# UNFPA-SPC Regional Workshop Reviewing the 2010 Round of Population and Housing Censuses in the Pacific

Experience from the Pacific – Lessons Learned for 2020 Noumea, 21-25 May 2012, SPC Headquarters

### Co-Chaired by Samoa and Cook Islands

# **Opening and welcome address: SPC Director-General**

Dr Rodgers welcomed participant to SPC headquarters. This workshop will take stock of experiences and lessons gained from the 2010 Census round, in order to set a planning platform for 2020. Census data is the fuel for the engine rooms of Pacific countries, providing information critical to planning and decision making, and achievement of the Millennium Development Goals.

Commitment has been made at the top political levels for the improvement of collection systems relevant to the Pacific, which goes beyond traditional statistics. Securing resources for quality statistics collection can be difficult, despite this high regional priority. The ten year *Pacific Statistics Strategy* enables the region to reinforce the importance of statistics, leverage international, bilateral and regional partnerships, and build capacity, in order better inform decision makers. Dr Rodgers acknowledged AusAID's bilateral and regional funding support. He thanked UNFPA for continuing technical assistance and funding, especially during the 2010 Census round.

Forecasting for the future is a key role of Pacific leaders. NSO's play a role in determining that future, by providing quality data to decision makers. Dr Rodgers called for participants to work as a team, leveraging their combined years of experience, to create a solid platform for the 2020 Census round.

# Session 1: 2010 Round of Censuses. UNFPA and SPC program of assistance

### **UNFPA Presentation: UNFPA Technical Adviser Population and Development**

UNFPA thanked Dr Rodgers for his ongoing support of data collection in the Pacific. Discussing UNFPA support to Census in the 1990, 2000 and 2010 census rounds, he noted the significant political issues which led to a paradigm shift away from Census support, between 1990 and 2000. Monitoring and Evaluation issues, Millennium Development Goals and resource-based management approach, again refocused support back to Census data gathering in 2010.

A brief outline of the UNFPA Special Initiative on Census, Asia-Pacific regional program and the PSRO-Multi-country Programme was provided. In conclusion, UNFPA noted that the ultimate value of a Census is the utilisation of the data to the benefit of country development efforts. He encouraged participants to consider the following issues: funding; questionnaire format; agreeing some standard questions; scanning systems; and strengthening South-South cooperation given shortage of regional resources.

Working Paper: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=411&Itemid=42&lang=en Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=414&Itemid=42&lang=en

# SPC Presentation: Statistics for Development Programme (SDP) Manager

SPC provided background to the regional, international and bilateral technical assistance provided to NSO's since 1990. The significant step up in technical support by UNFPA and SPC in the 2010 Census

round was due to a number of catalysts, most significantly: the creation of the Millennium Development Goals; serious coverage and data quality issues experienced in the 2000 round; and a new generation of Statistics Managers in countries.

Expanding the AusAID funded program has enabled SPC to consolidate expertise, and expand the programme to household surveys. The considerable investment of Technical Assistance (TA) time spent in country must be money well spent, and he encouraged countries to review and advise on this issue in order to direct SDP's inputs for the 2020 Census round.

Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=415&Itemid=42&lang=en

# Session 2: Census Planning: Operational planning and development of Census questionnaire

### **Country presentation: Vanuatu**

Within the Census cycle, the planning and preparation stage is crucial. Vanuatu noted the key elements of their experiences. Successes of the Census planning phase in Vanuatu relate to the development of strong planning assumptions, proposal and budgets. Ensuring government support and buy-in from stakeholders, and recruiting an enthusiastic Census team also greatly facilitated the process. The low-level of available government resources, delays, and the cost of communication/transportation were obstacles to the planning process.

Keys lessons from the 2010 Census were the need for early preparation in order to submit a budget and proposal well in advance of planned implementation, and to allocate discrete office space for the team. Vanuatu proposes that regional support be focused on project management training, provision of concise advice on data capture, and opportunities for South-South collaboration. He reinforced the need for bilateral agreements and MOUs with Census partners to clearly outline expectations.

Working Paper: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=412&Itemid=42&Iang=en
Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=419&Itemid=42&Iang=en

### **Country presentation: Cook Islands**

The Cook Islands experienced significant challenges implementing the 2011 Census. Two key issues were the limited resources and government finance support, and a change in government in the middle of the process. To overcome this, the Cook Islands developed a master plan aligned to government priorities, ministry and national data needs, that balanced with the data already gathered by the ministries. The Cook Islands recommends initiating the Census planning process early, entering into continuous dialogue with partners, and learning from other NSO success stories.

Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=417&Itemid=42&lang=en

### **Country presentation: Tokelau**

While the 2011 Census was supported fully by Statistics New Zealand, Tokelau noted that SPC's regional leadership is vital. He provided the background to Statistics New Zealand's provision of support with the goal of ensuring good quality data, and encouraging its use in local planning. Challenges experienced in Tokelau related to the mobility of population and counting of absentees and ensuring correct level of content given that the Census is the only regular official survey undertaken in Tokelau.

The Census planning process was strengthened with the creation of a planning hierarchy. This ensured coordination across three countries and targeted the correct content level to meet all stakeholder expectations. Developing quality planning documentation ensured knowledge was transferable and the process could be repeated. Lessons learned from the 2011 Census were listed in the presentation.

 $Working\ paper:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=427\&ltemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=418\&ltemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=418\&ltemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=418\&ltemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ htt$ 

### SPC presentation: SDP Demographer

Planning is a core process, linking to every other phase of the Census cycle. Technical assistance provided to countries in the planning phase and a detailed summary of achievements and challenges for the full regional Census round were discussed. A matrix outlining what worked, what didn't work, and areas for improvement was presented and is available in Working Paper 1.

Working Paper 1: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=401&Itemid=42&Iang=en
Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=416&Itemid=42&Iang=en

**PLENARY:** participants discussed the following topics relating to operational planning and development of Census questionnaires

### Initiate the preparatory/planning process early:

- The Ten Year Pacific Statistics Strategy 2011 2020 (TYPSS) proposes that census planning and budget development takes place at least twelve to eighteen month before Census;
- Given considerable delays experienced during the 2010 round, which lead to some countries taking operational short-cuts, SDP proposes to extend this period to two years, referring to Australia and New Zealand using a 5 year planning horizon;
- Post-Census, it is important to evaluate results in order to direct future plans, and consider conducting Post Enumeration Surveys;
- Apply Census planning processes to other surveys such as HIES and DHS.

### **Technical assistance:**

o Participants requested a clear articulation of TA offered by various development partners, so countries are aware of how and where to request this assistance.

### **Development of Funding Proposals**

- The Cook Islands requested development partner assistance for developing funding proposals.
- To kick-start the preparation process, consider submitting a small proposal to support the larger planning project.
- Templates for funding proposals and Census planning documents can be developed and provided by SPC if required, and added to the PRISM website.

### Include risk management as part of the planning process.

o For example state of emergency planning.

