

TERMS OF REFERENCE

International Contractor for implementation and management of Census data collection process using CAPI (Survey Solutions) and census data cleaning, editing and finalization of census dataset

(MDV-ToR/2022/02 Dated: 21/12/2021)

TERMS OF REFERENCE (to be completed by Hiring Office)	
Hiring Office:	UNFPA Maldives Country Office
Purpose of consultancy:	<p>UNFPA as the population data agency has provided technical support in the collection, processing, analysis, dissemination and use of census data for development in many countries. In the 2020 census round, UNFPA’s key areas of support include Geographic Information Systems and data processing experts, operations support, and training and developing technical and operation guidance tools.</p> <p>As Maldives Bureau of Statistics (MBS) of Maldives embarks on the preparation for census 2022, one of the key activities to be carried out include electronic data collection with census data cleaning and finalisation of census dataset at the earliest.</p> <p>Maldives population and housing census will be carried out from 17-30 September 2022. The pre-listing operation will take place one week prior to the main census operation. Online economic census will be carried out after the main census operation (for a duration of one month).</p> <p>As the census will be carried out in September 2022, preparation is underway to develop a census questionnaire in Survey Solution. This includes development of listing, person listing, household, individual and economic census questionnaires in CAPI for pre-testing, piloting and finalising the questionnaire before June 2022. And doing a follow up post-enumeration survey one month after census operation. Additionally, the contractor team is expected to support the roll of and management of census operation.</p> <p>Hence, UNFPA is seeking an International Contractor to continue assisting the MBS team to implement and manage census data collection process using CAPI and for census data processing.</p>
Scope of work: <i>(Description of services, activities, or outputs)</i>	<p>Scope and diversity of assignment:</p> <p>The assignment will require the Contractor to work closely with the MBS team in achieving the following deliverables.</p> <p>Specific milestones:</p> <ol style="list-style-type: none"> 1. Brief work plan on how the Contractor envisage undertaking the task (Third week of January 2022) 2. Guide the country team in the modification and applying validation and consistency check of census questionnaires for pre-tests, pilot census, main census operation and for Post Enumeration Survey (PES) (2022). This includes: <ol style="list-style-type: none"> a. <ol style="list-style-type: none"> i. Pre-listing form, ii. Person listing form iii. household form iv. Individual form (for foreigners, collective living quarters), v. economic census questionnaire. vi. Post Enumeration Survey questionnaire

- b. Designing, Validating, Testing and finalising the Census questionnaire in Survey Solutions along with the MBS team (special focus on how to match listing form and individual assignments).
 - i. Develop a procedure for Supervisor checks in the questionnaire.
 - ii. Listing will be ongoing throughout the data collection period- to develop a mechanism to carry out the listing and the survey simultaneously in the same Enumeration Area.
 - c. Verify and if necessary, adapt MBS' data quality assurance plan (i.e., identify potential problems and solutions within census operation plan).
3. Assist the MBS team for the smooth operationalization of census activities (pilot, main census and PES).
 4. Assist MBS team in staff onboarding and management
 5. Assist MBS team in the development of e-learning platform which includes developing training material/ content (slides. Videos/ pictures, quizzes) and other technical development aspects of the platform/website.
 6. GIS integration with Survey Solution including formulating lookup tables and integrating geotiff maps into survey solutions.
 7. Establish mechanism for data protection and data security measures needed for census server.
 8. Train MBS staff on the preparation of do files (STATA & R-software) needed for census operations (assignments to census workers (automated way), to measure daily work progress, coding, etc) (2022)
 9. Oversee the smooth functioning of do files used during census operation and data cleaning (2022).
 10. Develop a template to do the coding (ISIC, ISCO, Atoll, island coding etc.) (2022)
 11. Guidance on the field operation management and workflow management at sub-national level (from island, atoll to main centre). (2021)
 - a. The contractor should develop a management module to monitor data entered into Survey Solutions interviewers from the field on a daily basis for the evaluation of the field enumeration. This has to be automated at enumerator level and supervisor level. The system should allow supervisors to perform the monitoring daily progress of the enumeration in terms of the number of housing units and population enumerated in each enumeration area.
 - b. Make a progress sheet of the number of people covered even if the household is not completed along with the dashboard (including enumeration area, islands, atoll level), centrally. On the job training of MBS staff when preparing the dashboard.
 12. Assess census data quality following PES. (2022)
 13. Capacity building of the MBS staff in all key areas of designing and implementation of Census. (2022)
 14. Build MBS capacity in data editing and imputation using STATA. (2022 & 2023)
 15. Assist MBS team to develop data cleaning, editing and imputation programme for census dataset (2022 & 2023)
 16. Work with the MBS team and ensure the census database is finalised within 6 months of census data collection. Prepare the anonymized final dataset including the labels, data dictionary, in a user-friendly manner. (2023)

The above milestones will contribute to the overall outputs of the 2022 Census as follows:

17. Pilot census conducted with all possible implementation and IT management of the census operation tested; (June 2022)
18. E-learning platform developed with training materials (End of June 2022)

