

Availability of Official Data to Report on Sustainable Development Goals (SDGs) Land Tenure Security Indicators 1.4.2 and 5.a.1 in Kenya





IMPLEMENTING
THE NEW
URBAN AGENDA

Availability of Official Data to Report on Sustainable Development Goals (SDGs) Land Tenure Security Indicators 1.4.2 and 5.a.1 in Kenya



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Farmer harvests his crops near Kisumu, Kenya © Peter Kapuscinski/ World Bank Photo Collection/ Flickr

EXECUTIVE SUMMARY

The international community recognizes land tenure security as both a strategy and commitment to achieving the 2030 Agenda for sustainable development and its related Sustainable Development Goals (SDGs), the New Urban Agenda (NUA), regional development blueprints such as Africa's Agenda 2063 among other national and sub-national development frameworks. It is against this background that in September 2015, specific SDG indicators were adopted to measure land tenure security through access to, ownership of and control over land: Under SDG 1 on Poverty Eradication, indicator 1.4.2 measures the ***"Proportion of total adult population with secure tenure rights to land, with (a) legally recognized documentation and (b) who perceive their rights to land as secure, by sex and type of tenure"***. Moreover, under SDG 5 on Gender Equality and Empowerment of Women and Girls, indicator 5.a.1 measures the ***"(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure"***. Monitoring and reporting on these indicators at national and global levels requires United Nations member States to produce reliable, accurate, timely and disaggregated data and information.

This report is part of a collaborative project on "Enhancing National Statistical Offices' Capacity to Collect Land Tenure Security Data and Report on SDG Indicator 1.4.2" undertaken since July 2020, aimed at strengthening national statistical systems to measure, monitor and report on progress in the implementation of the land-related

SDGs in four pilot countries: Kenya, Rwanda, Tunisia and Iraq. For Kenya, this report not only provides useful information on availability of official data for measuring and reporting on SDG indicators 1.4.2 and 5.a.1 but also preliminary analysis of the existing data to assess land ownership dynamics.

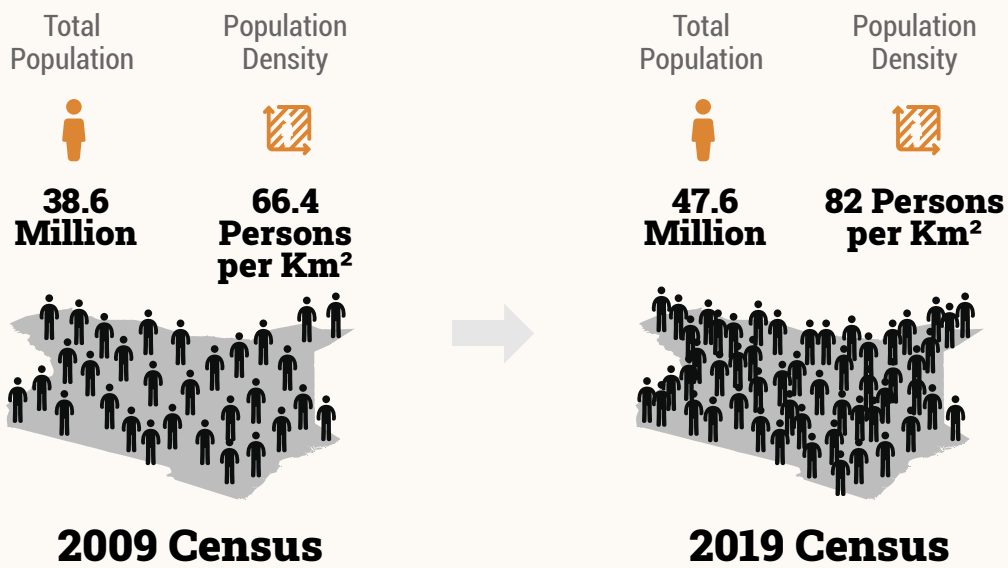
Overall, there exists relevant survey and administrative data and information within the Kenya National Bureau of Statistics (KNBS) and other national data agencies and ministries that can provide insights to the status of land ownership and tenure security in the country. Relevant national surveys conducted regularly by KNBS that were examined include inter alia, the Kenya Demographic and Health Survey (KDHS), the Kenya Integrated Household Budget Survey (KIHBS), and the Kenya Continuous Household Budget Survey (KCHBS).

Despite their inherent value, existing data from KNBS are limited by the nature of their scope, the type of data collected and related level of disaggregation, thus, present significant gaps in comprehensive monitoring and reporting of SDG indicators 1.4.2 and 5.a.1. To address these gaps, therefore, and as required in producing data for measuring and monitoring the two SDG indicators, it is imperative to integrate questions on land tenure security - from the globally approved joint module for collecting data and reporting on SDG indicators 1.4.2 and 5.a.1 - in relevant upcoming national surveys to collect relevant data on SDG indicators 1.4.2 and 5.a.1. This requires enhanced collaboration between KNBS - the primary government agency for collection, analysis and dissemination

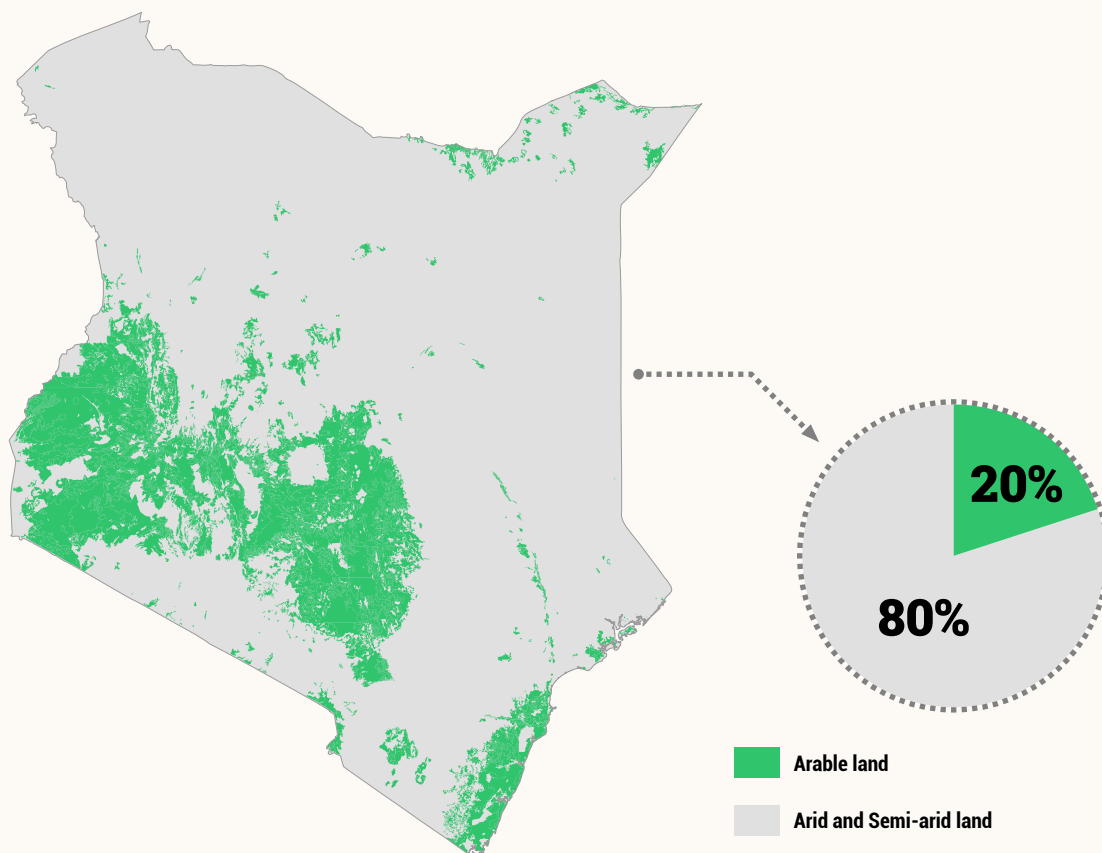
of official statistics in Kenya and the Ministry of Lands and Physical Planning (MoLPP) as well as with custodian agencies for these indicators i.e., UN-Habitat and the World Bank (co-custodians for SDG indicator 1.4.2) and FAO (custodian for SDG indicator 5.a.1). This will facilitate understanding of the data requirements of the two indicators and the data collection and reporting process, thereby enhancing prospects and sustainability of reporting on the indicators and assessing the impact of land programs and policies in Kenya. In general, to precisely capture and monitor the status of land tenure security in the country through the two SDG indicators, it is important to promote continuous triangulation of administrative data from MoLPP and data collected by KNBS through surveys. As such, the launching of the Ardhisasa platform – Kenya's Land Information Management System (LIMS) in April 2021 is a great milestone in enhancing accessibility of land-related data for reporting on regional and global commitments such as Africa's Agenda 2063 and the 2030 Agenda for Sustainable Development. The platform will be critical in providing updated information on age, sex, region and geographical location of parcels once the digitization process is complete. Further, enhanced coordination of Kenya's National Statistical System (NSS) will be essential in facilitating data flow across the various ministries/ stakeholders not only to ensure comprehensiveness in reporting on SDG indicators 1.4.2 and 5.a.1 but also to assess the impact of land policies and programs in the country.