### Ensure compliance with Census standards and consider standardised questions.

 A common questionnaire does not necessarily mean identical forms in each country. Costs can determine the size of a questionnaire, so a core set of questions should be a minimum guide for essential information. This allows provisional results to be provided to governments within a short time frame.  SPC noted that a core set of questions and standardised sequencing of questions were agreed by HOPS.

# Ensure aligning census questionnaires with national development priorities to meet key data needs.

## New technologies:

- Participants called for an increase of Census staff training on new technologies, especially scanning tools.
- NSO's must ensure requests for training are made well in advance of need.
- Participants encouraged development partners to undertake regional planning of capacity building activities, and financial support for NSO's, to ease the up-take of new technologies.
- Use of technologies should be aligned with the resources and technical capacity of each NSO office.
- NSO's are encouraged to research other countries experience before adopting new technologies.
- o Pilot test new technologies before Census, for example on other smaller surveys.
- o Ensure checks are in place to review correct technology use.
- Solomon Islands have a scanner to offer. UNFPA underscored the need for regular communication between NSO's to facilitate the sharing of equipment and experience.

### Political support secured well in advance:

 In Samoa, successful direct dialogue with parliamentarians came with assistance from a UNFPA Pacific Parliamentarians Assembly on Population and Development Facility. While this came about due to a convergence of good circumstances, UNFPA may be able to assist other countries in this area.

### Funding secured well in advance:

 Participants noted challenges created by delays receiving UNFPA funding. UNFPA explained that all existing LOUs are to be cancelled and re-done. This has caused significant challenges and delays in implementing activities, however it provides opportunities to access additional resources.

### Political stability:

- Managing shifts of political priorities when planning questionnaires can present challenges.
- o Ensure adequate lead-time is planned for when Census dates are changed by government.

### Treatment of papers in the field for scanning quality.

- Samoa suggested using two sets of papers one for field collection then transferring to a second clean version for scanning. However she noted the extra cost associated with this.
- o A3 format did work well in Samoa's experience.

### Planning for dissemination:

 Post-census education, data user workshops and consultations with policy makers should be planned and budgeted for in the census plan, as integral census outputs.

### Census timing:

 PNG noted the confusion caused by multiple surveys and elections occurring close together. A full calendar of events should be mapped out by NSO's the ensure timing does not create confusion or survey fatigue.

# Session 3: Census preparatory work I: Cartography, household listing

# **Country presentation: Samoa (household listing)**

New household listing initiatives were successfully utilised during the 2011 Census with financial support from UNFPA, AusAID and Government of Samoa. Samoa acknowledged the value of TA provided by SPC, experiences shared by other NSO offices, and support from the Electric Power Corporation GPS database.

Challenges relating to household listing and GPS waypoints included; a lack of training and field testing the GPS system, confusion around unknown GPS waypoints, overstepping of Census boundaries, and fieldwork management issues. Mechanisms to mitigate these challenges were discussed in the presentation.

For the 2016 Census, Samoa recommends a longer lead-in time, seeking sufficient funding, field and work flow testing, requesting TA well in advance of need, flexible systems, and having a committed team in place to improve quality control.

 $Working\ Paper:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=402\&ltemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=422\&ltemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=422\&ltemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=402\&ltemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ http://www.spc.int/sdp/index.php.\ htt$ 

### **Country presentation: Federated States of Micronesia (cartography)**

FSM highlighted the value of connecting Census data to GPS household locations to provide effective visual presentations, and enable locations-based information. Software was developed for Phoneme searching of sample set and to update household waypoints in order to match and quality control Census and GPS data sets. This software is available to other NSO's.

The questionnaire scanning process enabled a data quality check and back up. Mapping has allowed the production of ED maps for other NSO surveys, and assistance to other agencies requiring ED maps. Mapping in FMS is treated as an on-going process, rather than an ad hoc initiative in Census.

 $Working\ Paper:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=413\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=421\&Itemid=42\&I$ 

# SPC presentation: SDP GIS specialist and Database/Data Mining Specialist

Up-to-date Census maps and household listings are essential to enumeration and utilisation of Census data. A geo-reference database of GPS locations is key to the Census pre-enumeration phase. Data sharing amongst agencies and between PICs has been an effective regional approach. However, there are significant cost and time factors in training census geography staff, and printing of household stickers is difficult in the field.

The future of mapping and household listing is digital. Tangible gains have been made in the past three to five years, with successful uptake of new technology for data collection and storage.

 $Working\ Paper:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=400\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=420\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=420\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=400\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=400\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=400\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=400\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=420\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=420\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=420\&Itemid=42$ 

**PLENARY:** participants discussed the following topics relating to cartography and household listings

### **EA boundaries:**

- Physical references, e.g. roads and landmarks, need to be used when designing boundaries, so enumerators can easily follow natural boundaries.
- o Participants requested a guideline be created for drawing EA boundaries.
- Spatial analysis techniques can be used to clarify village identity with geographical location.
   SPC encourages NSO's to working closely with the national Lands Department to update village boundaries prior to Census.
- Using GPS points to set EA boundaries, after listing has occurred, is a key point to take from the GPS/Census integration process.
- A narrative description can be added to define EA boundaries, but this can create a lot of extra work.
- Fiji is the regional leader in establishing EA boundaries and could provide excellent guidance to other countries from their experience.
- o FSM noted from experience, not to redraw EA's after enumeration.

### Scanning technology:

- o FSM scanned for archival purposes only and as a cross check of listings.
- Samoa's experience of triplicate entry to ensure data quality and avoiding entry issues, was only possible due to sufficient funding gained from AusAID and UNFPA.

### Is there a benefit to GPS use in Small Islands States?

Small islands don't need to use GPS, given accessibility of mapping on Google Earth, noting
that satellite images are not always live up-to-date maps. It easy to prioritise EAs with
satellite imagery in small islands and SPC does not recommend expensive GPS systems
over free Google maps in these cases.

### Grouping GPs points into a village unit at geographical level:

 Jurisdictional association can present a challenge when grouping village units. In FSM villages were identified before the mapping.

### Out of sequence mapping of household listings:

o Different GPS technology (*Cense*) can allow GPS points to be taken at the same of Census enumeration, limiting risk of out-of-sequence mapping. However the decision to use Garmin units was made based on accuracy of the GPS point and the risk of testing this technology on the critical Census day. Training would overcome the risk of double click problems. Loss of GPS unit data was mitigated by the inclusion of GPS location handwritten on the scan forms. Later analysis found that GPS unit points were much more accurate than the hand written notes on scan forms.

# Session 4: Census preparatory work II: Pilot Census

### **Country Presentation: Tuvalu**

Tuvalu presented an overview of the Pilot Census process, noting issues relating to budget, mechanism for monitoring implementation progress, the scope/workload and coverage of the Pilot Census, critical activities, and key deliverables. Coverage of the main island only was enough for a

pilot Census. Key messages from the Pilot process related to extending enumeration to other institutions and not just households, ensuring fieldworker understanding and quality performance, and making revisions to the questionnaire.

