistics	_	1	1	1	1	-	1	1	1	1	1	1	-	-	1	1	1	1	11	61
Human Settlement Statistics		_	_	_	_	-	1	_	_	1	1	_	_	_	_	-	_	1	2	11
Health Statistics	_	_	_	_	_	_	-	_	_	_	-	_	_	_	_	_	_	_	0	0
ECONOMIC SOCIAL STATISTICS EXCL																				Ů
NATIONAL ACCOUNTS																				
Price Statistics	_	1	1	1	1	1	1	1	1	_	1	1	_	1	1	_	1	1	14	78
Household Income and Expenditure Statistics	-	1	_	1	1	1	_	1	1	_	1	1	_	_	1	_	1	1	11	61
Statistics on the Informal Sector	-	1	1	1	1	-	1	1	1	-	-	1	1	-	1	1	-	1	12	67
Labour Force Statistics	-	1	1	1	1	-	1	1	1	-	-	1	-	-	1	-	1	1	11	61
Construction Statistics	-	1	-	1	1	-	1	1	1	1	1	1	-	1	1	1	-	1	13	72
Food and Agricultural Statistics	-	1	-	1	1	1	-	1	1	-	-	1	-	-	1	1	-	1	10	56
External Trade Statistics	-	1	-	1	1	-	-	1	1	-	-	1	-	-	1	-	1	1	9	50
Distributive Trade Statistics	-	-	-	1	1	-	1	1	1	-	1	1	-	-	1	-	-	1	9	50
Industrial Statistics	-	1	-	1	1	-	-	1	1	-	-	1	-	-	1	1	1	1	10	56
Environmental Statistics	-	-	-	1	-	-	1	-	-	-	1	-	-	-	-	1	-	1	5	28
Agricultural Production Indices	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	11
Investment and Financial Statistics	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	6
Services Statistics	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	6
Energy Statistics	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	6
Damages Survey	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6
NATIONAL ACCOUNTS																				<b>7</b> 0
National Accounts Statistics	1	1	-	I	I	I	1	1	1	1	-	I	-	-	1	I	1	1	14	78
Income and Capital Accounts	-	1	-	-	-	-	1	-	1	-	-	-	-	-	1	-	-	-	4	22
Input Output Tables	-	1	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	3 1	17 6
Unobserved Economy and GDP Natural Resource Accounting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0	0
Balance of Payment Statistics	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	6
ANALYSIS AND INTERPRETATION	-																	1	1	0
Analysis of Survey Data		1	1	1	1	1	1	1	1	1		1	1		1	1	1	1	15	83
Analysis and Interpretation of Statistics	_	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	15	83
Forecasting	_	1	1	1	1	1	1	1	1	1	-	1	-	1	1	1	1	1	10	56
Leading Indicators		_	_	1	1	1	1	1	1	_	_	1	_	1	_	1	-	1	10	56
Seasonal Adjustments	_	1	_	-	1	1	1	1	1	_	1	1	1	-	_	1	_	1	11	61
Small Area Estimation	_	-	_	_	-	-	1	-	_	_	-	_		_	_	-	_	_	1	6
Evaluating Census data	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0	0
STATISTICAL PROCESSING EXCL EDP																				-
Quality Control in Statistical Processing	_	_	_	1	1	1	1	1	1	_	1	1	1	_	1	1	1	1	13	72
Dissemination of Statistics	_	1	1	1	1	1	1	1	1	1	_	1	_	_	_	1	_	1	12	67
Sample Design and Survey Organization	1	1	1	1	1	_	_	1	1	1	-	1	1	_	_	1	-	1	12	67
Statistical Operations and Procedures	-	-	-	1	1	1	1	1	1	-	-	1	1	-	-	1	-	1	10	56
Business Registers	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	11
Classifications	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	6
Census Organization	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	6
Total Quality Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	6
International Statistical Cooperation	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6
ELECTRONIC DATA PROCESSING (EDP)																				
Innovative Data Collection and Dissemination	-	1	1	1	1	1	1	1	1	1	-	1	-	1	-	1	-	1	13	72
Statistical Computing	-	1	-	-	1	1	1	1	1	-	1	1	1	-	-	1	-	1	11	61
Geographic Information System (GIS)	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	6
Use of IMPS per data processing	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	6
