

**PROJECT INFORMATION DOCUMENT (PID)
IDENTIFICATION/CONCEPT STAGE**

Report No.:

Project Name	Ethiopia 2017 Population and Housing Census Support
Region	AFRICA
Country	Ethiopia
Lending Instrument	IPF
Project ID	P161769
Borrower Name	Ministry of Finance and Economic Cooperation
Implementing Agency	Central Statistical Agency
Environment Category	C - Not Required
Date PID Prepared	05-Oct-2016
Estimated Date of Approval	
Initiation Note Review Decision	The review did authorize the preparation to continue

I. Introduction and Context

Country Context

Ethiopia is a large and geographically diverse country, with a total population of about 90 million, and a population growth rate of 2.6 percent (2013). At that rate, the United Nations estimates that the population will reach 130 million by 2025. Ethiopia is projected to be among the world's 10 largest countries in the world by population in 2050. Ethiopia remains one of the world's poorest countries but has achieved high levels of economic growth and made substantial progress on social and human development over the past decade. The country's per capita income of US \$550 (Atlas GNI, 2014) is substantially lower than the regional average of US\$1,257 and among the eleventh lowest worldwide. Ethiopia is ranked 173 out of 187 countries on the Human Development Index (2014) of the United Nations Development Programme (UNDP).

The last decades show a Government committed to extricating its population from poverty. While Ethiopia has achieved measurable progress in economic, social and human development, the main challenge is to maintain progress and implement changes that will enable it to meet its ambitious goals. The Government of Ethiopia (GoE) has completed its Growth and Transformation Plan (GTP) (2010/11-2014/15), which set a long-term goal for Ethiopia to become a middle income country by 2025, with growth rates of at least 11.2 percent per year during the plan period. To achieve the GTP goals and objectives, the GoE has followed a developmental state model with a strong role for the government in certain aspects of the economy. It has prioritized key sectors such as industry and agriculture as drivers of sustained economic growth and job creation. The GTP also reaffirms the GoE's commitment to human development. The programs of development partners (DPs) are broadly aligned with GTP priorities. A successor to the GTP, covering 2015/16 to 2020/2021, is being finalized.

Ethiopia is undergoing a fast demographic transition when compared to some other countries in the

region. The proportion of the population in working ages is increasing fast- a trend presenting both a challenge and an opportunity. Despite progress in human development, further investments are needed in education, health and social protection in order to make further contributions to poverty reduction. The population remains largely rural, with little mobility to urban areas. There are unique features of poverty that need to be further understood, including urban poverty which is closely associated with unemployment; rural poverty which is closely associated with marginal agricultural production and to be in remote locations.

Sectoral and Institutional Context

Ethiopia has so far conducted three Population and Housing Censuses (PHC). The first census was conducted in May 1984 and the second and third were conducted in October 1994 and May/ November 2007, respectively. The Country has also conducted an Inter-censal Survey in 2012. The fourth census is planned for November, 2017.

The 2017 census will provide critical information, including number of people who can read and write; level of education attained by those who have been to school; number of school age children presently not in school; population density; fertility rate per woman; infant mortality rate; maternal mortality rate; and level of disabilities and which age groups or areas are mostly afflicted, number of employed and unemployed persons; levels of female education and employment; number of households with access to electricity supply, sources of water supply. Such information will assist the government in planning for education, health, in job creation, in formulating appropriate intervention strategies to improve gender equality, and come up with effective housing policies, as well as improve availability of housing and amenities.

The legal basis for census is the 1995 constitution of Government of the Federal Democratic Republic of Ethiopia that stipulates the conduct of a population census once every ten years. According to the proclamation No. 442/2005, one of the mandates of the Central Statistical Agency is to collect, process and disseminate the necessary socio-economic and demographic statistical data through censuses, sample surveys, continuous registration and administrative recording systems. Moreover, the Second National Strategy for the Development of Statistics (NSDS II) (2015/16-2019/20) (document submitted for government approval) has included the 2017 Population and housing census as one of the priority activities under Strategic Theme 2: Data Development and Sub-Theme 2.3: Enhancing the coverage and capacity of the data, identified as necessary to produce the desired impact on the NSS and attainment of the Vision of the NSDS II.