LIST OF ABBREVIATIONS

ANES:	Agriculture Nutrition and Environment Committee
ESTeC:	Environment Statistics Technical Committee
FAO:	Food and Agriculture Organization of the United Nations
GLTN:	Global Land Tool Network
GUO:	Global Urban Observatory
IAEG-SDGs:	Inter-agency and Expert Group on SDG Indicators
KCHSP:	Kenya Continuous Household Survey Programme
KDHS:	Kenya Demographic and Health Survey
KENHA:	Kenya National Highways Authority
KIHBS:	Kenya Integrated Household Budget Survey
KIPPRA:	Kenya Institute for Public Policy Research and Analysis
KNBS:	Kenya National Bureau of Statistics
KNHS:	Kenya National Housing Survey
KENHA:	Kenya National Highways Authority
KPHC:	Kenya Population and Housing Census
KRA:	Kenya Revenue Authority
KSDS:	Kenya Strategy for Development of Statistics
KURA:	Kenya Urban Roads Authority
LIMS:	Land Information Management System
MDAs:	Ministries, Departments and Agencies
MoALF:	Ministry of Agriculture, Livestock & Fisheries
MoLPP:	Ministry of Lands and Physical Planning
MoU:	Memorandum of Understanding
NASSEP V:	Fifth National Sample Survey and Evaluation Programme
NEMA:	National Environment Management Authority
NLC:	National Land Commission
NSS:	National Statistical Systems
NUA:	New Urban Agenda
PDPs:	Physical Development Plans
QMS:	Quality Management Systems
TWC:	Technical Working Committee



Arable land in Kenya



Data source © Kenya Population Situation Analysis of 2013 conducted by National Council for Population and Development (NCPD)

Map source © Food and Agriculture Organization (FAO). 2000. Africover Multipurpose Land Cover Databases for Kenya. www.africover.org. Rome, Italy:FAO.

A farmer tilling his land, Kisumu, Kenya © Peter Kapuscinski/ World Bank Photo collection/ Flickr



1. INTRODUCTION

The importance of land in Kenya cannot be overemphasized. Given that agriculture is the backbone of Kenya's economy- contributing up to 34% to Kenya's GDP (KNBS, 2020) it is imperative that responsible land governance for sustainable agriculture be prioritized. The success of Kenya's short-term and long-term development plans inter alia the Big Four Agenda and Vision 2030 are heavily reliant on good land management and responsible land governance. The Big Four Agenda for instance, focuses on Food Security, Affordable Housing, Affordable Healthcare and Manufacturing all of which are hinged on land governance particularly for food security and affordable housing which are strongly and directly correlated to land governance, management and secure land tenure (Government of Kenya, 2020)¹. Furthermore, Kenya's Vision 2030² has three pillars: Economic, Social and Political. Further interrogation of each of these pillars reveals that most of the proposals in this development blueprint have a direct correlation to responsible land governance, use and management.

Land is a key economic resource inextricably linked to access to, use of and control over other economic and productive resources. However, in Kenya, the value of land goes beyond economic purposes to include social and cultural relationships which individuals and communities have with their land. For this reason, the increased demand for land given the growing population has occasioned land-related displacements which have plagued Kenya since the colonial period (Economic Commission for Africa, 2004)³. Decades after independence, there is still great emotional attachment to land in Kenya with evident discontentment over land ownership which has been at the core of perennial conflicts and tribal clashes.

As of 2019, Kenya's population was enumerated at 47.6 million up from 38.6 million in 2009 (KNBS, 2019). The trend shows that the Kenya's total population has been increasing by approximately one million people every year. Subsequently, the population density also increased from 66.4 persons per square kilometer in 2009

to 82 persons per square kilometer in 2019. This is an indication that there is increasing stress on land from the growing population, hence the need for strengthening land governance and tenure systems to optimize land use and management in Kenya. This is especially because of Kenya's 582,646 square kilometers, 80 per cent is arid or semi-arid, leaving only 20 percent of arable land (Kenya Population Situation Analysis)⁴. Therefore, it goes without saying that Kenya's social, economic and political development is by and large dependent on responsible land governance and secure land tenure.

At the global level, land tenure security has been recognized as highly relevant to the achievement of the 2030 Agenda for sustainable development and its related Sustainable Development Goals (SDGs), the New Urban Agenda (NUA), Africa's Agenda 2063 among other regional and global development frameworks. This is evidenced by the identification and inclusion of specific targets and indicators under Goal 1 on poverty eradication and 5 on gender equality and women empowerment to

analyze land governance issues and the impact of secure land tenure rights on poverty eradication and gender equality. Under SDG 1, target 1.4 aims to **ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance.** To monitor country level progress towards achievement of target 1.4, SDG indicator 1.4.2 measures the **Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure.**

Under SDG 5, target 5.a directs countries to undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws. Under target 5.a, SDG indicator 5.a.1 measures the (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure.

In many countries globally, the requisite data for reporting on SDG land tenure security indicators 1.4.2 and 5.a.1 is either not readily available or available in varying formats that

may not be compared in a meaningful way across countries. Many National Statistics Offices including in Kenya collect fragmented data on land tenure security which poses aggregation challenges to enable concise and precise reporting on SDG indicators 1.4.2 and 5.a.1. To facilitate collection of nationally applicable and globally comparable data on land tenure security therefore, necessitates support to member States to build and strengthen their national statistical systems (NSS) to apply appropriate approaches and methodologies to produce reliable, accurate and timely data and information for monitoring and reporting on land tenure security in the SDGs framework. As part of this capacity building and or strengthening efforts, UN-Habitat- a co-custodian agency of SDG indicator 1.4.2 - through its units - the Global Land Tool Network (GLTN) and the Global Urban Observatory (GUO) - has developed a collaborative project "Enhancing National Statistical Offices' Capacity to Collect Land Tenure Security Data and Report on SDG Indicator 1.4.2" to strengthen national statistical systems to measure, monitor and report on progress in the implementation of the land-related SDG targets.

Implementation of this project follows the finalization of a globally approved methodology that provides critical methods and questions that can be integrated in national surveys, censuses and other data collection activities to facilitate data collection for monitoring and reporting on SDG indicators 1.4.2

and 5.a.1. The joint methodology⁵ is accessible in five United Nations official languages: English, French, Spanish, Russian and Arabic. For Kenya, this project will enable the Kenya National Bureau of Statistics (KNBS) to regularly produce timely, reliable and comparable data for evidence-based decision making on land governance and tenure security for sustainable development. The data will be used to inform policy and allow for the assessment of specific outcomes and practical priorities for further improvements of tenure security at the country level.

