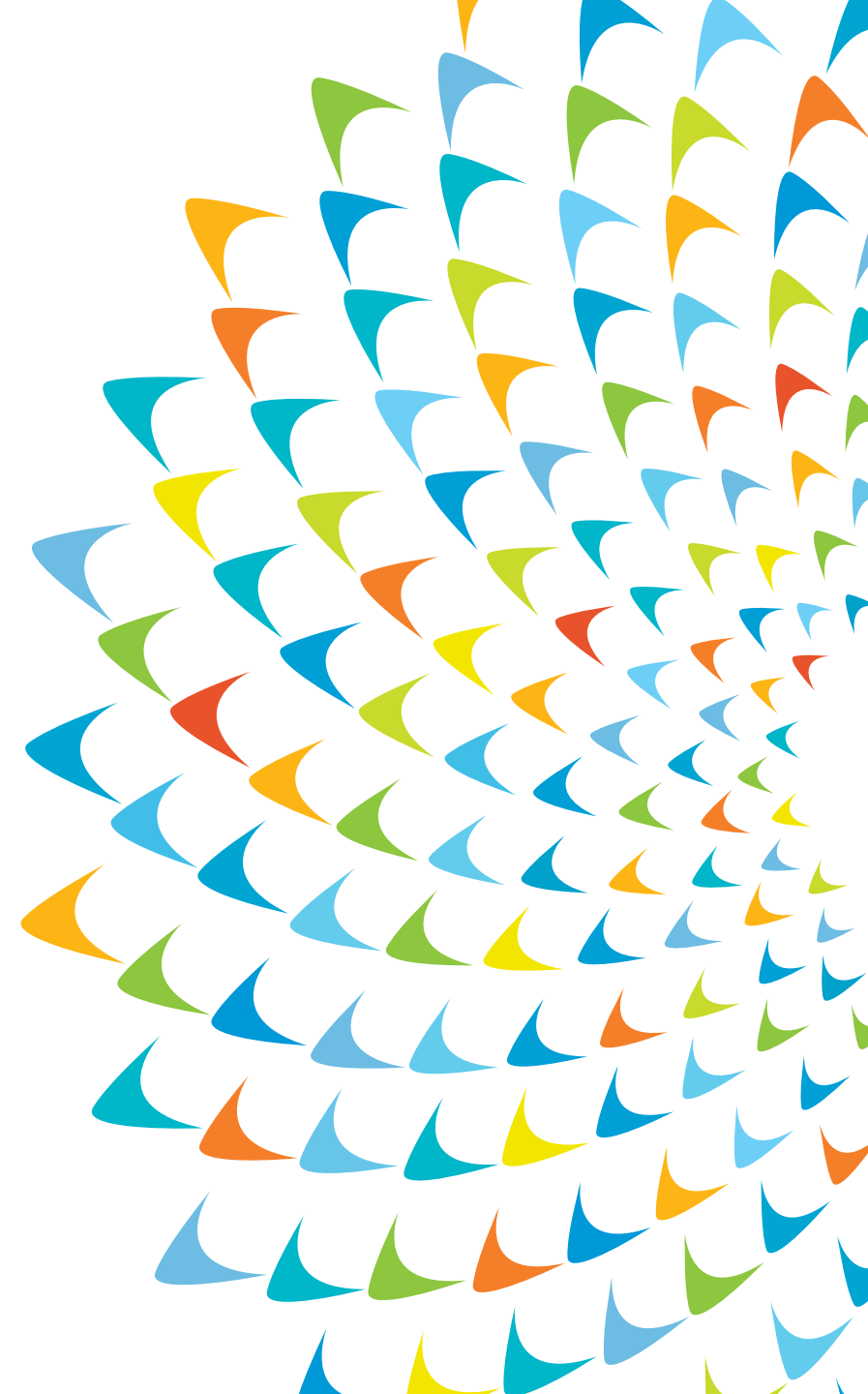




KSTA 9646: Data for Development (Phase 2)

**Agricultural Statistics /
Sampling Component**





KSTA 9646

- Objective:
To enhance the capacity of the national statistical systems (NSSs) of selected DMCs in support of the Sustainable Development Goals (SDGs).
- Intended impact: increased data driven monitoring of development goals and evidence-based policymaking
- Expected outcome: enhanced capacity of NSSs to meet the data requirements of the 2030 Sustainable Development Agenda.
- Expected outputs : (i) **sampling frames**; (ii) national accounts and statistical infrastructure; (iii) labor statistics; (iv) data visualization, anonymization, and exchange; and (v) knowledge sharing to enhance the quality of official statistics.



Sampling Frame / Agricultural Statistics

- Country coverage: **Cook Islands** and Lao PDR
- List Frame – list of all the units of population of interest
 - Cook Islands Census of Agriculture 1988, 2000, 2011, 2021
 - Use of census sampling frame
 - Primary sampling unit (PSU): household
- Area Frame – sampling frame defined using segments
 - Use of remote sensing data
 - Primary sampling units: grids or segments
 - Main advantage: non-overlapping sampling units; completeness of frame can be guaranteed



KSTA 9646: Sampling Frame Component

- Post-Census validation activity
 - Application of sampling techniques and employment of land measurement methods to validate national crop area estimates –using open-source remote sensing data and GIS software
 - Compare the farmer estimates of area with GPS measurements (using GPS device)
- Main Output
 - A methodology on the use of area sampling frame for agricultural statistics
 - Develop survey instruments
 - Conduct training courses on sampling techniques, basic remote sensing, access to open-source satellite data and land use maps, use of QGIS for sampling and area estimation
 - Conduct field work; Collect data with key variables on farmer-report crop area estimate in local units, GPS area measurement of parcels



KSTA 9646: Detailed Activities

- Review agricultural census questionnaire and develop post-census questionnaire
- Development of GPS training materials and field procedures for pilot survey
- Training on Agricultural Area Measurement Using GPS
- Testing land use/land cover map (e.g., in collaboration with ESA)
- Selection of holdings for pilot survey
- Training of Trainers (GPS team) for pilot survey
- Pilot survey for the post-census methodology
- Post-Census data collection / full-scale GPS area measurement



KSTA 9646 - Other Potential Collaborations

Vanuatu National Statistics Office

- Big data analytics – Processing of night time lights
- Small area estimation



Thank you!

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