# 13. Procurement and Financial Management

## Introduction

Funding for population and Housing censuses is the responsibility of government. The census implementing agency should present an activity-based budget to the government for consideration. All census processes including planning, cartographic mapping, enumeration, data processing, analysis and dissemination should be budgeted for in time and a resource mobilization plan put in place. Funding constraints can cause postponements or even cancellations of a census. Additionally, securing partial funds or securing funds too late into the census preparations can push countries to compromise their data collection, data processing and dissemination of census results.

Procurement is an important component to successfully implementing a census. Census procurement planning involves assessing and projecting the procurement needs of a census operation.

### 13.1.1 Comparison of procurement and financial management in the non-digital versus digital census era

The transition from manual, paper-based censuses to digital methodologies in Africa has profoundly reshaped the landscapes of procurement and financial management, it introduces new complexities and costs. The procurement process in the non-digital census era was centered on tangible, non-reusable goods, NSOs faced the task of sourcing extensive printing contracts, purchasing or leasing vehicles to transport materials and personnel to every corner of the country, millions of pens, clipboards, satchels, and other materials for enumerators among others. Procurement processes were often lengthy and bureaucratic, focused on securing the best price for bulk physical goods. The digital era led to the adoption of modern procurement tools like e-procurement platforms to enhance transparency and efficiency. It has opened avenues for innovative cost-saving measures, such as the South-South cooperation seen when Kenya donated tablets to other African nations for their census activities.

Financial management has evolved from managing a massive, temporary workforce and physical supply chain to overseeing large-scale technological investments and dynamic, real-time operations. The financial profile of a digital census emphasizes upfront capital investment and offering new tools for real-time financial monitoring over digital dashboards. Budgets now must new cost centres that account for software licensing, data transmission fees, cybersecurity measures, and extensive technical training for staff.

### 13.1.2 Considerations for procurement and financial management in a digital census

Ensure fairness in the procurement process, it should be free from favoritism, self-interest or preference in judgment and give timely information that is made known simultaneously to all interested parties. The UN P&R rev 4 provides detailed guidance on procurement management, see para 2.226 to 2.232. The procurement planning process should consider the following:

* Have logistical coordination with multiple census activities and counterparts to reduce the risk of encountering problems that may lead to additional costs and delays.
* Have the essential components in procurement planning such as needs assessment, cost estimation and requirement done as the first steps in the procurement process.
* Apply the principle of best value for money, i.e., get the best mixture of technical and financial attributes that create balance between price and performance for efficiency.
* Promote effective competition as a means of ensuring fairness, integrity, transparency and achieving best value for money by developing a procurement strategy, conducting market research of suppliers, applying national procurement regulations, and using formal methods of solicitation.

Based on experience in the 2020 census round, below are some issues that should be considered in ensuring good financial management for a digital census:

Countries should have a high-level census steering committee and one of the main roles in their terms of reference should be resource mobilization to secure comprehensive financial support for census funding.

* There should be more international donors and private sector involvement in trying to fill a financial gap and obtain technical cooperation and assistance. The required funding conditions should be known prior to avoid delays and any inconveniences.
* Utilize cost effective approaches to reduce costs without compromising the quality of data. Recent advances in technology can go a long way in achieving cost reductions, therefore cost- benefit analysis should be utilized during the budgeting process. For example, weighing the cost of purchasing new devices vis a vie leasing out.
* Budget development should utilize information on expenditures from the previous census that should be reviewed and adjusted accordingly. As well as ensuring transparent accounting procedures and financial management electronic systems are in place, given that a clean financial audit report adds credibility and acceptance to the census process and results. Leveraging digital financial services is key to efficient and transparent financial management.
* The census budget should be reviewed, and its performance evaluated against the planned phases. Expenditure should be well documented to ensure that all operations are within the budget and there is efficiency and effectiveness in implementation.

Detailed guidelines for census financial management refer to the UN P&R rev 4 para 2.87 to 2.108.