Computer Software & Hardware	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0

# NEEDS WITH REGARD TO SIAP-COURSES - OCEANIA -

	Cook Islands	Nauru	Niue	North Mariana slands	Palau	Papua New Guinea	Samoa	Solomon Islands	Tonga	Fuvalu	Nr need indications	% need indications
SOCIAL STATISTICS	+			<u> </u>	Д.	Ч	Ω	S	I	I		o`
		1	1	1	1	1		1		1	7	70
Demographic and Vital Statistics Human Development Indicators	-	1	1	1	1	1	-	1	-	1	3	30
Gender Statistics	-	1	1	-	- 1	1	-	1	- 1	-	4	40
Poverty Alleviation Programme	-	1	-	-	1	1	-	1	1	-	1	10
Social Statistics		1	_	1	1	1	-	1	_	- [	5	50
Human Settlement Statistics		-	_	_	_	-	-	-	-	- [	0	0
Health Statistics		_	_	_	_	_	_	_	_	_	0	0
ECONOMIC SOCIAL STATISTICS EXCL	┿									-	0	0
NATIONAL ACCOUNTS												
Price Statistics	1	1	_	1	_	1	1	1	_	1	7	70
Household Income and Expenditure Statistics	_	1	1	_	1	1	_	1	_	-	5	50
Statistics on the Informal Sector	_	-	_	_	1	1	_	1	1	-	4	40
Labour Force Statistics	_	1	-	_	_	1	1	1	_	-	4	40
Construction Statistics	_	-	-	_	1	1	1	-	_	-	3	30
Food and Agricultural Statistics	_	_	_	1	1	1	1	1	_	_	5	50
External Trade Statistics	_	1	_	1	1	1	1	1	_	_	6	60
Distributive Trade Statistics	_	_	_	_	1	1	_	-	_	_	2	20
Industrial Statistics	_	_	_	_	1	1	_	_	_	_	2	20
Environmental Statistics	_	_	_	_	_	1	_	_	_	_	1	10
Agricultural Production Indices	_	_	_	_	_	-	_	_	_	_	0	0
Investment and Financial Statistics	_	_	_	_	_	_	_	_	_	_	0	0
Services Statistics	_	_	_	_	_	_	_	_	_	_	0	0
Energy Statistics	_	_	_	_	_	_	_	_	_	_	0	0
Damages Survey	_	_	_	_	_	_	_	_	_	_	0	0
NATIONAL ACCOUNTS	1											
National Accounts Statistics	1	1	_	1	_	1	1	1	_	1	7	70
Income and Capital Accounts		-	_	-	_	-	-	-	_	_	ó	0
Input Output Tables	_	_	_	_	_	_	_	_	_	_	0	0
Unobserved Economy and GDP	_	_	_	_	_	_	_	_	_	_	0	0
Natural Resource Accounting	_	_	_	_	_	_	_	_	_	_	0	0
Balance of Payment Statistics	_	_	_	_	_	_	_	_	_	_	0	0
ANALYSIS AND INTERPRETATION	1											
Analysis of Survey Data	1	1	1	1	1	1	_	1	_	_	7	70
Analysis and Interpretation of Statistics	1	-	-	1	1	1	_	1	_	1	6	60
Forecasting	1 _	1	1	-	1	1	1	1	_		6	60
Leading Indicators	_	1	_	1	1	1	-	-	_	_	4	40
Seasonal Adjustments	_	1	_	-	_	1	1	1	_	_	4	40
Small Area Estimation	_	-	_	_	_	-	-	-	_	_	0	0
Evaluating Census data	_	_	_	_	_	_	_	_	_	_	0	0
STATISTICAL PROCESSING EXCL EDP	1											
Quality Control in Statistical Processing	_	_	_	1	1	1	_	_	_	_	3	30
Dissemination of Statistics	_	1	_	1	1	-	_	1	1	_	5	50
Sample Design and Survey Organization	_	1	_	-	1	1	1	1	-	_	5	50
Statistical Operations and Procedures	_	1	1	1	1	1	-	-	_	_	5	50
Business Registers	_	-	_	-	-	-	_	_	_	_	0	0
Classifications	_	_	_	_	_	_	_	_	_	_	0	0
Census Organization	_	_	-	_	_	_	_	_	_	_	0	0
Total Quality Management	_	_	_	_	_	_	_	_	_	_	0	0
International Statistical Cooperation	_	_	_	_	_	_	_	_	_	_	0	0
ELECTRONIC DATA PROCESSING (EDP)	+										<u> </u>	
Innovative Data Collection and Dissemination	1				1	1					3	30
Statistical Computing	1	1	1	1	1	1	1	1	1	-	8	80
Geographic Information System (GIS)	1.	-			-	-	-	-	_	-	0	0
Use of IMPS per data processing	1 -	-	-	-	-	-	-	-	-	_	0	0
Computer Software & Hardware	_	_	-	-	_	-	_	1	_	_	1	10
Computer Bottware & Hardware			-				-	1	-	-	1	10

## NEEDS WITH REGARD TO SIAP-COURSES - INDICATED NR OF PARTICIPANTS -

	East & South-		South-Central		Oceania (10	respondents)	TOTAL (42	respondents)
	respon number of	average per partip.	(18 respo	average per partip.	number of	average per partip.	number of	average per partip.