	<p>19. GIS maps integrated into survey solution and ready for field operation in the main census (July 2022)</p> <p>20. Main census data collection operation completed smoothly- with daily updates on the work status. (Sept 2022)</p> <p>21. Online economic census rolled out and completed (Sept 2022)</p> <p>22. Post enumeration survey data collection completed and evaluation of the PES data quality with that of the main census data collection. (October 2022)</p> <p>23. Dataset retrieved for coding and cleaning upon completion of census data collection (2022 & 2023)</p> <p>24. MBS capacity build in STATA (for implementation of census operation and for data processing) for the future census and surveys (2022 & 2023)</p> <p>25. Census preliminary results released on time (6 Oct 2022)</p> <p>Confidentiality:</p> <p>26. The Contractor will have access to confidential data. Sharing these data with the third party is strictly prohibited.</p>
Duration and working schedule:	<p>January to December 2022 (approximately 110 Working days in 2022) which includes:</p> <p>a) 84 Remote working days</p> <p>b) 3 in-country missions comprising of contractor’s staff/personnel:</p> <ul style="list-style-type: none"> – presence in Male’ Maldives for third pre-test (6 days); mission dates to be decided – presence in Male’ Maldives for pilot census (10 days); mission dates to be decided – presence in Male’ Maldives for main census (10 days); mission dates to be decided <p>Approximately 30 days may be required in 2023 under a subsequent contract or amendment for completion of data cleaning, finalising the dataset, and preparation of the dashboard for disseminating census results at island level.</p>
Place where services are to be delivered:	<p>For in-country missions, the Contractor’s staff/personnel will be stationed at Maldives Bureau of Statistics (MBS). For remote support, the Contractor will work with the Maldives Bureau of Statistics (MBS).</p>
Delivery dates and how work will be delivered (e.g. electronic, hard copy etc.):	<p>Milestones, outputs and deliverable target dates will be finalised within 1 week upon recruitment.</p>
Monitoring and progress control, including reporting requirements, periodicity format and deadline:	<p>The Contractor will be briefed and debriefed by UNFPA and the Maldives Bureau of Statistics and is expected to keep in close contact with both agencies via email</p> <p>The Contractor will be responsible for the quality and timeliness of the outputs, but will receive support from Maldives Bureau of Statistics.</p>
Supervisory arrangements:	<p>The Contract will be managed by UNFPA Country Office/ MBS; the output will be assessed by the Maldives Bureau of Statistics and UNFPA APRO.</p>
Expected travel:	<p>Field Mission to Male’, Maldives during the contract period; mission dates to be decided:</p> <p>a) Pre-test - 6 days</p> <p>b) Pilot census – 10 days</p> <p>c) Main census- 10 days</p>

<p>Required expertise, qualifications and competencies, including language requirements:</p>	<p>Primary expertise required: CAPI- survey solutions implementation and experience in working with other countries especially in Census data collection. Knowledge and experience in the local context of Maldives will be an added benefit..</p> <p>Educational background: IT, Programming, statistics or other computer related studies. Advantage will be there if Demography or other social sciences related to population census.</p> <p>Work experience:</p> <ul style="list-style-type: none"> ● Significant experience in working using STATA and Survey Solution ● Significant experience in conducting training in Survey Solutions and STATA ● Integration of statistics data and geospatial information ● Experience in working on small island nations population census and CAPI management. ● Past experience working with the United Nations, World Bank or similar organization is desirable <p>Other competencies:</p> <ul style="list-style-type: none"> ● Project planning, management, implementation and coordination and evaluation ● Excellent communication skills in English language, both oral and written ● Proficiency in statistical softwares such as STATA, R, SPSS, etc.
<p>Inputs / services to be provided by UNFPA or implementing partner (e.g support services, office space, equipment), if applicable:</p>	<p>Contractor:</p> <ul style="list-style-type: none"> ● Fulfil the stipulated in the contract and the ToR through review of documents, email communications, zoom/Skype calls and meetings ● Maintain close contact by email with MBS and UNFPA ● Communicate any complications regarding the assignment as soon as possible ● Provide contact details that allow MBS and UNFPA to get in contact with the contractor’s staff/personnel assigned for the assignment at any time during the contract. <p>Maldives Bureau of Statistics:</p> <ul style="list-style-type: none"> ● Assign a focal point to work with the Contractor ● Provide the relevant documents as required ● Provide data as required for the assignment ● Review and provide comments to the deliverables in a timely manner <p>UNFPA Maldives:</p> <ul style="list-style-type: none"> ● Monitor and facilitate the progress of the assignment ● Review and provide comments to the deliverables in a timely manner ● Facilitate necessary contacts ● Make payments upon completion and acceptance of each deliverable
<p>Other relevant information or special conditions, if any:</p>	<p>The other conditions that may apply in the undertaking of the assignment include:</p> <p>Basis of payment: Payments based on acceptance of the deliverables/milestones based on the first deliverable.</p> <p>Format of outputs: Editable electronic form</p> <p>Language of reports/publications and other documentation and working language in country of assignment: English</p> <p>Ownership of output: Maldives Bureau of Statistics</p>
<p>Signature of Requesting Officer in contracting Office: _____ Date: _____</p>	