



Training Course on *Measuring ICT Access and Use by Households and Individuals*

Suva, Fiji

25-29 April 2011

Organised by

International Telecommunication Union

and

Secretariat of the Pacific Community (SPC)

Sponsored by

Industry Canada and ICB4PAC Project

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ITU Training Course on Measuring ICT Access and Use by Households and Individuals

Final Report

1. General aspects

The **ITU Training Course on Measuring ICT Access and Use by Households and Individuals** was held in Suva, Fiji, from 25-29 April 2011. The main objective of the course was to improve the capacity of national statistical offices from Pacific countries and economies to produce internationally comparable statistics on ICT access and use by households and individuals.

The course was divided into the following five modules (see agenda in Annex 2):

- Module H-1: Introduction to household ICT statistics. Survey planning and preparatory work
- Module H-2: Statistical standards and topics. Data sources and collection techniques
- Module H-3: Questionnaire design. Household survey design
- Module H-4: Data processing. Data quality and evaluation
- Module H-5: Data dissemination

2. Participation

There were 31 applications received from national statistics offices of 16 countries of the Pacific region. A number of criteria were used to select the candidates. These included candidates' background in statistics or economics, their experience and role in conducting household surveys in their country (including all phases of survey implementation) and an excellent level of English (as the training was conducted in English only).

The course was attended by 19 participants from National Statistical Offices of the following 14 countries of the Pacific region (see list of participants in Annex). Of the 16 countries that were selected, two countries that did not come in the training, In addition, staff members of SPC attended the training.

Most of the participants were sponsored by the ICB4PAC project executed by ITU and funded by the European Union. The project aims at building human and institutional capacity in the field of ICT through a range of targeted training, education and knowledge sharing measures. For more information on the ICB4PAC project see http://www.itu.int/ITU-D/projects/ITU_EC_ACP/icb4pis/index.html. In addition, the salary and cost of travel of the course instructor, one of one ITU staff and some of the participants were funded by the Canadian voluntary contribution to ITU in support for the activities of the Partnership on Measuring ICT for Development in developing countries.

3. Course delivery

The main instructor that delivered the course was Mr. Juan Munoz, consultant to ITU. ITU staff delivered several parts of the course, in particular related to the definitions of the core list of ICT household indicators and the ITU data collection and dissemination of ICT household statistics. The course is designed to be highly interactive and included group discussions, group exercises, as well as tests and evaluations for each of the five modules, all of which was managed and facilitated by ITU.

4. Overview of the training course outcome

Overall, the course was appreciated highly by the participants. The majority of participants evaluated its content, the support materials provided and the methodology as “good” (second highest level possible) while the organization of the training as “very good. Participants appreciated very much the interactive nature of the training course and their involvement in group discussions. Also, the daily completion of tests was considered positively. The tests were graded every day, which allowed providing immediate feedback and to review difficult concepts the next morning.

Since this is the first training of its kind delivered in the region, the participants highly appreciated the possibility to learn about harmonizing ICT statistics and exchanging country experiences. A number of countries in the region have started to include ICT access indicators in their ongoing surveys or censuses; others are planning to include them in their forthcoming

surveys; and a few are envisaging carrying out an ICT survey. Therefore this training course has contributed to foster their work in this regard, for which they expect ITU and the *Partnership* to follow up.

The selected participants met the expectations of the organisers and the trainer; they had a good statistical knowledge and were familiar with the different steps of conducting surveys, in particular household surveys. As a preparation for the course, the participants were asked to provide a country paper highlighting the different household surveys conducted in their country and the methodology employed in each survey. Therefore, they were able to follow the training content and participate actively in all sessions. Trainer and facilitators of the training course observed a strong commitment from the participants to get the most benefit from the course in view of measuring ICT statistics in the future.

5. Evaluation of the course by participants

Each day, participants were asked to evaluate the module of the day. At the end of the training, they were asked to evaluate the entire course. This section provides the results of the evaluation of the course carried out by the participants. Results are shown separately for the final overall evaluation of the course, and for each module.

5.1. General evaluation of the course

Issues considered in the final evaluation were the content of the course in view of the coverage of the topic, the depth of the technical level and the accuracy of the information delivered. It also assessed the quality of the support material, the methodology, the organisation, the duration and the number of participants of the training course. Participants were also asked to make general suggestions for improving the course. Detailed answers are provided in Annex 1. The scale used for this evaluation ranges from “very good” to “very poor”.