 $Working\ paper:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=425\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=425\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=425\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=425\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=425\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=425\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=425\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=425\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=425\&Itemid=42\&Itemid=4$ 

# SPC presentation: SDP Demography and Health Survey Technical Officer

SPC highlighted the importance of the Pilot Census as an opportunity to test logistical, management, and operational arrangements before the full Census. SDP provides TA support from the planning phase, training, through data tabulation and analysis, to countries undertaking a pilot Census.

Successes and challenges of the pilot Census process, and suggestions for improvement were discussed in detail in the presentation. Counties are encouraged to conduct a pilot Census one year before the main Census.

Working paper 3: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=408&Itemid=42&Iang=en
Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=428&Itemid=42&Iang=en

# Session 5: Census preparatory work III: Fieldwork training

### **Country presentation: Nauru**

The training phase of the Nauru 2011 pilot Census was reviewed, noting the types of positions recruited and the priority criteria for recruiting enumerators. The training order, grouping of key training activities used, and provision of manageable manuals worked well.

Recommendations from the enumerator evaluation of the 2006 Census were all fulfilled, and suggested adjustments for the next Census round were noted. These include extra training in other countries undertaking a Census, an increase in enumerators, dedicated training venue space, and advertising for enumerators using digital phone services.

 $\textit{Presentation:} \ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=432\&ltemid=42\&lang=enderse$ 

# **Country presentation: Kiribati**

Kiribati discussed the Pilot Census recruitment phase undertaken by the Census Commissioner. Fieldwork training generally worked well and the quality of results improved because of this. However consolidating training into one day, and a lack of control by the Census Commissioner during training, created challenges. Tangible improvements which can be made by SPC and NSOs, and a way forward for 2020 were listed in the presentation. Support provided by UNFPA and AusAID was acknowledged with thanks.

### SPC presentation: SDP Demography and Health Survey Technical Officer

SPC provided a brief summary of the key preparation procedures for fieldwork recruitment and training. The TA support provided by SPC, and suggestions for improvement relating to proper preparation of training activities, NSO responsibility, and improved communication were listed in the presentation.

Working paper 4: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=403&Itemid=42&Iang=en
Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=430&Itemid=42&Iang=en

**PLENARY:** participants discussed the following topics relating to pilot census and fieldwork training:

# Is a pilot Census necessary (especially for small countries), given cost implications?

- Conducting a pilot census is a best practice recommendation in the UN system (undertaken one year prior to main census), to ensure all procedures and requirements for analytical product developments are in place before the census proper is conducted. It is essential to census preparations, particularly in the countries were census is done only every ten years.
- Country size is not an issue, it are the census processing systems (which are the same for all countries) which are being tested.
- Sufficient time between the pilot and full census must be planned for in order to properly amend/modify essential processes and operational procedures; conducting this one year prior to the scheduled census is considered best practice.

### **Training support:**

- o SPC training support is available following country requests.
- SPC can provide training manuals from other countries, which can be integrated and tailored to local language and processes.
- Consider using Census Commissioner training-of-trainers to mitigate training qualitycontrol issues.

### **Coverage of Pilot Census:**

 100% coverage is not required for a Pilot Census. Samoa recommends choosing a selection of rural and urban villages with more than 100 households.

### Is it possible to cost-share Pilot Census with other Ministries, or tag to other agency surveys?

- o Transportation costs can be shared.
- o Consider aligning training of enumerators with HIES and other surveys.

The Cook Islands requested a calendar depicting essential census activities, and list of criteria/types of funding support from partners (UNFPA and SPC).

## **Recruitment:**

- Small countries with a small labor pool reported experiencing difficulties in recruiting suitably qualified staff.
- o A significant challenge under such circumstance is ensuring enumerators focus on quality.
- Vanuatu reported the recruitment of teachers and delegation of supervisory responsibility to them was not a positive experience.
- It is important to set a minimum of unambiguous recruitment criteria for enumerator and supervisory staff.

### Should Post-Enumeration Surveys (PES) be piloted as well?

 PES is an independent undertaking planned (with resources) at the same time as Census planning. Best practice models advise PES testing be carried out two months after main enumeration takes place, by an independent body (not use former enumerators) with separate funding arrangements from the Census agency.

### **Publicity:**

 Good publicity is essential to educate the population on the difference between a pilot census and the census proper one year later, and thus achieve better support.

### **South-South collaboration:**

 With censuses in most PIOCs managed by different managers over time, it is recommended that new managers are seconded to countries undertaking a census during critical phases of census planning and implementation to gain first-hand experience.

# Session 6: Census preparatory work IV: Scanning and data entry (screens/training)

# **Country presentation: Niue (Data entry)**

Niue provided an overview of the 2011 Census project and discussed operational experiences during the data entry phase. CSPro was used for data entry and tabulation in collaboration with SPC TA. Good quality equipment and a confidential data entry venue proved very important issues for consideration in future rounds.

Working Paper: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=399&Itemid=42&Iang=en Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=434&Itemid=42&Iang=en

### **Country presentation: Solomon Islands (Scanning)**

Solomon Islands reviewed topics relating to questionnaire design, the advantages of scanning techniques, equipment/personnel requirements, and control and transfer of forms. The Census scanning process highlighted the value of SPC technical advice, and South-South cooperation. There is a need to further drive capacity development progression. The loss of scanning capacity due to recruitment, and issues around the ReadSoft FORMS license presented challenges in this Census round.

 $Working\ paper:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=409\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=435\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=435\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=409\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=409\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=409\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=409\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=409\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=409\&Itemid=42\&lang=enPresentation:\ http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download\&gid=409\&Itemid=40B&I$ 

# **Country presentation: Vanuatu (South-South cooperation)**

Experiences of South-South cooperation between the Statistician from Vanuatu and the Cook and Solomon Islands National Statistics Offices were shared. Detailed observations on the scanning activities that worked well in these Census projects, and those that did not were listed in the presentation. Significant improvements in questionnaire validation checks, data quality improvements and technology customisation are evident in the three countries.

# SPC presentation: GIS Specialist (Census and Survey)

SPC discussed preparation activities for data capture (entry) for both manual and automated approaches, and the benefits of scanning entry systems - noting that scanning is not necessarily the answer for all countries and applications. A summary of the key TA activities undertaken around the region, and use of new communication technology, was presented.

The Samoa example of using both manual and automated techniques highlighted issues of quality, time savings and cost comparisons, which are detailed in Working Paper 5. Digital questionnaires can link to GPS points allowing for quality control and alignment with other surveys. A detailed list of the issues proving problematic in the 2010 Census scanning projects, and recommendations for the next Census round is included in the presentation.

Working paper 5: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=404&Itemid=42&Iang=en
Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=433&Itemid=42&Iang=en

**PLENARY:** participants discussed the following topics relating to scanning and data entry methods:

### **Confidentiality:**

- o Niue and Tokelau introduced life-long confidentiality contracts to ensure privacy.
- Dedicated office space for data entry is vital.