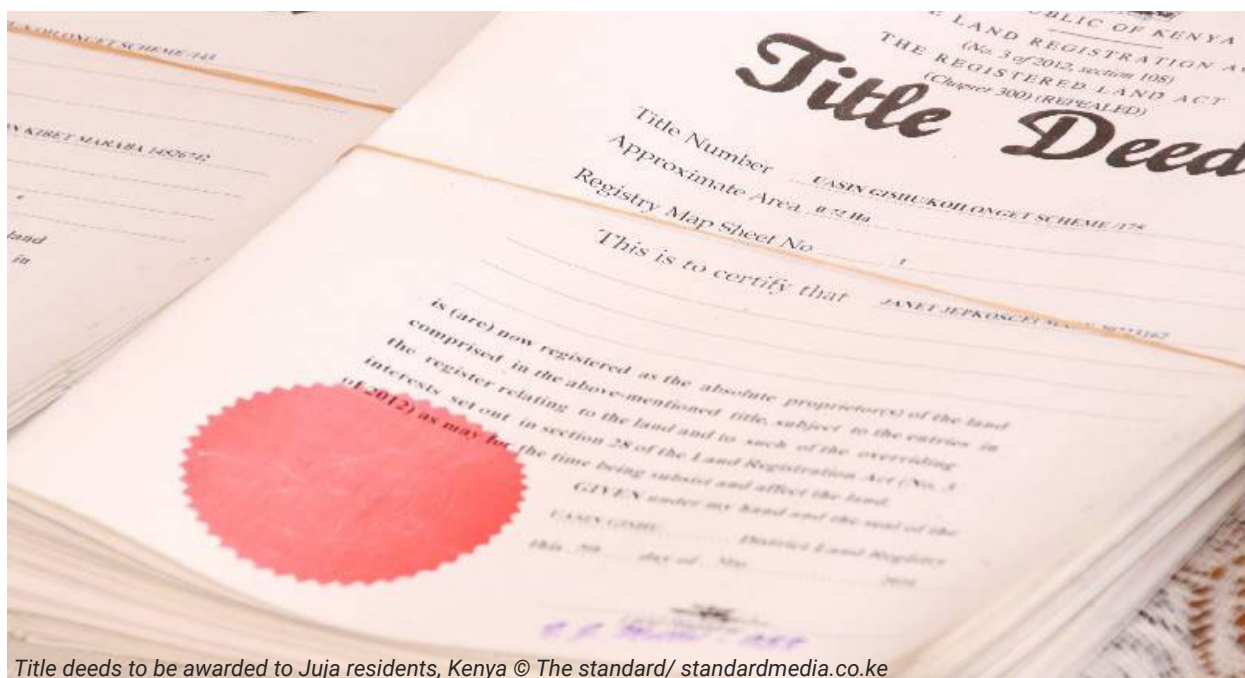
As part of the project activities, this report provides an assessment of data availability on SDG indicators 1.4.2 and 5.a.1 in Kenya including any other information on existing surveys, censuses and administrative sources that could provide data on the indicators. The assessment sought to identify available data in the repositories of KNBS, Ministry of Lands and Physical Planning (MoLPP) and the Ministry of Agriculture, Livestock & Fisheries (MoALF) for monitoring and reporting on the two indicators. The report is compiled based on a desk review of available documents and discussions with staff from the KNBS and the MoLPP⁶ and preliminary analysis of existing data. Apart from the introduction, the remainder of the report is structured as follows: Section 1 provides an assessment on land data availability; section 2 provides an analysis of existing quantitative data and section 3 consists of conclusions and recommendations.



SDG Indicator 1.4.2 "Proportion of total adult population with secure tenure rights to land, with (a) legally recognized documentation and who (b) perceive their rights to land as secure, by sex and by type of tenure"



SDG Indicator 5.a.1 "(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure"



Title deeds to be awarded to Juja residents, Kenya © The standard/ standardmedia.co.ke

2. ASSESSMENT OF LAND DATA AVAILABILITY

A. The Role of Kenya National Bureau of Statistics (KNBS) in the National Statistical System in Kenya

The Kenya National Bureau of Statistics (KNBS) is the principal Government agency established under the Statistics Act (2006) with the mandate of collecting, analyzing and disseminating statistical data. Moreover, it is also the custodian of official statistical information in Kenya and is responsible for maintaining a comprehensive and reliable national socio-economic database. This is achieved by conducting censuses and surveys regularly and on ad hoc basis as well as compiling data from the administrative sources. Additionally, KNBS is responsible for planning, authorizing, coordinating and supervising all official statistical programmes undertaken within the NSS. To do this, KNBS collaborates with and supports other national institutions in the production of official statistics.

KNBS collaborates with respective Ministries, Departments and Agencies (MDAs) of the government of Kenya in all their stages of official data

collection, i.e. from the development of data collection instruments, training of enumerators, supervision and coordination of data collection, data management and analysis, reporting and dissemination. This is done through the National Statistical System (NSS) under which each thematic area has a Technical Working Committee (TWC) comprised of data users, suppliers and producers. In these committees, official data is provided, discussed and validated. Submission of administrative data by MDAs to KNBS is guided by agreements or Memorandum of Understanding (MoU) which are signed by KNBS and the respective ministry, department or agency. KNBS and the respective MDAs agree on the format of data templates and the structure of data sharing. In cases where there are data gaps, surveys are collaboratively conducted to obtain data.

The roles played by the MDAs is the provision of technical support when necessary, collation and compilation of

administrative data which is published in the annual economic survey and pooling of finances and expertise when conducting surveys/censuses in their respective areas. KNBS also engages the respective MDAs to review and validate the data through the TWC before the data is disseminated and published. Data from the MDAs is submitted to KNBS either monthly, quarterly, half yearly or annually as per the MoU.

The level of compliance by MDAs is very high because KNBS is the custodian of official statistics as entrenched in the Statistical Act of 2006- which gives the bureau the mandate to collect, compile, analyze and disseminate official statistics on behalf of the Government of Kenya. KNBS does not issue sanctions or incentives for noncompliance of data provision. Instead, it strives to have a cordial relationship with data providers, producers and users. In its efforts to meet the data demands, KNBS

releases various publications and statistics on socio economic indicators including Economic Survey, Statistical Abstract, Quarterly Gross Domestic Product, Consumer Price Indices (CPI) and Inflation Rates, Producer Price Index, Leading Economic Indicators among others. KNBS disseminates publications, statistical releases and reports which can be obtained from the KNBS website. Additionally, there are also portals in the KNBS website⁷ where users and the general public can access the data. Most of the data is disaggregated by area of residence (rural/urban) and sex wherever possible and KNBS is able to meet about 80 per cent of the data demand.

For MDAs that have set up systems for data collection, KNBS through its NSS coordination role has put strategies in place to ensure quality control. This is mainly guided by the Kenya Strategy for Development of Statistics (KSDS)⁸ which is a multi-year plan for

the NSS covering 2019/20 –2022/23. One of the strategic focus areas for the KSDS is improving quality of data through eliminating existing data gaps, promoting the use of statistical standards and best practices, and development and implementation of the Kenya National Quality Assurance Framework for the NSS. Through this, there is a framework to designate statistics as official.

Further, KNBS engages MDAs to ensure data quality through:

- Statistics Act, 2006
- Capacity building through TWCs and other means
- Technical assistance missions in different areas to meet relevant international standards
- Trainings on the use of internationally adopted data collection systems
- Reviewing and updating the data collection instruments

- Application of the Quality Management Systems (QMS) framework
- Setting out the roles and responsibilities of data-producing agencies in the NSS
- Encouraging MDAs to set up statistical units and employment of statisticians

The key challenge faced by KNBS in providing data for decision-making is budget constraints for collecting data. Key priority areas for interventions to improve capacity to generate and use data by MDAs are:

- Conducting trainings and skills development on data collection, compilation and analysis
- Provision of adequate infrastructure such as computers and data softwares
- Prioritization of funding and setting up of a budget for statistical activities



A woman at her home, Kisumu, Kenya, © Peter Kapuscinski/ World Bank Photo Collection/ Flickr

B. Assessment of Data Availability on SDG Indicators 1.4.2 and 5.a.1 from Relevant Surveys and Censuses in Kenya

The assessment of data availability on land tenure security indicators from surveys and censuses conducted by KNBS in the recent past sought to ascertain the extent to which data on land tenure security was collected and whether the available data is responsive to the reporting needs of the two indicators. By definition, SDG indicator 1.4.2 considers the proportion of total adult population with secure tenure rights to land, with; (a) legally recognized documentation; and (b) who perceive their rights to land as secure, by sex and by type of tenure.”

On the other hand, the reference population for indicator 5.a.1 is the total adult agricultural population⁹. Therefore, by definition, SDG indicator 5.a.1 measures:

- a. Proportion of total agricultural population with ownership or secure rights over agricultural land by sex; and
- b. Share of women among owners or rights bearers of agricultural land, by type of tenure

Assessment of data availability on the two indicators was done from surveys and censuses that KNBS has undertaken since 2010. This is in line with the 5-year period (2010-2014) adopted by Kenya as the baseline for monitoring SDG indicators. The assessment was conducted on surveys and censuses that had questions on land ownership, use and management and/or agriculture. These include:

- a. the 2014 Kenya Demographic and Health Survey (KDHS),
- b. the 2015/16 Kenya Integrated Household Budget Survey (KIHSB),
- c. the 2019 Kenya Population and Housing Census (KPHC) and
- d. the Kenya Continuous Household Survey Programme (KCHSP).

The 2014 KDHS included questions on land ownership at household and individual level. The other surveys and census asked the questions on land ownership, use, management and agricultural activities at household level.

1. The 2014 Kenya Demographic and Health Survey (KDHS)

The **2014 KDHS**¹⁰ was the sixth Demographic and Health Survey (DHS) to be conducted since 1989 to provide data for monitoring the population and health situation in Kenya. The objective of the survey was to provide estimates of maternal and child health, marriage, sexual activity, fertility, childhood and maternal mortality, family planning, breastfeeding, nutrition, HIV/AIDS and other sexually transmitted infections, and domestic violence.

The sample for the 2014 KDHS was drawn from a master sampling frame, the Fifth National Sample Survey and Evaluation Programme (NASSEP V) which is used to conduct household-based surveys in Kenya. A total of 39,679 households were selected for the sample from 995 clusters in rural areas and 617 in urban areas. Of these households, 36,430 were successfully interviewed, translating to a household response rate of 91.8 percent.