5.1.1 Content evaluation:

The content of the course was evaluated in terms of three components. The first was the coverage of the topic, which was evaluated as either “very good” or “good” (47% each), and “adequate” by 5% of the participants. The technical level was assessed as “very good” by 58 as “good” by 37% and “adequate” by the remaining 5%. The participants commented that ways to adapt an ICT surveys in the context and to the needs of the region should have been given more emphasis. “Accuracy” was rated as “very good” (68%), “good” (26%) and “adequate” by the rest (5%) of the participants.

5.1.2 Support material:

This includes the ITU Manual for Measuring ICT Access and Use by Households and Individuals, the Core Indicators 2010 and the presentation slides used to deliver the five modules. Overall, the participants rated the materials as “very good” (72%), “good” (25%) and “adequate” (3%). Most of the participants evaluated the Manual as “very good” (72%), 22% as “good” and 6% as “adequate”. Regarding the slides, 72% evaluated them as “very good” and 28% as “good”. The majority of the comments received were pertaining to the presentation slides, and included suggestions to include examples to better illustrate how to do sampling, while others felt that some of the slides are too long.

5.1.3 Methodology:

Participants evaluated the methodology as “very good” (44%) and “good” (56%). They appreciated especially the usefulness of sharing country experiences and group discussions, which are an integral part of each of the course modules. However, they expressed interest in having even more practical exercises and examples to better illustrate the subjects being discussed.

5.1.4 Organisation:

The organisation of the course was rated as “very good” (25%), “good” (56%) and “adequate” (19%). Participants requested that more time should be provided to allow knowledge and experience sharing between countries.

5.1.5 Duration:

74% of the participants considered the duration of the training course adequate (long enough), while 21% found it too short, and 5% considered the course as too long. Those that considered it too short suggested that the training should be delivered for more than one week with shorter day programme. This will allow them to better understand the technical topics discussed, and suggested to provide more time for more discussions, practical exercises and country experiences/examples.

5.1.6 Number of participants:

The number of participants was assessed as “adequate” (89%), while a few of them said it was too low (11%). The participants suggested the importance of having all countries represented in the course, rather than having two participants per country. As noted earlier, there were 16 countries that applied but certain selected participants did not show up in the training.

5.1.7 General suggestions:

During the round table discussion, participants made a number of suggestions on how countries in the region can improve the availability of ICT statistics in their country. The suggestions included at the national level: asking governments to include ICT statistics in national statistical systems; NSOs should take the responsibility of producing and disseminating ICT statistics, raise the issue related to ICT statistics to senior officials of the NSO and government ministries and to adapt existing household questionnaires to include ICT questions that are in accordance with international standards. Participants also requested the international agencies to assist countries in financing ICT surveys, by providing support to cover costs of enumerators and equipment as well as processing and reporting of the data collected. They also emphasized the importance of coordination and cooperation between SPC and ITU in helping countries collect the necessary ICT statistics.

5.2. Evaluation of the modules

Each day, an evaluation of each of the five modules was conducted. Participants were requested to evaluate the following aspects of every module:

