





Statistics for Development Division (SDD)

5th Regional Conference of Heads of Planning and Statistics (HOPS)

(Noumea, New Caledonia, 14–16 November 2017)

SPC/HOPS 2017/Session 6 – Information Paper 1.5B

Original: English

SESSION 6 – STATS NZ PACIFIC CERTIFICATE IN OFFICIAL STATISTICS

(BUILDING OFFICIAL STATISTICS USER CAPABILITY IN THE PACIFIC)

(Document presented by Andrew Tideswell)

EXECUTIVE SUMMARY

- 1. Developing the capability to use data and statistics for decisions can be successful where:
 - a rigorous project-focused¹ training approach is used;
 - the approach is tailored to meet the context of particular participating cohorts and individual learners:
 - the delivery is provided by a collective of practising official statisticians and academics in the field; and.
 - the training is subject to strict external accountability and moderation systems from funders and qualification providers.

THE CHALLENGE

- 2. Pacific nations have acknowledged that they lack quality data and the skills to utilise it to best advantage in order to make evidence-based decisions with regard to the setting of policy and its implementation across many sectors, including their National Statistics Systems (NSS)². This leads to the poor allocation and management of resources and negatively impacts their economic development.³
- 3. Pacific Islands Government Statisticians expressed a need for users of statistics such as planners, policy analysts and decision-makers to improve their capability, if the value of data is to be unleashed. "There is little point in producing official information that is either misunderstood, misapplied or simply written off as too difficult to understand". Specific instances given included that policy advisors were

¹ A workplace based project using data comprises 40% of the certificate credit value.

 $^{^{2}}$ A comparison of the nature or magnitude of the problem in comparison with New Zealand is not known to this author.

³ "Building Official Statistics User Capability in the Pacific" Statistics New Zealand's Activity Design Document submitted 27 June 2014 (the ADD) WPG-0035982.

⁴Mr Kele Lui, Government Statistician Tokelau, Tokelau National Statistics Office, letter to Stats NZ, 2013.



keen to make use of Consumer Price Index Data but misunderstood it. There was a desire to "provide a much needed broadening and deepening of understanding of statistics".

THE RESPONSE

- 4. In 2012 MFAT provided funding to Statistics New Zealand (now Stats NZ) to deliver a certificate course in Tonga using Stats NZ staff and Victoria University of Wellington (VUW) School of Government lecturers. The Tonga pilot provided valuable lessons which were drawn on in the development of a previously existing qualification that was adapted to suit individual Pacific nations.
- 5. Stats NZ worked with members of the Pacific Statistics Steering Committee (PSSC)⁵ and the New Zealand Ministry of Foreign Affairs of Trade's (MFAT) New Zealand Aid Programme, to design⁶ a solution to build capability of the NSS to unleash the power of data for decision-making.
- 6. The New Zealand (NZ) recognised Certificate in Official Statistics (COS) course, once adapted to suit Pacific needs⁷, provides a mechanism to address issues around statistical information and its use.

The course is targeted primarily towards the "users" rather than the "producers" of statistics. The COS course covers five units of learning⁸ as follows:

- analysis of ethical and legal issues in the collection and use of data in a public sector context;
- interpretation of and drawing conclusions from descriptive statistical information in a public sector context;
- assessment of data collections and making statistical inferences in a public sector context;
- evaluation and use of statistical information to make recommendations in a public sector context;
 and
- delivery of a statistical research project in a public sector context.
- 7. In order successfully to deliver the training and to meet the delivery targets, a great deal of detailed attention was paid to the mode, nature and to the quality of delivery. The importance of this for the emerging success of the programme cannot be underestimated, thus a great deal of attention is paid to describing this in the following paper. Similarly, emphasis is placed on obtaining manager buy-in to what is a significant investment of their candidates' time in completing the certificate course.
- 8. The certificate, "National Certificate in Public Sector Services (Official Statistics)⁹" (more commonly known as the Certificate in Official Statistics, or COS) is an internationally portable Level 5 qualification at approximately undergraduate (university) level listed with the New Zealand Qualifications Authority¹⁰. The course materials and the mode of delivery were revised and tailored to meet Pacific needs. Following the pilot, a Memorandum of Understanding was signed between MFAT and Stats NZ, with Stats NZ to lead the delivery of COS in Samoa, Tokelau, the Cook Islands and in Vanuatu during 2013-17. Presenters and tutors included Stats NZ staff, with assistance from university staff. Victoria University of Wellington (VUW) was supportive, and its school of Mathematics, Statistics and

⁵ http://typss.org/pssc/

⁶ Activity Design Document, MFAT reference WPG-0035982

⁷ Adaptations included: revising the material to include Pacific country specific legislation and case study data sets; adapting teaching techniques to enhance participation of candidates in discussions in the classroom.