The 2014 KDHS sample was divided into two subsamples whereby

households were interviewed with either a long or short household questionnaires. Selection of these subsamples was done within a cluster where a total of 25 households were selected for the interview and one in every two households was selected for the long questionnaires, and the remaining households were selected for the short questionnaires. Hence, the survey used five questionnaires to collect data: (1) a Long Household Questionnaire, (2) a short Household Questionnaire, (3) a long Woman's Questionnaire, (4) a short Woman's Questionnaire, and (5) a Man's Questionnaire.

In one subsample, households were interviewed using the long Household Questionnaire and all women in that household who were 15-49 years participated in the individual interview through the long Woman's Questionnaire and men aged 15-54 years were interviewed using the Man's Questionnaire. In the other subsample, households were administered the

short Household Questionnaire and women in those households aged 15-49 were interviewed using the short Woman's Questionnaire.

Short household and short woman's questionnaires contained a subset of questions from the long questionnaires that were required to measure the priority indicators at the county level. Therefore, data collected in both the full and the short questionnaires can produce estimates up to county level while data collected in long questionnaires can only produce estimates at the national, rural/urban, and regional levels. During the development of the questionnaires, input was sought from various organisations that had interest in the resultant data to discuss the questionnaire design. A total of 17,409 households were interviewed using long questionnaires while 19,021 were interviewed using short questionnaires. In the households selected for and interviewed using the long questionnaires, a total of 15,317

women aged 15-49 were identified as eligible for the long Woman's Questionnaire, of whom 14,741 were interviewed, generating a response rate of 96 percent. A total of 14,217 men aged 15-54 were identified as eligible in these households, of whom 12,819 were successfully interviewed, generating a response rate of 90 percent. For households selected for and interviewed with the short questionnaires, a total of 16,855 women were identified as eligible for the short Woman's Questionnaire, out of which 16,338 were interviewed, yielding a response rate of 97 percent. In total 31,079 women aged 15-49 and 12,819 men aged 15-54 were interviewed.

The 2014 KDHS had land-related questions at household level and individual level. The household questionnaire had three questions on land ownership. The questions are:

- Does your household own the land on which the structure (house, flat, shack) sits?

- Does any member of this household own any agricultural land?
- How many acres or hectares of agricultural land do members of this household own?

The individual questionnaire which targeted women aged 15-49 years and men aged 15-54 years included a question on land ownership. The question was:

- ***Do you own any land either alone or jointly with someone else? The response choices were: Alone only, Jointly only, Both alone and jointly and Does not own.***

The 2014 KDHS included questions on land ownership where the dwelling is situated and households that own agricultural land. Information on land ownership for households that are renting their dwellings, but own land elsewhere was not captured. At the same time, information on land tenure and availability of documentation to

support ownership was not collected. Information on type of tenure system and type of documents to support the ownership was not collected. Further, information on perception of land tenure security was not captured.

From the 2014 KDHS data, it is possible to compute the proportion of women-headed households that own agricultural land over the total agricultural households (Proxy for SDG indicator 5.a.1) and the proportion of households that reported owning land where their dwelling is built irrespective of the type of ownership/tenure (Proxy for SDG indicator 1.4.2). This can be disaggregated by age, sex, type of residence of the household head.

The next round of KDHS will be conducted in the year 2021. This will provide an opportunity to revise the questions and introduce a few others to facilitate generation of data to monitor SDG indicators 1.4.2 and 5.a.1 on land tenure security.

Table 1: Summary of Kenya Demographic and Health Survey (KDHS) 2014

Survey	Periodicity/ Year	Main objective	Target population/ Sample	Question(s) on Land Ownership/ Access/ Use Rights.	Possible disaggregation
Kenya Demographic and Health Survey	Every 5 years/2014	Provide estimates of maternal and child health, marriage, sexual activity, fertility, childhood and maternal mortality, family planning, breastfeeding, nutrition, HIV/AIDS and other sexually transmitted infections (STIs), and domestic violence	Men (15-54 at individual level, all ages at household level) Women (15-49 at individual level, all ages at household level) Children under five years of age living in the households	At Household Level <i>Does your household own the land on which the structure (house, flat, shack) sits?</i> <i>Does any member of this household own any agricultural land?</i> <i>How many acres or hectares of agricultural land do members of this household own?</i> At Individual Level <i>Do you own any land either alone or jointly with someone else?</i> <i>The response choices were: Alone only, Jointly only, Both alone and jointly and Does not own.</i>	Sex, age, type of residence (urban vs. rural), County, wealth index

Source: KNBS, 2014.

2. The 2015/16 Kenya Integrated Household Budget Survey (KIHBS)

Conducted over a period of one year, the overall objective of the 2015/16 Kenya Integrated Household Budget Survey (KIHBS)¹¹ was to collect information for computation of poverty and inequality indicators, labour force indicators, consumer price index, and revision of the national accounts' statistics. The survey collected data on key socio-economic aspects of the Kenyan population inter alia: education, health, energy, housing, water and sanitation. The KIHBS is conducted every 10 years. The next round of KIHBS will be conducted in the year 2025/26.

The survey consisted of a core expenditure module coupled with several other modules covering the aforementioned areas. The sampling for the survey was done in three stages. In the first stage, a total of 2,400 clusters (988 in urban and 1,412 in rural areas) were sampled from NASSEP V sampling frame while the second stage involved selection of 16 households from each of the clusters. The third stage was sampling of 10 households from the 16 households for the main KIHBS with the remaining 6 earmarked for the Continuous Household Survey Programme (CHSP). Further, five households were randomly selected from the 10 KIHBS households for the administration of diaries.

The sample size was determined independently for each county, resulting in a national sample of 24,000 households. The respondent for the KIHBS questionnaire was the household head or any member of the household who is deemed able to provide accurate responses on behalf of the other members. Some modules e.g. fertility required individual responses from the respective household members. The data can be disaggregated by county and area of residence (rural/urban).

The 2015/16 had a stand-alone module on agriculture in which questions on land tenure were included.

- *Did any member of the household engage in crop farming in the last 12 months?*
- *Please provide a list of parcel (s) of land that HH members cultivated during the last 12 months (Up to 12 parcels).*
- *Location of this parcel by County?*
- *Who makes the decisions on input use and cropping activities on this parcel?*
- *What is the area of the parcel?*
- *Does HH own this parcel?*
- *What ownership document does the HH have for the parcel?*
- *What is the land tenure system of the parcel?*
- *What is your operational status?*

Information on land ownership, documentation of land rights, land tenure system and operational status was collected from households engaged in crop farming only.

Information on households involved in livestock farming only and those who own land but do not practice agriculture was not captured.

The 2015/16 explicitly asked questions on land to households engaged in growing of crops. This therefore did not capture agricultural households that practice pure livestock farming and households that were not actively engaged in crop production during the 12 months preceding the survey. However, households engaged in mixed

farming (both crops and livestock production) were covered considering they cultivated crops during the reference period.

From the data, it is possible to compute the proportion of women-headed households that own agricultural land over the total agricultural households (proxy for SDG indicator 5.a.1).

For households who engage in crop farming only or mixed farming (both crops and livestock production), it is possible to determine whether they possess legal documentation for their parcel of land and the type of tenure under which their parcel is held.

Table 2: Summary of the 2015/16 Kenya Integrated Household Budget Survey (KIHBS)

Survey	Periodicity/Year	Main objective	Target population/Sample	Question(s) on Land Ownership/Access/ Use Rights.	Possible disaggregation
Kenya Integrated Household Budget Survey (KIHBS)	Every 10 years/2015/16	<p>The survey covered topics on household demographic characteristics, household consumption of regular food and non-food items, housing, employment, labor, education, health, fertility and household deaths, child health and anthropometry, water and sanitation, agriculture holding, agriculture output, domestic tourism, energy use, livestock, household enterprises, transfers, other income, recent shocks to household welfare, food security, justice, credit, ICT and ownership of assets.</p> <p>The data is mainly used to provide updated estimates on household consumption/ expenditure patterns to produce poverty and inequality indicators, labour force indicators, Consumer Price Index (CPI) basket and national accounts benchmarks among other indicators</p>	<p>Households sampled from the fifth National Sample Survey and Evaluation Program (NASSEP V) master frame to represent the entire population.</p> <p>24,000 households</p>	<p>The 2015/16 had a stand-alone module on agriculture in which questions on land tenure were included.</p> <p><i>Did any member of the household engage in crop farming in the last 12 months?</i></p> <p><i>Please provide a list of parcel (s) of land that HH members cultivated during the last 12 months (Up to 12 parcels).</i></p> <p><i>Location of this parcel by County?</i></p> <p><i>Who makes the decisions on input use and cropping activities on this parcel?</i></p> <p><i>What is the area of the parcel?</i></p> <p><i>Does HH own this parcel?</i></p> <p><i>What ownership document does the HH have for the parcel?</i></p> <p><i>What is the land tenure system of the parcel?</i></p> <p><i>What is your operational status?</i></p>	<p>Sex and age of the household head, Area of residence (Rural/Urban), County</p>

Source: KNBS, 2016.