### **South-South cooperation:**

- This is a very valuable system of cooperation, and can be extended beyond censuses activities to other statistical activities.
- Participants noted that as this activity is not necessarily funded by SPC, countries often arrange collaboration by themselves.
- o Participants requested the Secretariat to provide a list of NSO officers (including specialist subject areas), who are available to approach for assistance.

## **Budget:**

- o Do not underestimate the cost of transportation, especially to outer islands.
- Part-time data entry can cost less, but may not be as efficient or easy to manage as full time personnel.
- Scanning technology can be more cost-efficient over time compared with manual entry, especially when spread across other national surveys, or more importantly, when used to capture/process routing statistical collections, such as scanning arrival/departure cards, or any other regular administrative reports, such as in the Education and Health Sectors.

### Questionnaire form format: One or multiple page form.

- Vanuatu recommended use of one form for scanning. If the decision is made to use more than one form, technical experience is required to match the correct person with the dwelling. Scanning systems create and name the images sequentially, enabling easier matching.
- Samoa used one form for population and one for dwelling. This ensured the forms were comprehensible and easier to complete.
- Questionnaire forms must be filled in correctly, and checks on verifiers must be in place, if you use scanning.

### **Data Quality:**

 Transferring data from field forms to a clean scanning form, opened up the risk of error. In Samoa close supervision of the transfer mitigated this issue.

### **Scanning units:**

- Maintenance costs and per-page time units (which vary between different brands of scanner) must be factored in to data entry plans.
- It was noted that new technology and internet online form completion may supersede scanning technology by 2020.
- Tablets will be trialled during the 2012 October Tuvalu Census, being employed in parallel to traditional questionnaire-based interviews, with feedback on experience to be reported to the 2013 HOPS meeting.

### Benefits of scanning:

- Scanning provides an easily stored electronic archive of Census data, but security of the data is an issue to be considered.
- o Digital data can be linked to GPS points for quality control.
- Scan rates can be up to 5000 to 7000 forms per day, which is much faster than manual data entry.
- Data capture is fast for tick boxes and multiple-choice questionnaires. This means that significant amounts of narrative information can be inputted which would otherwise require a lot of manual data entry.
- o Scanning makes verification and checking faster.

# Session 7: Managing Census field enumeration / data collection

Recap of field enumeration issues raised during Session 2-6: Statistics Adviser / Survey Specialist (Northern Pacific)

Issues that have already been raised during the workshop concerning fieldwork and data collection are:

- Fieldwork quality has significant impact on data entry and data integrity.
- The importance of planning Fieldwork processes can be tested in the Pilot Census.
- Regular contact between supervisors and enumerators is important.
- It is essential to ensure a healthy, safe and well financed environment for field staff.
- Spot-checks are a vital part of the data collection process in the field.
- Include training on qualitative issues and form checking for field staff.

### **Country presentation: Fiji**

Fiji made a presentation on the roles of area coordinators, and how local knowledge was used to prepare small area planning and budgets. He outlined important factors involved in training of area coordinators, support staff, enumerators, and supervisors. Implementing these initiatives has resulted in excellent capacity building and an improvement in data quality in Fiji. Management and supervision of data collection in the various dwellings and institutions was discussed. Challenges experienced in the Fiji Census in the fieldwork process were listed in the presentation.

Presentation:http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=437&Itemid=42&lang=en

# **Country presentation: RMI**

RMI thanked SPC and UNFPA for ongoing support to Census. The geography of the RMI islands presented a planning challenge especially relating to transportation. An outline of important planning steps relating to setting up headquarters, the enumeration schedule, spot-checks and reporting, and the use of Household listing were discussed - noting what worked well, and the obstacles encountered in case.

In planning for the next Census, RMI will factor in more training for enumerators to ensure better comprehension, better recruitment criteria and increased staffing, engaging a data processing adviser, and quality contracts signed by all Census partners.

 $\textit{Presentation:} \ http://www.spc.int/sdp/index.php?option=com\_docman\&task=doc\_download\&gid=438\&ltemid=42\&lang=enderse$ 

### SPC presentation: Statistics Adviser / Survey Specialist (Northern Pacific)

Management and supervision of Census fieldwork was the focus of SPC's presentation. Complex geographies, communication and language difficulties, and access to qualified staff, present challenges in the region. In most cases NSO's are not supported with TA in the enumeration phase. Successfully managing fieldwork involves a well developed plan for implementation, supervision in the field, and proactive staff who anticipate and address challenges.

It is important to note for the future that supervisors must check forms and ensure full coverage in the field. Training attendance must be ensured, and fieldwork needs to be actively managed and the highest levels. Good enumeration and data collection is crucial to data integrity.

Working paper 6: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=410&Itemid=42&lang=en Presentation: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=436&Itemid=42&lang=en

**PLENARY:** participants discussed the following topics relating to managing Census field enumeration and data collection

### Fieldwork management plan:

- The NSO enumeration strategy/plan can be reviewed by SPC to ensure all key topics are covered.
- o Quality assurance mechanisms are important to include in a fieldwork plan.
- Ensure timing of Census is coordinated with the public service agency(s) from where staff will be recruited, e.g. Ministry of Education.
- Development of a spot-check manual Create a checklist of checks to be performed in the field.
- Funding: Area coordinators are accountable for the funds of the impress accounts in Fiji.
   They report details on how the money is utilised. These records can be used to assist planning budgets for the future, factoring in inflation.

# Training on qualitative issues:

- Area coordinators are the subject-matter trainers in Fiji as they have been enumerators in the past, so can pass their knowledge on. This includes identifying issues they will encounter in the field. Area coordinators have six months of training.
- It is important for enumerators to understand 100% of the questionnaire content, and definitions of the questions, so the correct data is recorded. It was noted that International standard definitions should be applied in questionnaires to ensure analysis and reports meet government expectations.

### **Supervision:**

- In Samoa field supervisors were supported by office support staff. The correct level of funding will assist with the good quality of supervision and therefore data quality.
- o Succession planning assists with capacity building of Census managers.

### Attitude of enumeration staff:

- Ownership is important to ensuring recruits are committed to the job for the benefit of the country.
- Encouraging staff ownership can be assisted by planning for good logistics support ensuring the enumerators are well supported and valued in the field.
- Staff must be neutral to political, social and controversial issues.

o Factor in attitude and ownership identifiers during the recruitment process. Applicant qualifications do not always translate into good attitude and commitment in staff.

### Local knowledge - Deploying enumerators to their own villages:

- o Negative: Can affect confidentiality and impact on the honesty of the data collected.
- Positive: enumerators understand the environment (risks and social factors) and their knowledge can assist with quality control.
- SIS have little option when deploying enumerators, given the small labour pool. Intensive confidentiality training is used in Tokelau, and confidentiality measures are included as a topic in public awareness campaigns.