Relationship to CAS/CPS/CPF

The proposed Grant is consistent with the Country Partnership Strategy which underscores the importance of a stronger Census Statistical Agency (CSA) in data production. The grant will allow the World Bank, CSA, and United Nations Population Fund (UNFPA) to strengthen their collaboration in data collection and capacity building efforts.

II. Project Development Objective(s) Proposed Development Objective(s)

The development objective of the requested Grant is to support Ethiopia in the successful implementation of the Population and Housing Census (PHC) planned for 2017. The Grant will support the Central Statistical Agency (CSA) and tUNFPA Population Fund (UNFPA) to implement a newly developed census enumeration methodology that will ensure complete and accurate enumeration of the entire population. The 2017 PHC will collect information on all persons present within the borders of Ethiopia on the census reference date. Unlike the previous census (es) the 2017 PHC will be based on one reference date countrywide.

Key Results

The Grant will help to strengthen the national capacity for data collection, processing, dissemination and utilization, including the use of up-to-date Information Communication Technology (ICT). The Grant will directly support the implementation of the population census identified as a priority in the National Strategy for the Development of Statistics (NSDS). The conduct of a census every ten years is one of the most important mandates of the Central Statistical Agency and is part of the Second NSDS (NSDS II) (2015/16-2019/20).

Through the implementation of the census, the country will be able to generate current and reliable statistics on the population, in terms of demographic, social and economic characteristics, housing conditions and household amenities that will be used for development planning, policy formulation and services delivery as well as for monitoring and evaluating the progress and outcomes/impact of programs implementation. In this line, specific areas of support to be provided through the Grant include: long term technical assistance for census cartography/GIS methodology development; improvement of census cartography/GIS infrastructure; and support additional training of census cartography/GIS personnel. All these activities are essential for accuracy of final population count.

III. Preliminary Description

Concept Description

The Grant would support key activities that must be implemented in preparation of the census. These will include improvements in technology for census cartography and Geography Information Systems (GIS) development which are an essential preparatory activity for the census exercise as the success of any census is critically dependent on the accuracy of the cartographic maps. Accompanying the mapping activities will be training of CSA and other staff in cartographic and GIS methodology.

Data capture under the previous censuses had been done using paper based questionnaires. In planning ahead to the Ethiopia 2017 Census, a mix of technology has been put in place to assure quality and timely results. For the Ethiopia 2017 Census, hand-held devices will be used for data capture with at least 160,000 devices being required for enumeration alone. These devices will also be used in other downstream census activities, or in other large scale data generation activities at CSA and beyond upon completion of the census program. Furthermore, technologies will be introduced to support the elaborate process involved in delineating an estimated 150,000 to 160,000 census enumeration areas (EAs) countrywide.

The cartographic process will be modeled on the use of mobile GIS technology to ensure complete and accurate coverage of the vast frontiers (1.1m sq. km) and challenging topography of Ethiopia in time for the enumeration. ArcGIS for Windows Mobile software will be used in conjunction with GPS-enabled PDAs (Trimble Juno 3B) to gather GIS-based information for EA maps production. In addition, high resolution satellite imagery (SPOT - 1.5m/6m Pleiades for rural and 50cm for

urban areas) will be used to enhance pace and quality of the EA maps production. The cartographic activities will also employ the use of additional Apps (Dashboard & work force manager) installed on the ArcGIS platform to promote effective deployment, task distribution and progress monitoring and reporting.

The main components of the proposed Grant are below:

1. Technical assistance in cartographic and GIS Methodology development

The Ethiopian government has adopted mobile GIS technology for the 2017 Census. However, CSA technical staff have little experience to implement the technology (none of the staff has been involved in the census hitherto). The only exposure they have so far came through study tours GIS staff made to Brazil and Cape Verde. The only formal training on use of PDAs to collect data (with a GIS component) was attended by a couple of CSA staff in South Africa for a week, supported by FAO. This is inadequate and, therefore, cannot support the skill-intensive activities that mobile GIS technology demands.