## 13.2 Key implementation areas for procurement and financial management in a digital census

Successfully executing a digital census in Africa requires a strategic overhaul of traditional procurement and financial management practices. The procurement for a digital census moves beyond simply buying goods; it involves sourcing an entire ecosystem of technology and services in:

* Hardware sourcing, this involves a large-scale procurement of tens of thousands of tablets or smartphones for enumerators. This requires detailed technical specifications, rigorous testing, and planning for accessories like power banks, chargers, and protective cases.
* Software Development and Licensing, NSOs must decide whether to build custom census software or license existing solutions for data collection applications (CAPI), data transmission systems, and real-time monitoring dashboards.
* Procurement must cover the backend systems, including servers for data storage, cloud services, and robust data security infrastructure as well as seamless data transmission.
* Procurement plans must account for areas with poor or no connectivity, potentially requiring devices with offline data storage capabilities and plans for physical data transfer.
* Procurement of specialized services for training a large, temporary workforce on how to use the new digital tools is essential.
* Procure and establishing technical support contracts for helpdesk support and field-level technical assistance is crucial to quickly resolve hardware or software issues during enumeration.

Financial management for a digital census must be agile and transparent, leveraging technology to monitor spending and ensure resources are used effectively. See also census [budgeting](#_Census_Budget).

* Financial planning should consider the total cost of ownership of the technology, including maintenance, support, and potential for re-purposing assets for other statistical activities after the census, which can enhance the value proposition.
* Budgets must be front-loaded to accommodate the high initial cost of technology procurement.
* Budgets must include contingency funds to cover unforeseen costs, such as those arising from procurement delays, equipment failure, or external shocks like the COVID-19 pandemic, which increased costs for several countries.
* Leverage on real-time financial oversight with dashboards as one of the most transformative aspects of a digital census. Financial managers can use real-time dashboards to track enumerator productivity and fieldwork progress against operational plans. This allows for early intervention if teams fall behind, preventing costly delays. Link payments to performance. These digital tools provide transparent, up-to-the-minute data that can be shared with funding partners, improving trust and demonstrating effective stewardship of resources.

## 13.3 Selected country experiences

**Tanzania** conducted its 2022 Population and Housing Census with extensive procurement needs, managed in accordance with government procedures. All procurement activities were authorized by the central census committee and the National Advisory Committee. Financial management was handled within the National Statistics Office (NSO), following government financial guidelines. The government continued to pay salaries for all officials involved in census operations throughout the implementation period, ensuring consistent support and oversight.

**Kenya** appointed a procurement sub-committee a year before the 2019 census enumeration to oversee all procurement activities. This team developed guidelines aligned with the Public Procurement and Asset Disposal Act (PPADA, 2015), ensuring compliance throughout the process. Open tendering was the primary method used, and procurement plans were approved annually by the Board. While most procurement was centralized, exceptions were made for county-level acquisitions, when necessary, with oversight from the sub-committee. Coordination between procurement and technology/data management teams ensured smooth operations, with regular meetings and status reports enhancing monitoring. Stakeholder engagement, particularly with the Ministry of ICT, helped mitigate risks, especially in acquiring mobile devices. Disposal of these devices required careful data removal due to KNBS data security concerns.

Kenya also established a financial management sub-committee within the census Technical Working Committee (TWC) to mobilize and manage resources, primarily sourced from the government. Funds were centrally managed through a dedicated KNBS bank account, with county-level accounts opened for local transactions. Regulations were shared with officers handling funds, and all payments were supported by authorized documentation. Activities such as allowances, venue rentals, material storage, and transportation were funded through these accounts. Post-census, accounting documents—including payment schedules, attendance registers, and meeting minutes—were submitted to both the central finance office and county accountants to ensure transparency and accountability

Link to case studies

**Tanzania**

The 2022 Population and Housing Census required huge amounts of materials of different types to conduct the census successfully. Procurement of equipment and services were done according to government procedures. All procurements were authorized by the central census committee and National advisory committee.

Financial management was handled within the NSO with the overarching government financial management guidelines. The Government continued to pay salaries for all its officials who were engaged in the census operations throughout the implementation period.