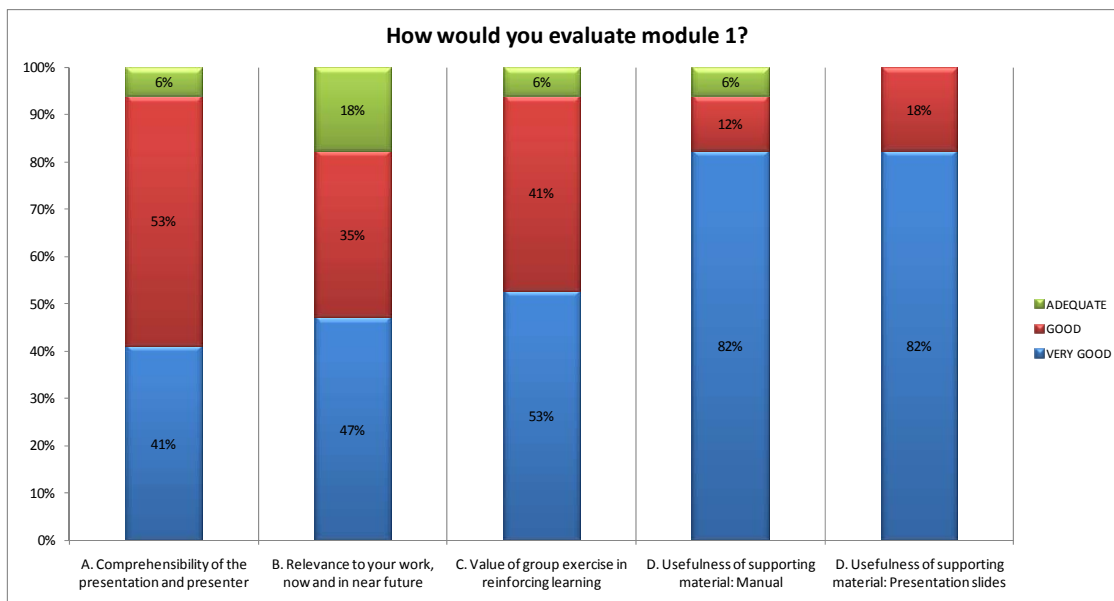
- Comprehensibility of the presentation and presenter
- Relevance of the module to their work, now or in the near future
- Value of group exercise in reinforcing learning
- Usefulness of supporting material: Manual and presentation slides

Similar to the final overall course evaluation, the scale used range from “very good” to “very poor”.

Participants were also asked which parts of the module they liked most/least, and to provide recommendations in order to improve each module.

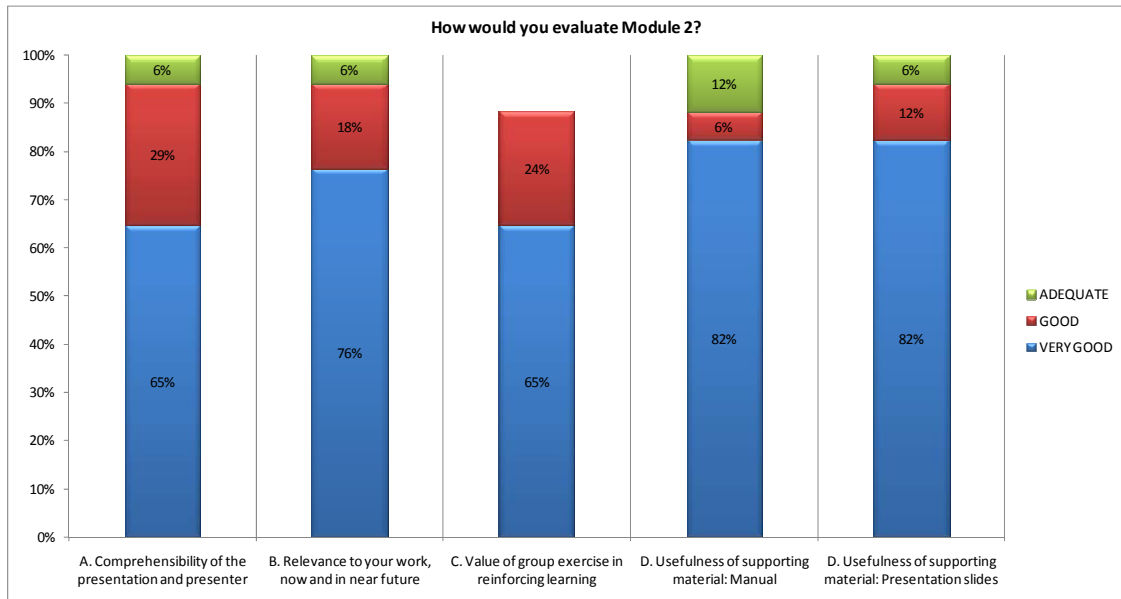
Module 1: Introduction to household ICT statistics. Survey planning and preparatory work

Module 1 was evaluated as either “very good”, “good” or “adequate” (see chart). The majority of the participants liked the sharing of country experiences while others liked the survey planning part of the module. Among the suggestions made by participants are: to include some country examples while presenting the module, and to increase the time allocated for the group exercise.



