



Vacancy Notice No. IC/2017- 001

Terms of Reference

Assignment Title:	International Consultant for Creation of Public Use Sample File for 2014 Myanmar Population and Housing Census and related documentation
Duty Station:	Department of Population, Nay Pyi Taw
Duration:	20 working days, All work will be done in-country
Starting Date of Assignment:	June 2017
Closing Date for Application:	19 May 2017

1. **ORGANIZATION SETTING / BACKGROUND INFORMATION**

The 2014 Population and Housing Census conducted enumeration in April 2014 after more than 30 years without a Census. Main results from the Census were released on the 29th of May 2015, in-print, electronically and on-line. The Department of Population, with technical and financial support from UNFPA and other donors implemented the census.

Thematic analysis of the census data is underway, with 14 reports planned for release. Data dissemination has been undertaken at the State/Region and at the District levels. DOP and UNFPA plan to disseminate the census data further down to the Township level in order to strengthen the capacity of data users in the utilization of the data for planning, monitoring and evaluation of development programmes at all levels.

DOP has requested UNFPA to enlist the services of an international consultant with experience in microdata anonymisation and the creation of a public use file (PUF) from the census microdata. This microdata file will enable data users (academics, researchers, private sector, development partners, etc) to undertake their own analysis of the census data and generate any information that the Department of Population has not made available through the various dissemination channels used so far.

2. **PURPOSE OF THE CONSULTANCY**

The Consultants will work under the overall supervision of the UNFPA Representative in Myanmar. Day-to-day supervision will be provided by the Permanent Secretary for the Ministry of Labour, Immigration and Population.



3. MAJOR TASKS AND RESPONSIBILITIES

The consultant will work with the Department of Population and the UNFPA technical team to create the public use file. Specifically, the consultant will perform the following:

1. Work with staff of the DOP to create a Public Use File (PUF) consisting of microdata census records (one for each person, one for the household).
2. Determine, in consultation with the DOP, the percentage of households to include in the PUF (e.g. 5%, 10%).
3. Determine weights (expansion factors) to include with each household in the PUF so that the users can produce nationally representative results.
4. Provide proper anonymization of the PUF so that no characteristics of any individual or household can be inferred. This includes techniques such as:
 - Suppression of low-level geographic codes.
 - Collapsing of categories (e.g. five-year age groups).
 - Top-coding of age and any other relevant variables where high values may identify an individual (e.g. “85 and above” into one category).
 - Record-swapping of individuals from one household to another.
 - Introduction of “noise” into the PUF.
5. Removal of sensitive data from the sample file
6. Develop computer programs to read the edited microdata file from the census to generate the anonymized PUF.
7. Produce documentation of the PUF file format (“data dictionary”).
8. Produce documentation of the procedures used to create and anonymize the PUF.
9. Provide on-the-job training to DOP staff on the creation and management of the PUF and techniques for the anonymization of data
10. Develop, in collaboration with DOP, a policy for accessing and dissemination of the PUF in the technological, technical and political context of Myanmar

4. KEY DELIVERABLES

The consultant will provide the anonymised microdata file to DOP, along with all the associated documentation of the process. The consultant will produce a consultancy report with relevant recommendations on managing the PUF and any other relevant issues for DOP/UNFPA follow up.

5. MONITORING AND PROGRESS CONTROL

The Consultant will have regular meetings with the Department of Population senior and technical personnel, as well as the UNFPA Technical Team. The consultant will provide regular updates to UNFPA management on progress.



6. QUALIFICATIONS AND EXPERIENCE

- Advanced university degree in Computer sciences, statistics, mathematical sciences or related field;
 - At least 10 years experience in census data processing (or other large-scale data collection and processing exercises). Advanced knowledge and practical experience in CSPro or other data processing software is a requirement.
 - Demonstrable experience in the creation of PUFs and in the anonymization of microdata.
 - Excellent communication and facilitation skills and fluency in written and spoken English;
 - Strong analytical skills;
 - Dedication and belief in upholding the highest ethical standards and respect for data confidentiality;
- Adaptability and ability to work with people from different socio-cultural backgrounds and across different managerial levels;

HOW TO APPLY:

Applicants with the required qualifications and experiences should submit a written letter of application, a copy of curriculum vitae (CV), completed UN P11 Form (<http://myanmar.unfpa.org/en/vacancies/un-p11-personal-history-form>), relevant educational certificates showing highest level of educational attainment and the names and contact information of three references.

Applications should be addressed to:

To: UNFPA Representative
Attention: International Operations Manager
UNFPA, No. 6, Natmauk Road, Yangon
Email: hr.myanmar@unfpa.org

Note: Only those candidates who meet all qualifications and experiences will be contacted for further consideration.