# Session 8: Data processing / Tabulations

### **Country Presentation: PNG**

In PNG the data processing implementation strategy utilised the existing administrative structure in the provinces, and some external contracts for dissemination, with NSO providing guidelines. Factors and interventions relating to site and equipment requirements, questionnaire form check-in phase, and release of preliminary results, were discussed. The manual editing/coding phase included recruitment and training of editors and coders, and developing a strategy for editing. PNG emphasised the need for a data processing adviser to assist activities, and a concise data processing plan.

Lesson learned from the experience relate to capacity building, use of control forms and bar code labels, adequate storage space, and refresher training for entry/editing /coding staff. [Refer to document Day Three/Session8/PNG]

# **Country Presentation: FSM**

FSM discussed the essential resources required for data processing and tabulation. Key to the success of the project was the provision of timely technical assistance by SPC via a clear MOU, centralised data processing, training and the development screens and internal controls, and regular monitoring by the Census Technical Committee.

Insufficient time allowed for edit design and review, the high demand on SPC TA and lack of training on CSPro presented challenges. FSM called for better coordination of training and TA between NSO's and SPC to manage the time required to complete task, and a greater investment in CSPro training for potential South-South cooperation.

[Refer to document Day Three/Session8/FSM]

# SPC presentation: SDP Census and Survey Data Processing Specialist - Programmer (Northern Pacific)

SPC provided a description of control and quality assurance, coding, data capture, editing, tabulation micro database activities. Successes and challenges experienced in the 2010 Census round were listed in the presentation.

Recommended solutions to address some of the difficulties experienced in the 2010 Census round include development of a comprehensive data processing plan, training key personnel in data processing activities, and dedicating more time to the whole data processing phase. Increasing the

number of SPC attachments and defining key roles in NSO's will also mitigate challenges. A single use dictionary and data file will be used in future Censuses, and standardised codes, definitions and table layouts, and mixed mode data capture should be considered as a way forward.

Working paper 7: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=426&Itemid=42&Iang=en Presentation:

**PLENARY:** participants discussed the following topics relating to data processing and tabulation:

### Data integrity - Balancing editing with respecting the intention of the respondent:

- Subject matter specialists (from country) are crucial to developing an editing plan and testing the integrity of the data.
- Subject matter specialists and data processing specialists must work together to finalise a data set.
- In Samoa the data processing team follows the workflow from planning through to processing (not a separate group) so understands the questionnaire and how to apply edits.

### Standard tables:

 Creation of regional standard tables would be welcomed, based around an agreed-upon core set of census questions and question sequencing.

### Structure and coverage edits should be manually based.

### Data processing plan:

- This must be drafted at time of consultation with stakeholders.
- Must be flexible to allow for unforeseen circumstance such as snap elections (and the resulting budgetary implications).
- o Involve the data processing team in the questionnaire format design.
- Data processing must be tested during the Pilot Census.
- Edit specifications, imputation rules and a tabulation plan will improve consistency and clarity for the data processing team.

### **Technical support – knowledge transfer:**

- Technical support for data processing is crucial and needs to be planned and requested in advance to meet Census activity sequencing, and for coordination of the SPC technical assistance plan. It was noted that changes in national Census dates affect regional TA planning.
- SPC to consider how to strengthen this capacity regionally by contracting or hiring additional resources for blocks of time, based on high intensity Census rounds.
- UNFPA can assist in high intensity situations by providing consultant TA.
- Knowledge transfer from TA to the NSO data processing team is an integral component of planning for the next Census.

### Strengthening the data processing team:

 Data processing as been identified in the *Ten Year Pacific Statistics Strategy* as one of five core functions any statistics office, irrespective of size, out to be able to undertake. Hence, data processing capacity in all NSOs need strengthening, which should include appointment of a full-time or at part-time designated data processing specialist.

- Data processing specialists need to be fully engaged in census planning from the start, and they have to remain actively involved right throughout the entire census planning and implementation process.
- Data processing must be treated by NSOs as an on-going priority statistical capacity, and not just attended to during census (and survey) operations.
- Provide technical assistance in the form of on-the-job training, and provide designated DP staff also with basic IT training.
- o Participants noted the challenge posed by the loss of trained staff to other agencies.

# Session 9: Data analysis and report writing

# **Country presentations: Tonga**

Tonga presented a summary of data analysis and report writing experiences during the 2006 Census. Designing data entry screens, data dictionary and edit specifications, and data analysis were undertaken in collaboration with SPC. Preliminary counts were released two weeks after the close of enumeration and the draft report produced after nine months.

Lessons learned from 2006 relate to the advantages of a five year interval between Censuses, and the value of TA and donor partner support. Improved census publicity and communication, better training of supervisors and extended census enumeration dates were changes incorporated into the current Census round. Tonga acknowledged agencies providing funding, technical and operational support to the Census process.

Working Paper: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=406&Itemid=42&lang=en

### **Country presentations: Vanuatu**

The main aim of data analysis and reporting writing (based on a tabulation plan) is provision of quality information for national policy needs. Description of the reports produced from the Vanuatu Census data was provided. These reports are: preliminary results, basic tables report, analytical report, gender monograph, national population policy, and a youth monograph. To ensure capacity building, NSO staff were assigned to work on different sections of the reports, with supervision and guidance of external TA. Technical support interventions during the analysis phase were discussed.

Restructuring the NSO and creation of a new section (Statistical Leadership and Coordination) proved worthwhile in coordinating the data analysis and report writing. Vanuatu experienced some difficulties faced in the process, for example the introduction of new technology and templates, and the lack of internal capacity/guidelines on analysis, editing and publication standards. [Refer to document Day Four/Session9/Vanuatu]

# SPC presentation: SDP Demographer

SPC presented an overview of Census data products and services, highlighting the importance of consultation with users through all phases of the process, ensuring Census outcomes meet user needs. A summary of the key activities undertaken with NSO's was provided. SPC has developed a draft *Pacific Census Managers Guide* in collaboration with the Vanuatu Statistics Office. This will be finalised once the outcomes and recommendations of this census workshop are incorporated, and be ready for use prior to the start-up of the 2020 World Census round planning phase in 2014.

With many census products designed and developed with external TA support, direct links to country policy are often unnecessarily weak. Product development often stops once the basic

reports are released. Census products must be promoted to, and easily accessible/ interpreted by, end users. Development indicators need to be linked to sector, national and development strategies and regional or global reporting requirements. Creating basic tables and thematic maps aligned to development indicators will also assist to create demand.

SPC recommends for a specific project activity to be included in all census plans, which is of particular relevance and importance for understaffed SIDS NSOs, and that is to assist them to explore and extract data directly linked to their national, regional and international reporting requirements on policy and development progress.