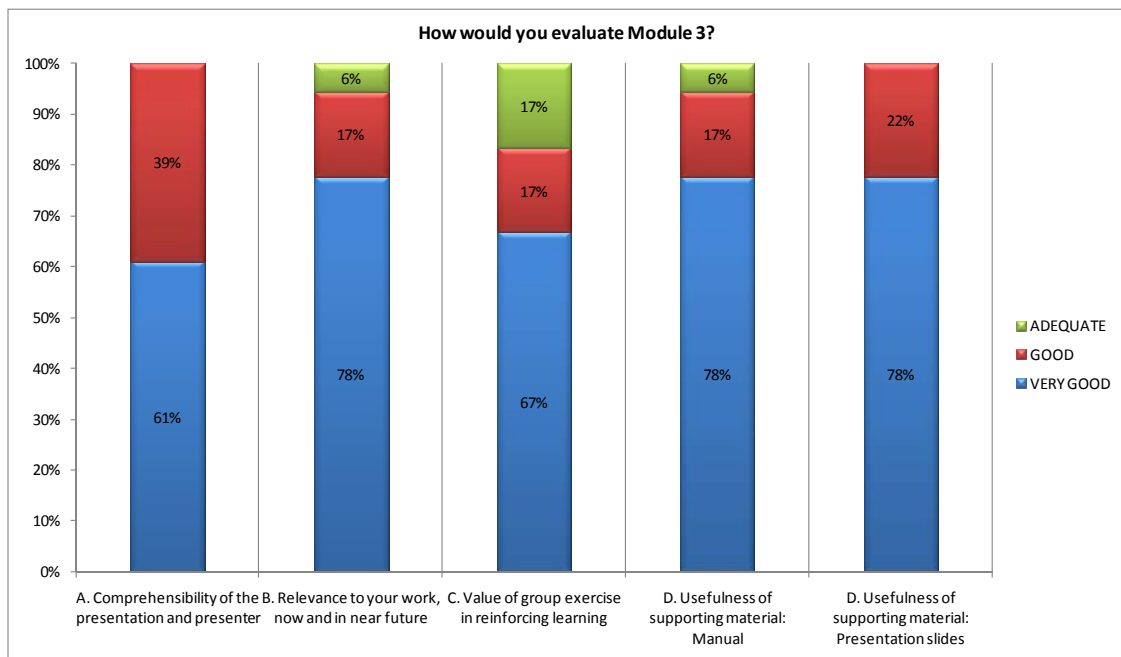
Module 2: Statistical standards and topics. Data sources and collection techniques

Module 2 was particularly relevant for the participants as they are mostly involved in the survey implementation in their respective countries. Almost 75% of the participants graded the module as “very good” while others said it is either “good” or “adequate”. The most liked topic was the core ICT household indicators including their definitions and clarifications. Others liked the group exercises, data collection techniques, identifying the types of survey and the group discussion. Some participants suggested including examples to illustrate the different technologies included in the core ICT household indicators and their sub-categories.



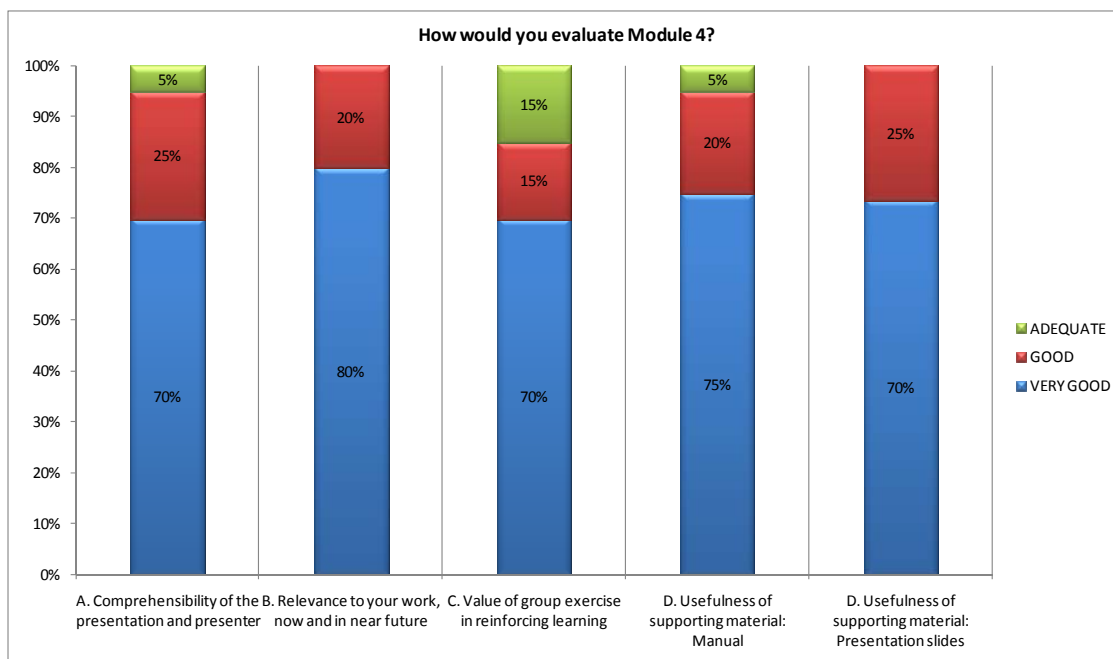
Module 3: Questionnaire design. Household Survey design