⁸ A fuller description of the certificate and its constituent units can be found via http://www.nzqa.govt.nz/nzqf/search/viewQualification.do?selectedItemKey=1283

⁹ The certificate was created by a coalition of NZ academics in Official Statistics lead by the then General Manager of Statistical Education at Statistics New Zealand, Adjunct Professor Sharleen Forbes and first listed in 2007. It is owned by the Industry Training Organization for the NZ state sector – The Skills Organisation, and is listed with the national body responsible for all NZ qualifications, the NZQA. See footnote 4 below.

¹⁰ http://www.nzga.govt.nz/nzgf/search/viewQualification.do?selectedItemKey=1283



Operations Research (MSOR) was generous in enabling Assistant Professor Richard Arnold's ongoing participation as lecturer and course co-designer.

- 9. From the outset Statistics NZ established relationships with government statisticians and their staff within the National Statistics Offices (NSOs). NSOs assisted to solicit and screen participants from other government ministries, the private sector, Chambers of Commerce, Central Banks, and regional agencies (where applicable). Minimum criteria for selection were agreed to so as to ensure that participants had the potential capability of success. The course was offered to up to 25 participants per country.
- 10. Stats NZ has been responsible for the development and delivery for up to 25 participants per country. The course has been designed to improve the use, interpretation and analysis of official statistics, contributing to increased evidence based decision-making, planning and tracking of progress.
- 11. The course covered five units of learning and has been delivered through a mixture of face to face course work, tutoring and country and employing-agency-specific research projects. On successfully completing the course, participants obtained a Certificate in Official Statistics (COS).

Short-term Outcomes include:

- Official Statistics users have greater knowledge and ability to analyse data and report on results;
- Pacific COS course designed to meet the needs of Pacific Island Countries and Territories (PICTs).

Emerging success

12. To date, some 21 candidates in the Pacific have completed workplace-based projects (hence "the certificate" aka "COS"), with another 57 continuing, the majority of whom are expected to complete¹¹. Completion rates have increased to as high as 80% in some countries, compared to 20% in the pilot.

Projects completed so far cover a range of topics areas including:

- Election registrations
- Seasonal trends in tourism
- Analysis of imports
- Assessing the effectiveness of public service training
- Disabilities
- Teenage pregnancy
- Assessment of geospatial distribution of crops varieties
- Youth unemployment
- Export price indices
- Graduation rates for tertiary education providers
- Government motor vehicle operating costs
- 13. Although the intent of the programme is not specifically to enhance the monitoring of the Sustainable Development Goals¹² (SDGs) each of the projects addresses at least one and often several of the seventeen high level SDGs.

¹¹ Interim data as at 3/8/17 sourced from Skills Organization and assessor working records

¹² http://www.un.org/sustainabledevelopment/



Projects most commonly address SDGs:

- Decent work and economic growth 22%
- Good health and well-being 20%
- No poverty 18%
- Peace, justice and strong institutions 12%
- Reduced inequalities 6%
- Gender equality; Industry, Innovation and infrastructure; Quality education each 5%
- Responsible consumption and production; Climate action; life on land each 3%
- 14. Candidates have been positive about the way in which the programme has supported them professionally and personally in the workplace, as a range of verbatim comments illustrate:

"On a certain degree it has helped me to better assess the limitation of data sets when analysis is carried out. It has also made me re-evaluate the overuse of graphs if tables are enough to carry the message across. I also contemplate the ethics behind the data."

"COS has helped me a lot to understand how I analysis any data before I make any report our decisions."

"COS has supported my career development and helping me develop my skills in leadership and management by using the COS knowledge to guide/set goals for my team to achieve what we assign to achieve for the year"

"is expected to be used in providing statistical analysis for reports issued by the Ministry"/" Brought to the attention of Tokelau Counsel (cf Cabinet) will be used for policy development in villages"