Working paper 8: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=405&Itemid=42&lang=en

**PLENARY:** participants discussed the following topics relating to data analysis and report writing:

### National policy priorities:

- National policy and development directives need to be tracked by NSO's. This information needs to be conveyed to the NSO staff who undertake analysis, and not just monitored by Heads of Statistics.
- Ensure Census reports include a glossary and clear definitions of terms, to assist policy makers interpret data. Reports should be presented in a way that is informative to those who are not statisticians.
- Metadata will add value to other products, as advanced users will appreciate information about input data.

### Advocacy:

- A Census Communication Strategy should be developed at the front end of the Census process, in order to ensure all issues and stakeholders are considered.
- Ensure NGO's, academia, disability groups, the public, the education system etc are included in this plan.
- NSO's must guide users but, also understand what their questions are before providing the answers.
- Samoa established a group of Census users to guide questionnaire design and report planning.

### **Training:**

- o NSO's should plan training to be timed closely to activities, ensuring knowledge is retained.
- Scholarships in Population Studies (as previously provided by UNFPA at USP) are valuable to the region.
- NSO's need to treat TA as capacity transfer and not just focus on the creation of the Census product.
- UNFPA noted that technical assistance ToRs weigh production of the product the same as capacity transfer.
- SPC MOUs also include skills transfer, however NSO's need to ensure counterpart engagement. The level of skill transfer should be realistic given the capability of the NSO officers and the type of specialised subject matter.
- Data analysis and report writing training has been offered after HIES and DHS surveys, and should become an integral census output.

### **Technical support:**

- TA supporting policy and national planning issues affecting Census was requested.
- Ongoing technical assistance in demography is essential to ensure production of quality demographic and social statistics and indicators.
- o NSOs need to take care with release of data sets to external technical advisers. The issue should be addressed by building capacity in countries where possible.

### Micro-data:

- Dissemination of micro-data needs to be well planned and managed in accordance with a comprehensive policy of microdata use and access. CARICOM has a policy in place on the use of micro-data, and established mechanisms for micro-data sharing, which it intends to share with SPC.
- In-house micro-data labs can be used to provide access, with guidance/oversight from NSO staff.
- Data user agreements will be used in the Pacific to regulate the dissemination of microdata sets (an outcome of PSSC discussions).

### Creation of a Census data extraction and analysis facility for SIS:

- Small NSOs may not have analysis capabilities. Expertise based in regional universities can be utilised, however past experience in the region has had mixed results.
- UNFPA can offer retired population specialists to assist with product development and data analysis.

### Session 10: Data dissemination and documentation

# **Country presentation: Vanuatu**

Vanuatu provides Census data via the various Census-based reports, the VNSO website, counter service, mail outs and databases (PopGIS and REDATAM). Census products are targeted at government ministries, NGO's, researchers, international organisations, the media and students. Communication activities included user consultation meetings and seminars/workshops. Reports are provided to users at no cost. Initiatives intended to building statistical literacy were built into the recent Census.

The broader approach taken in dissemination worked well in this round, and this will need to be expanded again to adjust to rapidly changing technologies. Dissemination of micro-data was delayed and this presented a challenge.

[Refer to document Day Four/Session10/Vanuatu]

# SPC presentation (documentation): SDP Database/Data Mining Specialist

SPC provided an overview of microdata (unit record) management and metadata documentation. Confidentiality, visibility, accessibility, reliability, relevance, comparability, and usability are key factors to consider. Ways in which microdata dissemination increases the use and potential impact of data, and the benefits of dissemination were discussed. The *Microdata Management Toolkit* has allowed the documenting of Census data. Vanuatu and Samoa NSO websites are examples of good practice dissemination online.

Working paper 9: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=440&Itemid=42&Iang=en Presentation:

# SPC presentation (data user workshops/policy dialogues): SDP Demographer

SPC summarised regional initiatives on data dissemination, policy dialogue, and data analysis. Data utilisation training materials have been shared with Census managers. However the link to user needs was often not well established. Increased data use creates data demand. Advocacy activities, policy dialogue and engagement of political support are key to ensuring Census relevance.

Working Paper 10: http://www.spc.int/sdp/index.php?option=com\_docman&task=doc\_download&gid=407&Itemid=42&lang=en Presentation:

**PLENARY:** participants discussed the following topics relating to data dissemination and documentation:

# Metadata workshops:

- o Documentation of the Census survey process is valuable.
- Noted that REDATAM is a data dissemination tool at the aggregated level (microdata is the input) and the Toolkit is a documentation product at the microdata level.

### **Translation:**

- Translation to various languages is an extension of Census reporting.
- o You will reach a far greater audience.

### Advocacy:

- Consider a National Statistics Day as a means to promote the Census.
- Target data dissemination/style-form of message/content to suit absorptive capacity of different data users to achieve maximum impact. .
- o Target structure of data to the end user.
- RMI generated public interest by publishing data tables in the local newspaper in Marshallese.

# **Session 11: Experience from CARICOM states**

CARICOM presented a brief history of Caribbean Censuses, and an overview of regional preparations undertaken for the 2010 census round. The regionally coordinated approach provided support and economies of scale to SIS. Regional census frameworks included **common questionnaire and methodology components, and dissemination tools.** Regional capacity was developed via workshops on consensus building, demography, census organisation and administration, and mapping GIS.

Regional advocacy activities and awareness materials were supported under the framework. Challenges experienced in census implementation included poor utility supply affecting technologies, poor field supervision, delays in salary payments and staff safety issues, public perception, and integrity of field staff performance. Data processing issues were discussed. For the 2020 round, scanning technology will be more entrenched, updated manuals will provide a rich knowledge base, and population registers may provide an alternate subject to debate. [Refer to Working Paper 11]

### **PLENARY:** participants discussed the following topics:

### **Common Census framework:**

- The common framework added structure, formalised the process and leveraged funding to support SIS.
- The IDB Regional Public Goods Facility funded the coordination of the regional framework.
   The RPG funding proposal was based on a common census framework, with a regional work programme.
- o Buy-in from heads of statistics programmes was essential to the process.
- Interim and end-of-project evaluations reflected a very successful result. Methodologies were improved, and valuable support was provided to new Census managers/officers.
   Dissemination tools, manuals and templates developed during the process were well utilised.
- South-South cooperation during the process was very successful.
- In some countries questionnaires became too long. This is due to SIS relying so heavily on Census for data collection, as they do not have survey capacity.
- Responsibility for conducting and funding Census under the common framework lies with the countries.

### Caribbean statistical governance/coordination framework:

- The Standing Committee of Caribbean Statisticians was established in 1974 (equivalent of HOPS) and is a permanent committee that meets annually. The advisory committee is a sub-group and meets every six months. The Regional Census Coordination Committee is not a permanent committee, but for Census purposes only.
- Attendance is self-funded and countries volunteer to host meetings. However funding has become more difficult so now UNFPA support some SIS to attend.
- Statistical Research Seminars are attached to Standing Committee meetings to encourage the use of the data.