Overall, module 3 was evaluated as mainly “very good” (72%), “good” (21%) and adequate (6%) (See chart for details of the different aspects). Participants particularly liked the questionnaire design part and the group exercise. The participants suggested including practical country examples or exercises on sampling design (which seems to be the most difficult area and at the same time very relevant for their work), to emphasize more that the NSO need to understand the concept related to ICT indicators and not the enumerators alone and to increase the time allotted for this part of the training.



Module 4: Data processing. Data quality and evaluation

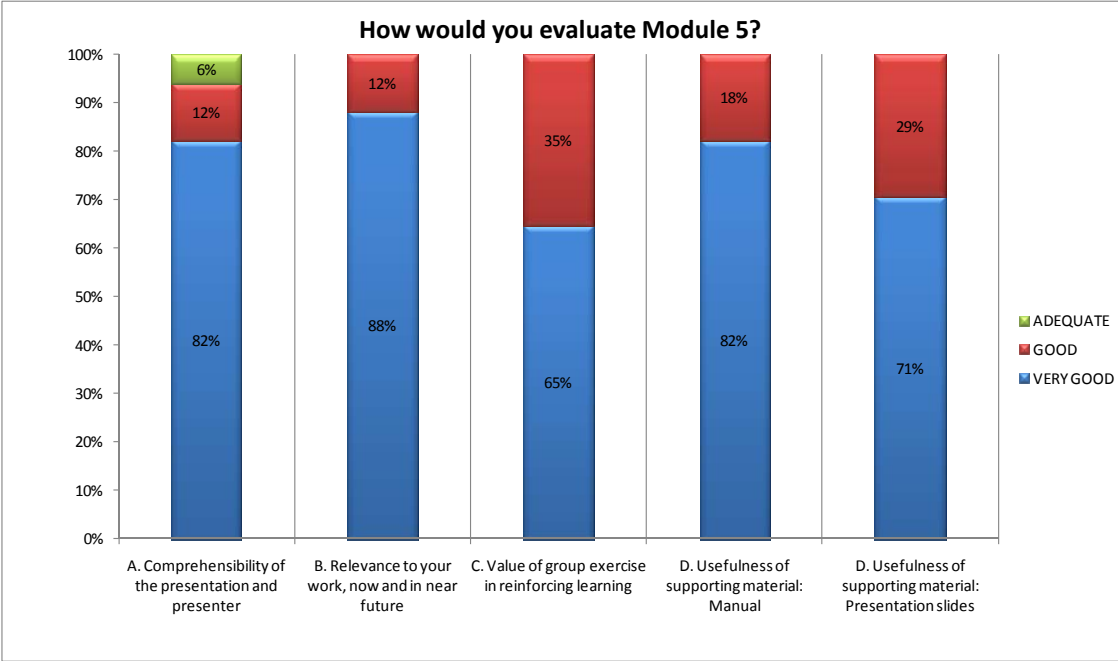
During the presentation of module 4, participants were very enthusiastic in learning how to compute the weights that will be applied to the sampled households or individuals to come up to the value of the in-scope population or the target population. For some countries, this subject was new and they highly appreciated to learn how to weight the data and compute the sampling error during the training. The overall evaluation is “very good” (73%), “good” (21%), and “adequate” (5%). The majority of the participants liked the sampling and non sampling error part of the module, while some liked the data quality and editing part. They also liked the group exercises. Some participants even requested having assistance in this part of the survey when they implement the survey in their country, while others requested to have more examples and more time for explanations.