**Kenya**

A procurement sub-committee was appointed one year before the census enumeration to handle all procurement activities. The team developed census procurement guidelines in conformity with the current country Public Procurement and Asset Disposal Act (PPADA, 2015) and the relevant regulations, which provided procurement and financial flow guidelines on various aspects of the 2019 KPHC procurement process.

The open tendering method was the main procurement method used during acquisition of the census materials and equipment. Procurement plans were prepared before each financial year and had to be approved by the Board before execution. The process adhered to the detailed approved 2019 KPHC procurement plan. All procurements of goods, equipment, and services for the 2019 KPHC were centrally handled at the headquarters as detailed by the guidelines. However, in exceptional cases where the situation on the ground and logistical challenges dictated that a specific procurement could be undertaken at the County level. In such a scenario the procurement sub – committee advised accordingly to facilitate the activity and ensured that the process adheres to PPADA, 2015 guidelines. At the sub-national level, the county census committees and sub-county census committees were established to oversee implementation of the procurement activities especially acquisition of training facilities and storage facilities.

Synergy existed between different census committees (procurement and technology data management sub-committees) and the procurement division, and user directorates that facilitated the smooth running of the process. There was good communication between the procurement division and the user directorate on item specifications/Terms of reference (TORs) to ensure that any deviations were detected early, and action taken. The user directorate provided adequate specifications/Terms of reference (TORs)as per the requirements to procurement section which ensured timely procurement. Procurement sub-committee meetings appraised the members with census materials requests before they are forwarded to the Director General for approval.

The secretariat scheduled meetings frequently (fortnightly) where status reports were provided and this enhanced monitoring of the procurement progress. A special census procurement file was opened to check and monitor the status of procurement processes to enable proper documentation of all procurements.

Involvement and engagement of relevant stakeholders (Ministry of ICT and others) in the planning process especially in the acquisition of mobile devices addressed any possible challenges and risks that may hinder the performance of procurement activity. This minimized possible challenges and risks that might have hindered the performance of the procurement activity.

Disposal of mobile devices required data removal which consumed valuable time because they could not be disposed of with KNBS data.

A sub-committee of the census TWC was established to undertake financial management for the censuses. The committee was also charged with the responsibility of mobilizing resources from various stakeholders and development partners to support implementation of various census activities and processes. The mobilized resources, were 99% from the government and managed centrally. Regulations were developed which were shared with officers that were advanced some funds to manage the payments at County Levels. KNBS had a bank account dedicated to the census at the headquarters, through which all funds were made. At the subnational level (County) Census Bank Accounts were opened to manage payments at that level. All receipts were acknowledged through the official receipting system and payments were supported by fully authorized documentation. All funds allocated to the Counties were remitted to the County Accounts as AIE, regularly.

Several activities undertaken during the census process were facilitated through imp-rest advanced to members of staff. Funds approval was done in a hierarchical manner- the user requests were first approved by the Director General who forwarded the same to the Director, Corporate Services for processing. Payments that were made through the county census bank accounts included allowances (of ICT supervisors, content supervisors and enumerators, county census committee members, sub-county committee members, village elders, security personnel), payments for training venues and storage of various materials, transporting personnel and materials, among others.

After the Census was completed, approved accounting documents were forwarded back to the Finance office at Real Towers in Nairobi and to the County Accountants’ offices. These accounting documents consisted of signed payment schedules, attendance registers and meeting minutes to account for sitting allowances paid to sub-county committee members while planning for recruitment, undertaking shortlisting, interviews, and approving the list of successful candidates and contacting them.

## 13.4 Challenges and Lessons Learnt

Although financial management guidelines are developed to ease the process of handling census funds, countries can experience challenges that disrupt work. Therefore, mechanisms should be put in place to ensure smooth operations. Kenya faced the following challenges:

* Transfer/ unavailability of mandatory signatories to the census accounts hindered timely movement of funds to facilitate the census activities.
* The Central Bank of Kenya set limitations on the amount of money to withdraw from the bank account, this made the payment processes long and tedious.
* Unrealistic accounting procedures of funds were flaunted, especially since some activities were overlapping and the requirement was to account immediately after every activity.
* When making various payments to the census personnel, there were numerous cases of bank rejections due to dormant or inactive bank accounts coupled with inaccurate bank details.