### Consensus building workshops:

- An example of the work done is on common questionnaire format. Agreement is reached on thematic topics, core and non-core questions.
- Regional consensus does not mean that all country questionnaires are exactly the same, due to costs and environmental issues. General principles are agreed around definitions, core questions and approaches used for logistical issues, e.g. fieldwork.

### Demographic analysis training (seven weeks):

- Content in these training is very in-depth, using a mix of theory and data projects in a lab setting
- Training is fully funded by the Caribbean Development Bank, and development partners in some country cases. The university campus in Trinidad and Tobago was used as venue
- A tracer study reflected a generally good transfer of skills after the training. In some cases trainees were not placed in correct area to use their new skills, but generally trainees went on to lead the Census process in the countries and followed through into further training.

### **Funding:**

 Caribbean Development Bank is a regional body that funds training of statisticians. This is a difference with the Pacific region, were there is a reliance on external development partners.

# Data processing uniformity:

o remains key challenge for the region.

### Population registry:

- o Population registries are new to the Caribbean, but CARICOM encourages South-South cooperation with the Pacific to collaborate on this.
- To develop a population register countries can use latest Census as a base. Countries should look at building the administrative sources – births, deaths, and migration data – using a unique population identifier across all administrative databases.
- UNFPA is making 'careful first steps' to support vital statistics, and extending to population registries in the future. Both systems are more feasible for very small countries and provide greater "real-time" statistics compared to high costs of surveys and censuses.
- o Another avenue for SIS is an annual update of household listings (being trialled in Tuvalu).
- A measured approach to population registries is advised. Registries work when the integrity of the civil and vital registries is guaranteed.
- Statistics New Zealand is preparing a paper on a forty year approach to population registry that could be interesting for the Pacific.

### **Census preparation:**

• With political support essential for budgeting and funding purposes, NSOs should initiate an early dialogue with their political masters.

# Session 12: Guidelines and program of engagement for 2020 World round of population and housing censuses

Participants highlighted the following issues that need to be taken forward to inform and guide good practice guidelines and effective and efficient preparations for the 2020 round of Censuses.

### **Census Planning:**

- Census must feature strongly in NSO strategic plans/strategies and multi-year statistical
  events list. This ensure timeliness of preparations, links the full raft of the statistical work
  and embeds cross-cutting survey processes (e.g. data entry). It will also link Census to
  government development agendas, and policy planning.
- o Ownership:
  - A Census funding component should be included in NSO master plans or long-term strategic plans, such as their NSDS. strategy
  - Funding needs to be integrated into the national government budgets, with development partners requested to assist in covering shortfalls where necessary.
  - Ensure ongoing political support and government engagement.
- SIS Census committees to collaborate on lobbying donors for Census support, ensuring enough lead-time for donors to respond. Proposals based on strong NSO statistical master plans or long-term strategies (NSDS).

- o Census plans need to address all steps or stages of the census process; they need to be comprehensive and costed accurately.
- A calendar of international and national statistical events has been added to the PRISM website. This will assist coordination of planning activities, and can prompt SPC to contact NSOs and their Ministries of Finance to alert them to their upcoming Census and the need to begin budgetary preparations.
- o MOUs be established between NSO and development partners to clarify roles and expectations.
- o The conduct of a PES is recommended to be included in all census plans.

### South-South:

- o Expand sharing of specific technical expertise between NSO's.
- SPC to compile a formal inventory of skills/experience within NSO's (coordinated with NSO managers) to create a South-South cooperation mechanism. SPC to table at PSSC.
- SPC to prepare annual technical assistance plans:
  - Based on regional events calendar and a needs assessment (esp. with SIS).
  - Identifying SPC /International technical assistance (short term), and South-South (longer term) support to fill gaps – balancing supply/demand and timing.
  - Spell out criteria for funding support from development partners.
- o Readily available technologies can be used to facilitate South-South sharing e.g. Skype
- Explore a South-South arrangement with CARICOM (such as short-term cross-postings), to share expertise across sectors.

### Questionnaire design:

- o Adhering to an agreed upon core set of census questions is essential to maximize and sustain technical assistance and capacity building activities by SPC, as it reduces both costs and burden to produce multiple data entry/data processing/data editing systems and applications, training manuals and census questionnaire modules, for what is covering basically the same questions and census process across the region (and beyond).
- o This emphasis on a common core set of census questions is line with Pacific Leaders' call for striving towards a greater harmonization of statistical concepts, tools, classifications and systems; it is not meant to force a common questionnaire on all countries, but simply to have a standard demographic core module<sup>1</sup>, and in addition encourage countries to add specific questions of relevance to monitor specific national development policies or programs.
- SPC to circulate the draft core set of census questions to HOPS members for review in time for adoption during upcoming 2020 round of censuses.

### **Cartography and GIS:**

- SPC to undertake an evaluation of GPS technology and equipment, factoring in technology change.
- NSO's encouraged to develop procurement strategies and funding options for new technologies (scanning and GPS), linked with training. Management of GPS unit's factored in the plan.

 $<sup>^{1}</sup>$  There are only so many ways one can use to ask people for their age, sex, occupation, religion, family status, place of birth, number of children etc. Standardizing this core set takes does not compromise national statistical sovereignty - to the contrary, it would set a very strong and positive message about being pragmatic and cooperative.

- Rationalise utilisation of new technologies based on life expectancy, and possibilities for sharing between NSO's. Weigh costs of shipping GPS units across the Pacific against costs of purchasing new units.
- Further training and capacity development be provided within NSO's (and other government agencies) on GPS technologies. SOPAC can also provide support.
- o Develop relationships with other mapping providers in countries to share:
  - Technical expertise
  - Costs software and training
  - GPS coordinates linked to other to service providers
  - Best practice examples: VNSO worked with the Lands Department, and Samoa worked with Water Authority and Electric Power Company.
- Use the GIS products (for example visual overlay maps) to sell the importance of the technology to stakeholders and government.
- Integrate GIS into the entire Census operation including dissemination, and other surveys such as poverty mapping and HIES.
- o Bring in additional layers such as DEM's for elevation and identification of access issues.
- o Encourage regional standardisation of software.

### **Household listing:**

 Household listing updates must be conducted before every Census, and is of particular importance in high growth areas.

### **Pilot Census:**

- Pilot testing the <u>full Census process</u> is strongly encouraged best practice model is twelve months prior to Census. The key issues for testing are:
  - Questionnaire design and production
  - Management structures
  - Field logistics and workload estimates
  - Data entry software
- NSOs to forward their census diaries or administrative reports to SPC for review. Results to be included in best practice model for 2020.
- Consider outsourcing census logistic arrangements.
- Pre-testing structures (e.g. questionnaire), will help NSOs to develop criteria and questions to answer with the pilot test. This ensures Pilot Census is not overloaded.
- o Engage provinces and local authorities.