Module 5: Data Dissemination

Overall, this module was evaluated as “very good” (78%) or “good” (21%) by the participants.¹ Most participants liked all parts of the module while others particularly appreciated the metadata and country data dissemination/tabulation parts of the module. Participants suggested having more practical exercises showing how they can disseminate their survey results by using their own data.

¹ This module doesn't include a group exercise.



6. Main findings and recommendations for future training courses

6.1 Content of the Course

Participants suggested that a clear description on why it is important to collect the data for the Core ICT indicators should be provided. This will enable them to justify the inclusion of the indicators in their existing household questionnaire, given that funding to conduct a survey in the region is limited.

6.2 Methodology

A number of participants found the group exercises very useful, particularly in reinforcing their learning of the modules and suggested to have more group discussions. They suggested having examples and exercises on sampling techniques, sampling error and weighting; and to base the exercises on data of countries attending the training. Some participants further suggested that practical group exercises should end with a document summarizing all steps not to be missed when planning a survey. While some found the explanations clear enough, others suggested that it will be useful to illustrate the more technical concepts (sampling, weighting) using clear slides or a drawing board.

6.3 Final remarks

The delivery of the training is considered successful. A number of countries already include ICT access indicators in their existing data collections and they will revise them based on international standards and classification. Other countries mentioned that they consider to producing a number of the ICT core indicators, mostly access indicators, in the near future. Some countries highlighted the importance of assistance from ITU in funding the surveys, to finance enumerators and equipments, as well as to process, analyze and disseminate the data collected.

The training course itself was appreciated highly. Since this was the first time the course was delivered in the region, an important conclusion is that the course can be considered as a useful capacity building tool available for ICT data producers in developing countries.

During the final roundtable discussion, several recommendations were made to ensure that the data are collected in the region. At the national level, it was suggested that countries should ask the government to include ICT statistics in national statistical systems, that NSO should have the responsibility to produce and disseminate ICT statistics, to raise the issue to the attention of senior officials of NSO and government ministries, and to adapt existing household questionnaires in accordance with international standards.

The cooperation with SPC in the organization of the training was very successful. It was suggested that ITU & SPC should strengthen the cooperation in their work on ICT statistics and should continue to provide technical assistance to countries in the area of ICT household statistics. In addition, as SPC is currently finalizing its Household Income and Expenditure Survey (HIES) standard questionnaire, it is a timely opportunity to harmonize the questions related to ICT with the international standards. The HIES questionnaire can be used by countries as a vehicle for collecting some of the data on ICT access.

Annex 1. Final Evaluation

FINAL EVALUATION

Q1. The course was:		Number of answers	Percentage
	Too long	1	5%
	Long enough	14	74%
	Too short	4	21%
Q.2 Number of participants:			
	Too high		0%
	Adequate	17	89%
	Too low	2	11%
Q.3 The instructor performance:			
	Very good	15	79%
	Good	3	16%
	Adequate	1	5%
	Poor		
	Very poor		
Q4. Content of the course:			
Coverage of the topic			
	Very good	9	47%
	Good	9	47%
	Adequate	1	5%
	Poor		
	Very poor		
Technical level			
	Very good	11	58%
	Good	7	37%
	Adequate	1	5%
	Poor		
	Very poor		
Accuracy			
	Very good	13	68%
	Good	5	26%
	Adequate	1	5%
	Poor		
	Very poor		

Q5. Organisation of the course:		
Very good	4	25%
Good	9	56%
Adequate	3	19%
Poor		
Very poor		
Q6. Support material:		
Overall		
Very good	26	72%
Good	9	25%
Adequate	1	3%
Poor		
Very poor		
Manual		
Very good	13	72%
Good	4	22%
Adequate	1	6%
Poor		
Very poor		
Slides		
Very good	13	72%
Good	5	28%
Adequate		
Poor		
Very poor		
Q7. Methodology:		
Very good	7	44%
Good	9	56%
Adequate		
Poor		
Very poor		