Although, procurement guidelines are developed to ease the process of handling the acquisition of census materials. Countries experience challenges that can disrupt work as such mechanisms should be put in place to ensure smooth operations. Procurement for goods, works and services for the 2019 KPHC presented some challenges despite the timely planning by the procurement sub-committee, from which lessons are drawn:

* Lack of an in-country market survey to identify large scale production companies to allow for proper planning about whether to procure locally or internationally. If not done, this will cause delay in supplying some items due to the large quantities required yet the contracted suppliers had to import the materials
* Emerging new procurement requirements that were not initially captured in the census procurement plan and budget may arise. For instance, during uploading of maps on mobile devices, those for urban areas failed thus reverted to printing which had not been planned for. There being inadequate printing machines, outsourcing of printing services had to be done instead of printing in-house as planned.

Some of the challenges experienced included in Kenya and in some other African countries:

* Census materials were procured on time, but some other materials were greatly delayed by the procurement process. This was because suppliers had to import almost everything and required several loads to be dispatched to the regions.
* Census materials were delivered in single small batches to the enumeration centers due to shortage of time at a very high cost.
* The shortage of transport means for census materials due to gross under estimations in quantities and budget.
* Some of the equipment, including enumerators manuals, was not printed in sufficient quantities and this led to late dispatch.
* In some areas diaries were not procured on time leading the regional census committees to direct the RCC to buy the equipment to avoid procrastination problem.

## 13.5 Recommendations

Based on the African country experiences, this handbook recommends that:

* Implementing digital payment systems like mobile money and digital transfers for enumerator stipends and allowances reduces administrative overhead, minimizes the risks associated with handling large amounts of cash, and provides a clear audit trail. The use of mobile money for payments can align with broader national goals of promoting digital financial inclusion.
* In addition to having the normal sub national level (county) bank accounts, it is important to open a bank account dedicated only to facilitating census activities at that level. In addition, include the sub national level accountants in the process of managing census funds at that level, they should undergo thorough training on financial management and accounting of funds. They should be involved at an early stage of census planning such as budgeting. This enables more efficient management and accountability of census funds. Managers of the next census should watch against expensive ways of managing the census project by ensuring that procurement is done well ahead of the date of delivery by the suppliers.

Based on the African country experience, this handbook recommends that for a successful census procurement and disposal implementation:

* There should be a timely constitution of the procurement and disposal committee and appointment of its sub-committees such as the Inspection and Acceptance/Rejection Committee (evaluation committee) that ensures that the goods and services are availed promptly. This will enable early planning and coordination of procurement processes. Where necessary external stakeholders should be involved in all stages of procurement for electronic devices.
* There should be strong synergy among the census committees, the user directorates with the procurement division. This should be buttressed with effective communication between the procurement division and the user directorate on item specifications. There should be frequent and regularly scheduled procurement committee meetings to provide status updates that enhance monitoring of progress made in requested materials and avoid unnecessary delays in procurement. Additionally, there should be early identification of risks and forwarding them to the risk management committee for timely mitigation to reduce their probability and likely impact.
* The process of procuring census equipment should be done early before census training to avoid the challenge of getting equipment late. Procurement of publicity materials for the census should be finalized and distributed at least three months before the enumeration period. All the publicity activities should have adequate materials. See challenges faced in [publicity](#_Challenges_and_Lessons).
* In case of delays in procuring tablets, countries should have plan B and it should be reflected at the planning stage. The United Republic of Tanzania had a plan B of using the enumerators’ smartphones when there was a threat of not being able to have enough tablets. The smartphone was tested during pretest and used during training of enumerators in three cities. During recruitment of enumerators, having a smartphone with certain specifications suitable for the census questionnaires was considered as one of the qualifications of the enumerator.
* The procurement of diaries for enumerators should be done at regional level to eliminate the inconvenience of delays.
* In case of delays in procurement, all levels of training should leverage the use of soft copy questionnaires and manuals based on training applications to avoid inconvenience based on printing.