### Training of field staff, enumerators and supervisors:

- Develop a training strategy incorporating:
  - On-going NSO needs,
  - Census-only needs,
  - Training for all levels of staff, from supervisors to junior enumerators ensure the full team understands all the roles and duties in the process, not just their own,
  - Adequate timing:
    - length of sessions depending of maturity of staff, questionnaire length, type of technologies - two weeks + two weeks generally suggested
    - number of trainees per session,

- timing of training activities noting potential conflict with other national activities (e.g. exams when teachers are hired)
- Including regional training materials (to be updated by SPC),
- Classroom and practical training methods
- Strong focus on training-of-trainers, with benefit of providing training in local language.
   Those trained in the Pilot phase can be utilised as trainers for full Census.
- Expand efforts to train area coordinators (as in Fiji) to manage local field operations for quality control.
- o Use telecommunications to expand supervision activities.
- o Carefully consider recruitment criteria for Census staff before investing in training.
- Consider interactive training CD-Rom and videos assists with message consistency and quality.
- o Undertake an assessment of training, measuring results.

### Managing field Census operations /enumeration:

- Logistics strategy developed, including:
  - Communication and transportation logistics.
  - Census commissioner to have full control of the Census budget.
  - Delegation of responsibility for field operations and budget management to improve ownership, especially out to provinces.
  - Include procurement rules and regulations.
  - Include risk management budget for natural disasters etc.
  - This will be included in SPC draft Census planning document which will be released soon
- Quality control issues highlighted:
  - Questionnaire completion field editing and supervision vital.
  - Checks to be done early (first interview) to ensure the enumerator is working correctly.
  - Use cell phone technology and GPS to monitor field operations.
- Develop mechanisms with Ministry of Finance to ensure timely payments. For example relocation of Treasury staff to NSO for period of Census.
- o Ensure enumerators are well supported.
- Prepare an awareness campaign, briefing community leaders on the Census enumeration process.
- o Ensure secure processes and handling measures.
- o Enforce Census night legislation requirements such as alcohol restrictions.

### Data entry and processing:

- o Must be attended to at the very beginning of the Census planning process.
- Data processing plans must include:
  - Engagement with subject matter specialists (including local knowledge) in questionnaire design and edit specifications. Agree definitions and edit specification early;
  - census questions directly linked to a tabulation plan and Census table output.
  - develop coding schemes;
  - specify realistic timelines and how to accomplish activities;
  - designate equipment and physical venue, and consider confidentiality;

- Expand /develop data processing capabilities each NSO to have a designated data processing capacity as previously highlighted
- o Spell out/document imputation process, and maintain an un-imputed data set.

### Scanning:

- Consider the value-add of scanning technology for other statistical activities and needs, not necessarily only restricted to NSOs:
  - immigration and education records,
  - off-set costs across other surveys,
  - for archiving,
  - staff/resource efficiencies time and retention of skills.
- o Document a scanning plan.
  - Link to procurement and training plans,
  - First time use should not be at Census time,
  - Rationalise scanners and licenses to need, to avoid redundancy.
- o Ensure a counterpart is designated to manage the scanning technologies in country.
- o Favour tick boxes rather than open ended questions when using scanning.

### Data analysis and report writing:

- Ensure local counterparts are involved as much as possible in data analysis process.
- o Peer review is an important best practice approach.
- Document the analysis process and method of calculation. This ensures transparency can be included as an annex.

### **Dissemination and communication of Census results:**

- Develop a dissemination/communication plan:
  - Linked to the initial Census planning process,
  - Developed in consultation with data users and stakeholders,
  - Including an 'audience model' targeting outputs to different audiences e.g. Develop one page executive summaries, and inclusion in parliamentarian handbooks.
  - Including a calendar of census product releases
- Keep products user friendly and adopt appropriate data dissemination modalities.
- Educate users and create demand e.g. provide data result seminars to key government sectors, provide seminars to the media on how to interpret numbers.
- o Use technologies like websites to maximize impact of Census products,
- o Ensure confidentiality, anonymization and security of information.
- o PSSC consider creating a TWG on data dissemination and fostering greater use of data

### Data use:

"Unused data is useless"

### Data quality:

"Poor quality data leads to poor quality decisions"

# **Annex A: Workshop Recommendations**

### **General Recommendations:**

- 1. In the lead-up to the 2020 Round of Population and Housing censuses, SPC to circulate the *Pacific Statistics Strategy* Technical Assistance Plan (subset related to Census), so countries are aware of how and from whom to request specific technical assistance.
- 2. Census funding support SPC and UNFPA to:
  - Circulate a list of funding support (with criteria) available to NSOs
  - Develop a template for Census funding proposals made available on PRISM.
  - Clarify with Statistics New Zealand their financial and technical support relationships with regard to Tokelau, Niue and the Cooks Island.
- 3. SPC to circulate the core set of Census questions and standardised sequencing of questions agreed by HOPS.
- 4. SPC and UNFPA to develop a regional plan and calendar of Census training and capacity building activities. Include potential funding support for NSO's to attend these activities
- 5. Training was specifically requested in the following areas:
  - New technologies (Scanning, GPS)
  - Pilot Census and fieldwork
  - Demography and data analysis
  - Report editing and publication standards.
  - Policy and national planning issues affecting Census
- 6. South-south cooperation SPC to provide a list of NSO officers (including specialist subject areas), who are available to approach for South-South assistance.
- 7. SPC to write letter to national MOF in order to highlight importance of upcoming Census prompted by updated calendar of national Census and survey events in PRISM.

### **Planning**

8. SPC to facilitate development of key Census planning document templates – made available on PRISM.

## **Cartography and household listings**

9. SPC to facilitate the development of a guideline for drawing EA boundaries – incorporating Fiji's experience as regional leaders in establishing EA boundaries.

# **Scanning**

10. SPC to facilitate development of a generic checklist to assist NSOs to review correct technology use.

# Managing Census field enumeration / data collection

- 11. SPC to facilitate development of a spot-check manual including a generic list of checks to be performed in the field.
- 12. SPC to update field-staff training manuals.

### **Data processing / Tabulations**

13. SPC to facilitate the development of regional standard data entry tables based around core questions and question sequencing.

14. SPC and UNFPA to consider how to strengthen data processing TA capacity - by contracting and managing consultants or hiring additional SPC resources for blocks of time based on high intensity Census rounds.

# Data analysis and report writing

- 15. SPC to facilitate development of guidelines on report editing and publication standards.
- 16. CARICOM to share its policy on Micro-data use and dissemination.
- 17. SPC to develop and share template Data User Agreements to NSOs.
- 18. SPC to finalise and disseminate the Pacific Census Managers Guide.

### Data dissemination and documentation

- 19. SPC to create an audience model for targeting user groups
- 20. PSSC consider creating a TWG on data use and dissemination.

### **Experience from CARICOM states**

21. SPC and the PSSC to arrange a technical seminar on population registries for inclusion in the next HOPS meeting.

### Where to in 2020? Guidelines and program of engagement

22. Good practice census preparation report to be developed from this meeting by SPC/UNFPA.

Noumea, 15 November 2012