AGENDA

Monday, 25 April 2011

- 8:30 - 9:00 Registration of participants
- 9:00 - 10:45 **Opening session**
- Opening Prayer (Tanielu Aiafi, SPC)
 - Opening Remark (Fekita 'Utoikamanu, Deputy Director General, SPC)
- Introductory session**
- Measuring ICT for Development (Susan Teltscher, ITU)
 - Regional Statistic Programme (Bertrand Buffiere, SPC)
 - Pacific ICT Outreach Programme (Tanielu Aiafi, SPC)
 - Update on the ICB4PAC project (Futai Purcell, ITU)
- 10:45 - 11:00 *Break*
- 11:00 - 11:30 **Introduction to the course**
- Contents, objectives and methodology
 - Presentation of instructor and participants
- 11:30 - 13:00 **Module H-1: Introduction to household ICT statistics. Survey planning and preparatory work**
- 13:00 - 14:00 *Lunch*
- 14:00 - 15:30 **Module H-1: Introduction to household ICT statistics. Survey planning and preparatory work (cont.)**
- 15:30 - 15:45 *Break*
- 15:45 - 17:00 **Module H-1: Introduction to household ICT statistics. Survey planning and preparatory work (cont.)**
- 17:00 - 17:30 Test and Evaluation
- 18:00 – 20:00 **Opening Cocktail**

Tuesday, 26 April 2011

- 9:00 - 10:30 **Module H-2: Statistical standards and topics. Data sources and collection techniques**
- 10:30 - 10:45 *Break*
- 10:45 - 13:00 **Module H-2: Statistical standards and topics. Data sources and collection techniques (cont.)**
- 13:00 - 14:00 *Lunch*
- 14:00 - 15:30 **Module H-2: Statistical standards and topics. Data sources and collection techniques (cont.)**

- 15:30 - 15:45 *Break*
- 15:45 - 17:00 **Module H-2: Statistical standards and topics. Data sources and collection techniques (cont.)**
- 17:00 - 17:30 Test and evaluation

Wednesday, 27 April 2011

- 9:00 - 10:30 **Module H-3: Questionnaire design. Household Survey design**
- 10:30 - 10:45 *Break*
- 10:45 - 13:00 **Module H-3: Questionnaire design. Household Survey design (cont.)**
- 13:00 - 14:00 *Lunch*
- 14:00 - 15:30 **Module H-3: Questionnaire design. Household Survey design (cont.)**
- 15:30 - 15:45 *Break*
- 15:45 - 17:00 **Module H-3: Questionnaire design. Household Survey design (cont.)**
- 17:00 - 17:30 Test and evaluation

Thursday, 28 April 2011

- 9:00 - 10:30 **Module H-4: Data processing. Data quality and evaluation**
- 10:30 - 10:45 *Break*
- 10:45 - 13:00 **Module H-4: Data processing. Data quality and evaluation (cont.)**
- 13:00 - 14:00 *Lunch*
- 14:00 - 15:30 **Module H-4: Data processing. Data quality and evaluation (cont.)**
- 15:30 - 15:45 *Break*
- 15:45 - 17:00 **Module H-4: Data processing. Data quality and evaluation (cont.)**
- 17:00 - 17:30 Test and evaluation

Friday, 29 April 2011

- 9:00 - 10:30 **Module H-5: Data dissemination**
- 10:30 - 10:45 *Break*
- 10:45 - 12:30 **Module H-5: Data dissemination (cont)**
- 12:30 - 13:00 Test and evaluation
- 13:00 - 14:00 *Lunch*
- 14:00 - 15:00 **Final course evaluation and discussion (ITU)**
- 15:00 - 16:00 **Closing remarks (Susan Teltscher (ITU), John Rounds (SPC))
Handing out of Training Certificates (Ritva Sallmén, Representative of the European Union, Fiji)**
- 17:00 - 19:00 **Closing cocktail**

**Training Course on
Measuring ICT Access and Use
by Households and Individuals**

**List of Participants
Suva, Fiji
25-29 April 2011**

- | | |
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