3. The Kenya Continuous Household Survey Programme (KCHSP)

The Kenya Continuous Household Survey Programme (KCHSP) is a programme supported by the World Bank through the Kenya Statistics Program for Results to address data gaps by providing updated welfare and socio-economic indicators through surveys. The survey is conducted every year since January 2019 and data is collected in 12 monthly cycles of 14 days each from January to December to account for seasonality.

The key modules in the KCHSP are the household consumption and labour force modules for computing annual poverty estimates and quarterly labour force indicators. Other modules include household demographic characteristics, education, housing and agricultural farm gate prices. The sample for the KCHSP is drawn from NASSEP V, a household-based sampling frame.

The survey programme includes two different specific surveys: 1) a cross-sectional survey where information from the household is collected at one specific point in time and 2) a panel study where observations from the same households are monitored for two quarters every year. The sample for the 2019 KCHSP had a total of 50 study domains, namely: national, urban, rural and 47 counties consisting of 25,260 households from 1,684 clusters. This comprised of 1,300 clusters for cross-sectional survey and 384 clusters for the panel study. At the county level, the sample ranged from a minimum of 24 clusters (360 households) to a maximum of 56 clusters (840 households). Two panels were implemented alongside the cross-sectional sample in each quarter. In

total, 517 (325-cross-sectional and 192 panel) clusters (7,755 households) were visited every quarter.

The agricultural module mainly collects information on agricultural farm gate prices for crops and livestock in the last 12 months. There is also a question on the type of farming activity a household is engaged in with the choices being crop farming, livestock farming, mixed and non-farming.

- *What type of farming activity is your household engaged in?*
- *Did the household engage in crop production during the last 12 months?*
- *Did the household engage in livestock production during the last 12 months?*

Table 3: Summary of the 2019 Kenya Continuous Household Survey Programme (KCHSP)

Survey	Periodicity/Year	Main objective	Target population/Sample	Question(s) on Land Ownership/Access/ Use Rights.	Possible disaggregation
The Kenya Continuous Household Survey Programme (KCHSP)	Every year/2019	Address data gaps by providing updated welfare and socio-economic indicators, mainly annual poverty estimates and quarterly labor force indicators	Households sampled from the fifth National Sample Survey and Evaluation Program (NASSEP V) master frame to represent the entire population. 25,260 households from 1,684 clusters	<i>What type of farming activity is your household engaged in?</i> <i>Did the household engage in crop production during the last 12 months?</i> <i>Did the household engage in livestock production during the last 12 months?</i>	Sex and age of the household head, Area of residence (Rural/ Urban), County

Source: KNBS, 2019.

4. The 2019 Kenya Population and Housing Census (KPHC)

Kenya conducted her latest population and housing census in August 2019. The Kenya Population and Housing Census (KPHC 2019)¹² collected information regarding crop farming, livestock, fishing and aquaculture to obtain statistics on agriculture indicators. Questions on land tenure security and documentation of land rights as proof of ownership/ use rights were not included.

Table 4: Summary of the 2019 Kenya Population and Housing Census

Survey	Periodicity/ Year	Main objective	Target population/ Sample	Question(s) on Land Ownership/ Access/ Use Rights.	Possible disaggregation
2019 Kenya Population and Housing Census	Every 10 years/2019	The main objective of the 2019 KPHC was to collect information on the size, composition, distribution and socio-economic characteristics of the population. The specific objective in the area of agriculture was to provide agricultural indicators to inform the creation of an agriculture sampling frame.	Persons' within the boundaries of Kenya on the night of 24/25 th August 2019	<i>During the last 12 months, did any member of this household engage in the following within this County? (Crop farming, Livestock Rearing, Aquaculture)</i> <i>What was the main purpose of the main agricultural production? (Subsistence, Commercial, Not Applicable, Don't Know)</i> <i>What is the area of agriculture holding operated by this household in acres in this County? (1Ha=2.47 acres)</i> <i>During the last 12 months, did any member of this household practice irrigation</i>	Sex and age of the household head, Area of residence (Rural/Urban), County

Source: KNBS, 2019.

5. The 2012/13 Kenya National Housing Survey (KNHS)

The objectives of the Kenya National Housing Survey (2012/2013 KNHS)¹³ were to improve the base of housing statistics and information knowledge, provide a basis for future periodic monitoring of the housing sector, facilitate periodic housing policy review and implementation, assess housing needs and track progress of the National Housing.

The 2012/2013 KNHS targeted different stakeholders in the housing sector including renters and owner occupiers, housing financiers, home builders/developers, housing regulators and housing professionals. Whereas a census was conducted among regulators and financiers, a sample survey was conducted on renters and owner occupiers, home builders/developers and housing professionals. To cover renters and owner occupiers,

the survey was implemented on a representative sample of households drawn from the NASSEP V frame which is a household-based sampling frame developed and maintained by KNBS. The survey was conducted in 44 counties excluding Wajir, Garissa and Mandera counties. The sample contained 1,340 clusters with a target of 19,140 households in the country both in rural and urban areas.

Table 5: Summary of the Kenya National Housing Survey 2012/13

Survey	Periodicity/ Year	Main objective	Target population/ Sample	Question(s) on Land Ownership/ Access/ Use Rights	Possible disaggregation
The Kenya National Housing Survey	2012/13	<p>The general objective for the survey was to improve the base of housing statistics and information knowledge</p> <p>The specific objectives of the Survey were to:-</p> <ul style="list-style-type: none"> • Improve the base of housing statistics and information knowledge. • Provide a basis for future periodic monitoring of the housing sector. • Facilitate periodic housing policy review and implementation. • Assess housing needs and track progress of the National Housing Production goals as stipulated in the Kenya Vision 2030 and the Medium Term Plans. • Provide a basis for specific programmatic interventions in the housing sector particularly the basis for subsequent Medium-Term frameworks for the Kenya Vision 2030. • Facilitate reporting on the attainment of the then MDGs particularly goal 7 target 11. • Provide planners, policy makers, program designers and researchers with housing sector specific information 	<p>The survey targeted renters and owner occupiers, housing financiers, home builders/developers, housing regulators and housing professionals.</p> <p>• 19,140 households were sampled from 1,340 clusters</p>	<p><i>Do you own the land alone or jointly with other persons?</i></p> <p><i>Types of land ownership (where premise is located)</i></p> <p><i>What ownership documents do you have?</i></p>	<p>Sex and age of the household head, Area of residence (Rural/Urban), County</p>

Source: KNBS, 2013.

C. Assessment of Data from Administrative Sources

This section reviews administrative data sources, specifically for SDG land indicators 1.4.2 and 5.a.1 from the Ministry of Lands and Physical Planning (MoLPP) and the Ministry of Agriculture, Livestock & Fisheries (MoALF).

Production of land records and maps is a core function of public land registries, with legally recognized documentation being the output. Reporting on the information contained in these land records ((i) names of people holding rights, (ii) type of rights and (iii) location) is not difficult in principle if records are kept in a computerized

format. Using household surveys, this land information can be cross-checked against survey information with respect to quality and coverage. In the case of registered communal or group rights, identifying the group members who gain tenure security through its registration is equally possible.

1. Data from the Ministry of Lands and Physical Planning (MoLPP)

The Ministry of Lands and Physical Planning - MoLPP (<https://lands.go.ke/>) is charged with the responsibilities of all national lands matters in Kenya with the objective of ensuring accessibility, equity and sustainable management of land resource for socio-economic development and strengthening institutional capacity for efficient and effective service delivery. The Ministry's mission is to facilitate improvement of the livelihood of Kenyans through efficient administration, equitable access, secure tenure, and sustainable management of the land resource.

The ministry, in the executive order No.1/2018, is tasked with the following functions:

- National Lands Policy and Management
- Physical Planning and Land Use
- Land Transactions
- Survey and Mapping
- Land Adjudication
- Settlement Matters
- Rural Settlement Planning i.e. eco-village
- Land Registration
- National Spatial Infrastructure
- Land and Property Valuation Services Administration
- Administration of Public Land as Designated by the Constitution
- Land Information Systems
- Maintenance of a Public Land Bank

The MoLPP derives its mandates to develop policies on land, facilitate implementation of land policy and reforms, coordinate management of the National Spatial Data infrastructure, formulate standards of service, regulate service providers and professionals, monitor and evaluate land sector performance.¹⁴

The ministry, in its day-to-day operations such as, resolution of land disputes before the afflicted parties can seek redress from the courts, and development applications such as compliance applications for petrol stations, change of use applications, subdivisions and amalgamations, extension and renewal of leases, public land emerging from field audits and landless families or households collects information on titles and leases. The ministry also collects data on revenue collected from stamp duty, property values and rents for lease purpose. In relation to County Governments, data is collected for Physical Development Plans (PDPs). The ministry responds to data request for physical planning from other Ministries, Departments and Agencies and other data as need arises. The Ministry is the custodian of all the data related to land.