Accordingly, this activity partly entails the recruitment of a cartographic/GIS specialist who will provide responsive and timely overall technical assistance and oversight on implementation of all census cartography/GIS related activities. The ArcGIS software suite already supplied and being used requires further re-engineering to be fully adapted to CSA's needs. Thus, the technical assistance will allow for the support CSA staff needs to resolve outstanding technical challenges (e. g. software upgrade and customization, data synchronization and system automation), advise CSA on mapping methodology amendment and development, identify, draw up and lead implementation of additional capacity building needs, and establish pragmatic data quality assurance mechanisms and fields monitoring and reporting framework. The cartographic / GIS specialist will be recruited through competitive bidding in the global market place in accordance with UN procurement due process to assure quality technical assistance and value for money. The UN's hiring procedures for long term consultants will guarantee successful recruitment of the right skills for the needs at hand.

2. Improved cartographic infrastructure

The existing census mapping methodology will be amended to enhance quality and pace of map production. This will require, among other things, acquisition of additional Bluetooth and GPS enabled hand-held data loggers. At least 500 devices will be required to facilitate the operations of 100 or so teams to be added (each team has one supervisor and six GIS assistants). Technical experts will be consulted on appropriate and cost-effective devices.

3. Technical capacity building of CSA staff

Due to high turnover of staff at CSA, none of the current CSA staff managing the censuses processes has been involved in census implementation previously. Because census cartography and GIS development is an extremely high skill all CSA technical staff will require conceptual and hands-on training so as to leverage the optimal benefits of the use of new technology. In full particular, full capacity building in the following critical areas is inevitable:

- (¢ Geodatabase development and management
- (¢ EA maps production and concatenation
- (¢ Field-office work flow management

- (ç Network security and administration
- (ç Disaster preparedness
- (ç Data documentation and archiving
- (ç Spatial data analysis

The capacity building programs will strengthen the skills of CSA staff to effectively implement all the phases of the census (pre-enumeration, enumeration and post-enumeration) activities, as well as support other national statistical system activities such as upcoming agricultural census and national surveys. Further, the skills can and will be shared with other countries needing similar support through the South-South cooperation initiatives, and of which CSA is already a big beneficiary (Ethiopia 2017 Census cartographic activities were kick-started through devices (GPS-enabled data loggers) and technical assistance provided by Namibia Statistics Agency through the South-South Cooperation arrangement). Quite a few NSOs have already expressed interest to visit CSA when they start preparing for their census to understudy Ethiopia's census cartography and GIS methodology.

4. Geodatabase development and management and field supervision

The CSA needs to collect and manage the GIS data through a data base system that will ensure operational efficiency in work flow management and quality and timely production of EA maps. To this end CSA requires to develop a geodatabase through which project downloads, uploads, editing/validation and compilation will be accomplished. The geodatabase will provide additional advantages to census operations through linkages with other GIS-platform applications to facilitate subsequent census processes/phases (e.g. data processing, analysis and dissemination).

The development of the Geodatabase will require an external/international IT/data processing expert to work with the GIS Specialist and CSA GIS staff. Once developed the geodatabase will be implemented both at head office and branch offices across the country. Regular monitoring through scheduled field monitoring visits (FMVs) will be required for optimum and sustainable implementation and benefits thereof.

5. Training of additional cartography/GIS field personnel

The additional 100 or so teams (or at least 700 field mapping personnel) recruited to enhance the pace of EAs production related activities must undergo comprehensive training and field practice (45 days, or 6 weeks) to bring them up to the required skill levels before embarking on field mapping. Three international experts (Cartography, GIS & IT/data processing experts) will be hired for 3 weeks to train selected CSA staff (TOT) who, in turn, will train the field mapping personnel.

6. UNFPA grant administration costs

A standard fee of seven percent of the entire cost of every donor funded program will be levied by UNFPA head office to offset costs related to the program administration, including project review and audit.

IV. Safeguard Policies that Might Apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		✗	
Natural Habitats OP/BP 4.04		✗	

Forests OP/BP 4.36		x	
Pest Management OP 4.09		x	
Physical Cultural Resources OP/BP 4.11		x	
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12		x	
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	0.5	Total Bank Financing:	0
Financing Gap:	0		
Financing Source			Amount
Trust Fund for Statistical Capacity Building			0.5

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