	participants	country	participants	country	participants	country	participants	country
TOTAL GENERAL	3064		2068		637		5767	
SUBTOTAL	733		412		121		1266	
SOCIAL STATISTICS	185	21	113	10	32	-	330	12
Demographic and Vital Statistics Human Development Indicators	204	20	75	7	36	5 12	315	13 13
Gender Statistics	104	12	86	9		8	215	10
Poverty Alleviation Programme	160	23	72	7	2	2	234	12
Social Statistics	63	13	65	7	26	7	154	8
Human Settlement Statistics Health Statistics	17	9	1	1			1 17	1
ECONOMIC SOCIAL STATISTICS EXCL	17	9					17	9
NATIONAL ACCOUNTS								
SUBTOTAL	847		515		218		1580	
Price Statistics	76	13	58	5	29	5	163	7
Household Income and Expenditure Statistics	148	16	49	5	40	10	237	11
Statistics on the Informal Sector Labour Force Statistics	129 132	16 17	93 37	8	24 25	8	246 194	11 9
Construction Statistics	99	17	58	5	13	7	170	8
Food and Agricultural Statistics	123	21	51	6	19	6	193	11
External Trade Statistics	35	7	39	5	18	4	92	5
Distributive Trade Statistics	39	7	40	4	10	10	89	6
Industrial Statistics	28	6	43	5	10	10	81	5
Environmental Statistics	3	3	28	6	30	30	61	9
Agricultural Production Indices Investment and Financial Statistics	2 24	2 12	10 4	5			12 28	9
Services Statistics	9	9	1	1			10	5
Energy Statistics			2	2			2	2
Damages Survey			2	2			2	2
NATIONAL ACCOUNTS								
SUBTOTAL	181		129		30		338	
National Accounts Statistics	175	22	102	8	30	5	307	11
Income and Capital Accounts Input Output Tables			21	11			21	11
Unobserved Economy and GDP			2	2				
Natural Resource Accounting	6	6					6	6
Balance of Payment Statistics			4	4			4	4
ANALYSIS AND INTERPRETATION								
SUBTOTAL	616		418		132		1166	
Analysis of Survey Data	181	16	109	8	40	8	330	11
Analysis and Interpretation of Statistics Forecasting	167 67	17 10	125 58	10 6	36 26	9	328 151	12 7
Leading Indicators	114	16	42	4	14	5	170	9
Seasonal Adjustments	69	10	82	8	16	4	167	8
Small Area Estimation	15	15	2	2			17	9
Evaluating Census data	3	2					3	2
STATISTICAL PROCESSING EXCL. EDP								
SUBTOTAL	426	10	383	-	100		909	
Quality Control in Statistical Processing Dissemination of Statistics	107 72	10 9	92 75	7 8	12 8	6 2	211	8 7
Sample Design and Survey Organization	74	11	128	12	36	9	155 238	11
Statistical Operations and Procedures	169	19	71	8		11	284	13
Business Registers			3	3			3	3
Classifications	4	4	2	2			6	3
Census Organization			4	4			4	4
Total Quality Management International Statistical Cooperation			6 2	6 2			6 2	6 2
·			2					
ELECTRONIC DATA PROCESSING (EDP)	261		211		2.0		500	
SUBTOTAL Innovative Data Collection and Dissemination	261 142	14	211 107	9	36 10	10	508 259	11
Statistical Computing	116	19	96	11	24	3	239	11
Geographic Information System (GIS)	3	3	4	4	27	,	7	4
Use of IMPS per data processing			4	4			4	4
Computer Software & Hardware					2	2	2	2