Data collection instruments are developed in consultation with data users e.g. KRA, County Governments, to fit and accommodate their data requirements. The list of instruments and forms used for routine data

collection are listed in Annex 1 & 2 of this report and can also be obtained from the Ministry's website¹⁵. Other instruments are generated as their need arises. The data is collected daily as the Ministry does its operations and data entry is continuous. Computations and generation of reports for property values, rents for lease and development plans are done daily. The reports on revenue collection, titles and leases and landless inventory are compiled on monthly, quarterly and annual basis. Other reports are compiled on an ad hoc basis as the need arises.

The enumerators and supervisors hold discussions regularly to ensure quality of the collected data. In addition, the Ministry does close checks with the market and other professional organizations and its management validates the data before communicating externally. The data is mainly used for policy planning, formulation and decision making, monitoring and evaluation of ministerial mandate and programmes, measure the performance of the Ministry and the quality of the services offered. The data is also used to inform production of National and County Spatial Plans. Apart from the administrative data that is generated as part of day-to-day operations, the Ministry conducts annual surveys on National Land Value Index which is used in development of maps and customer satisfaction surveys.

In 2017, MoLPP started the development of a Land Information Management System (LIMS) to digitize land records, in collaboration with the National Land Commission (NLC) and key partners in Government. On 27th April 2021, the president of the Republic of Kenya officially launched the LIMS dubbed Ardhisasa (<https://ardhisasa.lands.go.ke/>) It is an online platform that allows citizens, stakeholders and interested parties to interact with land information held and processes undertaken by Government. It allows the lodgment of applications for various services offered by the Ministry and the Commission. The applications are handled through the platform and responses presented through it. The system will enable the capture, management and analysis of geographically referenced land-related data in order to produce land information for decision-making in land administration and management. Services accessible through Ardhisasa include:

- Land registration
- Land administration
- Physical planning
- Survey and mapping
- Valuation
- Adjudication and settlement and
- Services by the National Land Commission.

Ardhisasa is currently operational in Nairobi County with plans underway of being extended to the metropolitan region before a full roll out to the rest of the country. The entire digitization process is expected to be finalized in 2022.

Additionally, the Ministry also provides data to other MDAs, Counties and development agencies for decision making on land issues and land planning upon request. At the same time, the ministry obtains data from Judiciary on land and environment court cases, Kenya Revenue Authority (KRA) on collection of revenue (stamp duty), MDAs on government leasing and administration (chiefs among others) on landlessness.

The ministry coordinates with sub-national structures in the ministry such as the land offices in the counties on land related data and land use planning in counties, and NLC while responding to land related matters. There exists a structured communication channel between the ministry and sub-national structures and agencies where the latter compile the data and submits reports to the ministry every month.

The ministry requests data from the county governments on a need basis. The MoLPP County offices which are located in all the 47 counties facilitate coordination between the national and county governments. Some of the data that is requested from the county includes approvals for Physical Development Plans (PDPs), authentication, land use development plans, land settlement and community land. The data is received in form of reports prepared in consultation with the two levels. When the data is received, acknowledgment is done in form of written communication and email. Measures have been put in place

to improve the timeliness of the data including establishment of regional offices whose officers are answerable to the Ministry, provision of emails in the land offices across the country to ease communication, keeping a directory of the contacts of the officers at the counties and use of Wizara mashinani Programme¹⁶ which is an initiative to accelerate issuance of titles across the Country.

The data that is received from the regional and county land offices undergoes quality checks and validation at the head office. Data on landless inventory, strategic policy and programmes is the most commonly requested and it is shared with other administrative units upon request. The data is provided in reports, records or maps. Other institutions and data systems that facilitate showcasing the situation of land governance in Kenya are County Governments, Kenya Institute for Public Policy Research and Analysis (KIPPRA), Kenya National Highways Authority (KENHA), Kenya Urban Roads Authority (KURA), Regional Centre for Mapping of Resources for Development (RCMRD), NLC, Institute of Surveyors of Kenya (ISK), Kenya Land Alliance and Land Governance and Development Institute.

Major challenges in maintaining the information system at MoLPP are data insecurity, manual data records, low upskilling of staff and disharmonized land laws. Most of these challenges will be addressed through the ongoing digitization of land records and updating of the LIMS.

The priority areas to ensure regular access of data for decision making in relation to land are:

- Computerization of land records to facilitate access to information
- Decentralization of land registries
- Consolidation, harmonization, streamlining land registration, land adjudication and land consolidation Acts for efficiency, transparency
- Recognize and protect all legitimate rights/interests in land
- Authenticate, document and enhance custody of land records
- Land Surveying and mapping by establishing a unitary and homogenous network of control points using dynamic technology
- Adoption of gender disaggregation among other disaggregation levels of data

The Ministry collects data on ownership which includes owners' name(s), location of the parcel, size, its use, category of owners, tenure type. Access to data on land ownership and documentation of ownership and use rights is currently limited as most of the data is in manual records. However, accessibility of the data in various disaggregation levels is poised to improve with the ongoing digitization of land records through the LIMS. There are approximately 10.5 million titles that have been issued across the country as of March 2021¹⁷.

The land tenure types applicable in Kenya are freehold, leasehold, and customary. The land tenure documents that the government considers as legally recognized are:

- Title Deed (for freehold land)
- Certificate of Lease (for leasehold land)
- Sub-lease
- Short-term lease
- Charge
- Transfer
- Land Control Board Consent
- Certificate of Incorporation
- Power of Attorney
- Trust deed
- Settlement Scheme legal documents

The tenure security for lands issued with the Title Deeds and Certificates of Leases by the Government are generally secure. For lands under customary tenure and where titles have not been issued, the tenure is also secure notwithstanding the lack of titles. This is because documentation of rights for such lands by governments depends on the existing customary law as rights on the ground are ascertained by the local people and their leaders before documentation without creating new rights¹⁸.

The country's legal frameworks¹⁹ used for safeguarding the land tenure security in Kenya are: the Land Act 2012, Land Registration Act 2012, Land Adjudication Act, Cap. 284, Land Consolidation Act, Cap. 283, Community Land Act 2016, The Constitution of Kenya, 2010, Land registration (general) regulation 2017, Stamp duty Act, Matrimonial Property Act 2013 and Sectional properties Act 2020.

Table 6: Legally Recognized Land Documents and their Applicability in Kenya

Legal Document	Tenure Rights Protected	Applicability period	Conditions (Conditions under which the documents are valid)	Issuing Authority/ Institution	Additional Comment
Title Deed	Freehold	Unlimited term until transfer of rights	Written and registered	Ministry of Lands and Physical Planning (or as name may change)	The use of the land is deemed to be agricultural (agricultural here means all types of farming whether crops or stocks)
Certificate of Lease	Leasehold	33, 50, 60, or 99 year terms	Written and registered	Ministry of Lands and Physical Planning	Rights revert to Government on expiry of term if not renewed/ extended
Sublease	Leasehold	Up to 99 years (The period conforms to the term of the original lease i.e. cannot exceed)	Written and signed by relevant parties	Ministry of Lands and Physical Planning	MoLPP's role is confined to registration of the Sublease
Short term Lease	Use rights	Up to 21 years	Can be written	Between the lessor and lessee	It is not a registrable interest
Charge	Freehold/ Leasehold	Valid until when the loan is fully paid up	Written, signed by relevant parties and witnessed	Between the charger and chargee	It is not a tenure document but supporting document to claims of tenure rights
Transfer	Freehold/ Leasehold	Valid until when rights to the land are transferred to another entity.	Written, signed by relevant parties and witnessed	Between the transferor and transferee	It is not a tenure document but supporting document to claims of tenure rights
Land Control Board Consent	Freehold/ Leasehold	Valid until when another consent is issued upon transfer of the land	Issued by a validly constituted Land Control Board	Land Control Board	For agricultural land within controlled areas it is not a tenure document but supporting document to claims of tenure rights
Certificate of Incorporation	Freehold/ Leasehold	Valid until when rights to the land are transferred to another entity	Signed and Sealed by Registrar of Companies	Registrar of Companies under the Judiciary	It is not a tenure document but supporting document to claims of tenure rights
Power of Attorney	Freehold/ Leasehold	Valid until when rights to the land are transferred to another entity or as stipulated in the Power of Attorney instrument	Written, signed by relevant parties and witnessed	Prepared by a lawyer and signed by relevant parties	It is not a tenure document but supporting document to claims of tenure rights
Trust Deed	Freehold/ Leasehold	Valid until when rights to the land are transferred to another entity or as stipulated in the Trust Deed	Written, signed by relevant parties and witnessed	Prepared by a lawyer and signed by relevant parties	It is not a tenure document but supporting document to claims of tenure rights
Settlement Scheme Legal Documents	Freehold	Unlimited term until transfer of rights	The documents should be executed by relevant entities	Ministry of Lands and Physical Planning	The documents must include a Letter of Allotment, a Charge and Auxiliary Agreement

Source: Ministry of Lands and Physical Planning.

2. Data from the Ministry of Agriculture, Livestock & Fisheries (MoALF)

The Ministry of Agriculture, Livestock & Fisheries (MoALF) regularly collects various types of data as shown in the table 7 below. The ministry prepares data collection tools, trains enumerators, processes the data and writes reports. The data is collected by field staffs across the country using prescribed formats and checklists or by use of Computer-Assisted Personal Interviews (CAPI). Other data are collected using satellite images. To ensure the quality of the data collected, the ministry conducts annual data verification at county level and periodic technical meetings with stakeholders during data collection, analysis, reporting and dissemination.

The data is published in the Economic Review of Agriculture (ERA)²⁰ which informs on the performance of the agriculture sector in the areas of crops, livestock and fisheries. The data is used to advise government on policy design and implementation, measure the contribution of the sector to the GDP, inform on resource allocation to the sector, prescribe tax regimes in the sector and ascertain the country's status in terms of food security. The data is also used by investors, academia, research organizations and shared with international organizations for which Kenya is a signatory.

The MoALF has institutionalized relationships with other ministries, departments and agencies on data generation, analyses, and use. KNBS provides financial support every year for data validations which is used in measuring the sector growth. The ministry also requests data on GDP, Trade and Employment from KNBS. Other data sources that can help generate information on agricultural land are Ministry of land, cooperative societies and large commercial farms including ranches.

Table 7: Type of Data Collected and Frequency

S/No.	Data Type	Frequency
i	Area under production	Seasonally
ii	Seasonal rainfall amounts	Seasonally
iii	Area under irrigation and rainwater harvesting	Seasonally
iv	Informal trade volumes	Monthly
v	Yield data	Seasonally
vi	Inputs volumes and prices	Monthly
vii	Farm machinery and equipment	Quarterly
viii	Area under greenhouses and speciality crops	Annually
ix	Food stocks	Monthly
x	Food prices Farm gate and whole sale	Daily
xi	Food and inputs, quantity and value of exports and imports	Monthly

Source: Ministry of Agriculture, Livestock & Fisheries (MoALF).

Ordinarily, the Ministry does not collect data on land ownership. Therefore, it not possible to use the data for measuring SDG indicator 1.4.2 or 5.a.1.



3. ANALYSIS OF EXISTING SURVEY DATA

This section presents the results of analytical work done leveraging data from past surveys conducted by the Kenya National Bureau of Statistics (KNBS). For Indicator 1.4.2, the main survey considered is the 2014 Kenya

Demographic and Health Survey (2014 KDHS) while the main surveys considered in computation of proxies for SDG indicator 5.a.1 are: the 2014 Kenya Demographic and Health

Survey (KDHS) and the 2015/16 Kenya Integrated Household Budget Survey (KIHBS). The 2015/16 KIHBS presented a wider spectrum for analyzing SDG indicator 5.a.1.

A. SDG Indicator 1.4.2

1. Data Sources and Methods of Analysis

SDG Indicator 1.4.2 is defined as the proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as

secure, by sex and type of tenure. In practice, the indicator is computed as two sub-indicators: One that captures the proportion of the adult population with legally documented tenure rights

to land and the other that measures the proportion of the adult population who perceive their land tenure rights as secure, regardless of whether these rights are legally documented.

From the 2014 KDHS dataset, questions on land ownership were asked at household and individual level. Questions asked at household level were:

- *Does your household own the land on which the structure (house, flat, shack) sits? Does any member of this household own any agricultural land?*

The question that was asked at individual level is:

- *Do you own any land either alone or jointly with someone else (Alone only, Jointly only, Both alone and jointly, Does not know)?*

- *Do you own this or any other house either alone or jointly with someone else ((Alone only, Jointly only, Both alone and jointly, Does not know)?*

The question targeted women aged 15-49 years and men aged 15-54 years. The 2014 KDHS did not include questions on perception of land tenure security and proof of land ownership by legally recognized documents for those who answered affirmative to owning land. Also, there is no other available data from previous surveys/censuses that collected data on the perception of land tenure security.

This means that only the proportion of the adult population (aged 18-49 for women and 18-54 for men) who own land irrespective of the availability of legal documents to support ownership can be calculated from the 2014 KDHS data. Those aged 15-17 years were dropped in the analysis because by Kenya's legal definition, they do not fall in the adult category (of 18 years and above) which is also the target population of SDG indicator 1.4.2.

The above sets of questions were used to compute a proxy of SDG indicator 1.4.2 at the household and individual level using SPSS software.

2. Key Findings

Information on land ownership at both household and individual level was collected in the 2014 KDHS. The question on land ownership for the household questionnaire did not target/cover households that owned land elsewhere apart from where they lived. As a result, land ownership

information for households that live in rented dwellings and own land other than agricultural land elsewhere was not captured. Hence the data on land ownership from the 2014 KDHS is likely to be biased thus, not able to answer directly to SDG indicator 1.4.2.

Table 8 shows land ownership among women aged 18-49 by their area of residence and age group. According to the data, 43.1 per cent of the adult female aged 18-49 years reported to own land in the country either alone or jointly. More female adults living in rural areas (55.2 per cent) owned land compared to their counterparts in urban areas (26.6 per cent).

Table 8: Land Ownership among Women (18-49) by Area of Residence and Age

	Own Land		Does not own land		Total
	Number	Per cent	Number	Per cent	
Residence					
Rural	4,121	55.2	3,347	44.8	7,468
Urban	1,458	26.6	4,020	73.4	5,478
Age Group					
18-29	2,018	30.3	4,642	69.7	6,660
30-39	2,041	51.8	1,901	48.2	3,942
40-49	1,520	64.8	824	35.2	2,344
Total	5,579	43.1	7,367	56.9	12,945

Source: 2014 Kenya Demographic and Health Survey.

The data reveals that land ownership increases with the increase in the age, with the proportion of women owning land going from 30.3 per cent among those aged 18-29 to 64.8 per cent among those aged 40-49 (Table 8).

Overall, 52.4 per cent of the adult males aged 18-54 years owned land alone or jointly in the country as shown in Table 9. The proportion of men aged 18-54 years living in rural areas that self-reported to own land was 56.7 per cent while that of those in urban areas was 47.3 per cent.

Land ownership increases with age with the proportion more than doubling from age 18-29 years which was 28.8 per cent to 66.1 for 30-39 years and 85.1 per cent among those aged 50-54.

Table 9: Land Ownership among Men (18-54) by Area of Residence and Age

	Own Land		Does not own land		Total
	Number	Per cent	Number	Per cent	
Residence					
Rural	3,465	56.7	2,645	43.0	6,110
Urban	2,449	47.3	2,729	52.7	5,178
Age Group					
18-29	1,506	28.8	3,732	71.2	5,239
30-39	2,161	66.1	1,107	33.9	3,268
40-49	1,603	85.1	422	20.8	2,024
50-54	644	85.1	113	14.9	756
Total	5,914	52.4	5,374	47.6	11,288

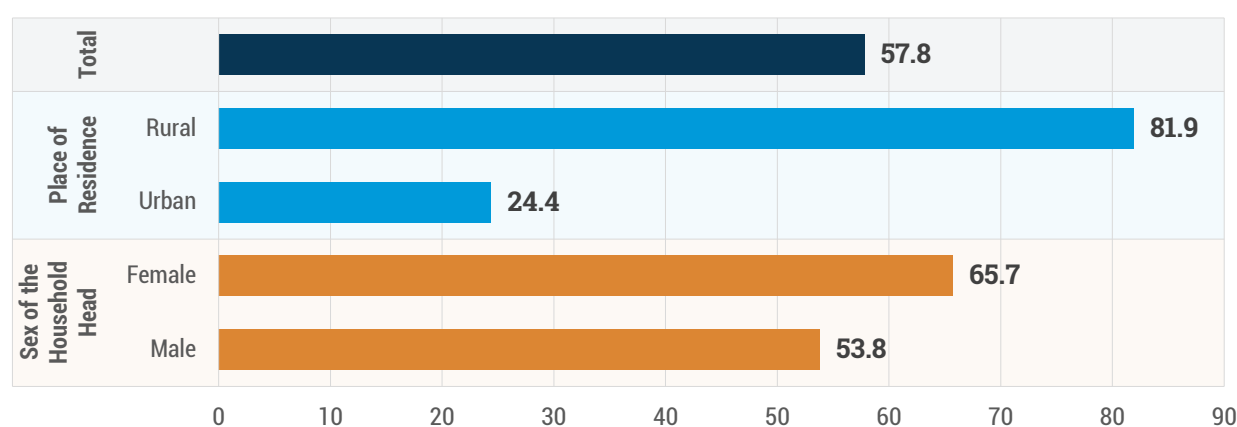
Source: 2014 Kenya Demographic and Health Survey.

Figure 1 shows household land ownership where the dwelling structure sits by sex of household head and residence. In general, 57.8 per cent

of the households owned land where their dwelling structure sits. Only 24.4 per cent of households living in urban

areas owned land where their dwelling structure sits. It is the case of 81.9 per cent of households living in rural areas.

Figure 1. Household Land Ownership where the Dwelling Structure Sits by Sex of Household Head and Place of Residence



Source: 2014 Kenya Demographic and Health Survey.

Table 10 presents the proportion of households that owned land either where the dwelling structure sits or agricultural land or both. Households that own non-agricultural land away

from where they stay such as renting households were not captured. Overall, 70.5 per cent of the interviewed households reported to own land with

households headed by men having the highest proportion of ownership (71.8 per cent vs. 67.9 percent for female headed households).

Table 10: Household Land Ownership (Agricultural land or land where the Dwelling Structure Sits) by Sex of Household Head and Place of Residence

		Own Land		Does not own land		Total
		Number	Per cent	Number	Per cent	Number
Sex of the household head	Male	17,678	71.8	6,951	28.2	24,628
	Female	7,942	67.9	3,747	32.1	11,689
Residence	Urban	7,819	51.3	7,428	48.7	15,247
	Rural	17,801	84.5	3,269	15.5	21,070
Total		25,620	70.5	10,697	29.5	36,317

Source: 2014 Kenya Demographic and Health Survey.

In addition, the proportion of households who own agricultural land or own land where their dwelling unit sits is much higher in rural areas (84.5 per cent vs. 51.3 per cent in urban areas). There is a big contrast for

households living in urban areas in the two scenarios with the proportion that owned either agricultural land or where the dwelling structure sits more than doubling from 24.4 per cent to 51.3 per

cent. In addition, the proportion of male headed household increases from 53.8 per cent for land ownership where the dwelling structure sits to 71.8 per cent when agricultural land was considered.

B. SDG Indicator 5.a.1

1. Data Sources and Methods of Analysis

By definition, SDG indicator 5.a.1 measures (a) the proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure.

The reference population for SDG indicator 5.a.1 is the total adult agricultural population. To ensure comparability of this indicator across time and context, the adult agricultural

population is defined as: all adult individuals living in agricultural households i.e. households who operated land for agricultural purposes and/or raised/tended livestock in the past 12 months, regardless of the final destination of the production. Households in which members are engaged in agriculture only through wage labour are excluded from the reference population (Measuring Individuals' Rights to Land- An Integrated Approach to Data Collection

for SDG Indicators 1.4.2 and 5.a.1.).²¹

The 2015/16 KIHBS had a standalone agriculture module that asked questions that would be relevant in addressing this indicator.

From the KIHBS dataset, there was a section on crop and livestock farming. Questions on crop farming were asked at parcel level while questions on livestock farming were asked at household level.

Questions on crop farming were:

- *Did any member of the household engage in crop farming in the last 12 months? (Yes vs. No).*

Households that responded in affirmation were asked the following questions:

- *Total Number of Parcel Cultivated*
- *Does household own this Parcel (Yes vs. No)?*
- *What ownership document does the HH have for the parcel (Title, Share certificate, Allotment Letter, Temporary Occupation License,*

Letters of offer, Other, None, Don't Know)?

- *What is the land tenure system of the parcel (Freehold, Leasehold and Don't know)?*

The question on livestock farming was:

- *Has any member of your household reared livestock, fish, etc. during the past 12 months (Yes vs. No)?*

To obtain the total number of households that was involved in agricultural in the past 12 months, we combined households that reported

to practice crop and those that are involved in livestock farming. So, if a household was involved in either crop or livestock farming or both, it was considered to be involved in agriculture. Household that neither participated in crop nor livestock farming were considered to be non-agricultural households.

In the 2014 KDHS dataset, a question on agricultural land ownership was asked at household level.

- *Does any member of this household own any agricultural land?*

2. Key findings

SDG indicator 5.a.1 has two components, namely:

- Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex.*
- Share of women among owners or rights bearers of agricultural land, by type of tenure.*

The first component measures the incidence of people in the agricultural population with ownership or tenure rights over agricultural land (disaggregated by sex) while the second component focuses on gender parity, measuring the extent to which women are disadvantaged in ownership/tenure rights over agricultural land.

As per the definition of SDG indicator 5.a.1, it was not possible to generate the indicator as defined. This is because the data on crop and livestock farming was not collected at the individual level but at the household level. Similarly, the aspect of whether the individual had the right to sell or bequeath agricultural land was not investigated in the 2015/16 KIHBS.

Households that were engaged in crop farming were 6,068,818 translating to 53.3 per cent as shown in Table 12. As expected, crop farming is more prevalent among rural households (75.8 per cent vs. 24.0 per cent for

urban households). There is not much difference between male and female household heads when it comes to crop farming.

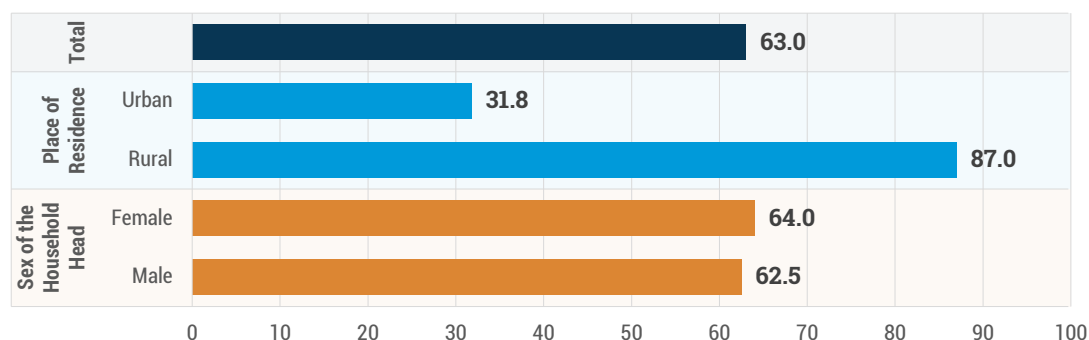
When it comes to livestock farming, there were about 6,090,913 households engaged in this kind of farming translating to 53.5 per cent of all households (Table 11). Like for crop farming, rural households are more likely to be involved in livestock farming than their urban counterparts (75.7 percent vs. 24.6 percent). There is not much difference between male and female household heads when it comes to livestock farming.

Table 11: Proportion of Households Engaged in Crop Farming or Livestock Farming by Sex of Household Head and Place of Residence, 2015/16

Characteristics		Crop Farming		Livestock Farming	
		Per Cent	Total	Per Cent	Total
Sex of Household Head	Male	52.8	7,692,838	53.1	7,692,380
	Female	54.4	3,691,915	54.4	3,691,915
Place of Residence	Rural	75.8	6,432,286	75.7	6,431,875
	Urban	24.0	4,952,467	24.6	4,952,421
Total		53.3	11,384,753	53.5	11,384,296

Source: 2015/16 Kenya Integrated Household Budget Survey.

The total number of agricultural households was 7,170,515 representing 63.0 per cent of the total households as presented in Table 13. The highest proportion of agricultural households including crop and livestock farming are those that are located in rural areas.

Figure 2: Proportion of Agricultural Households by Sex of Household Head and Place of Residence, 2015/16

Source: 2015/16 Kenya Integrated Household Budget Survey.

Table 12 presents the number of parcels that households reported to own. The total number of households that practiced crop farming and owned at least one parcel of land were

4,881,708 households. One average, most households own one parcel of agricultural land as shown by 72.8 per cent of households. Male headed households had the highest proportion

of households that own more than one parcel (28.4 per cent own at least one parcel as compared to 24.8 per cent among female-headed households).

Table 12: Number of Parcels that Households Owned by Sex of the Household Head

	Crop Farming		Livestock Farming		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
1	2,368,511	71.6	1,184,733	75.2	3,553,245	72.8
2	680,801	20.6	304,181	19.3	984,982	20.2
3	186,224	5.6	65,326	4.1	251,553	5.2
4	47,490	1.4	15,172	1.0	62,662	1.3
5+	23,700	0.7	5,566	0.4	29,266	0.6
Total	3,306,726	100.0	1,574,981	100.0	4,881,708	100.0

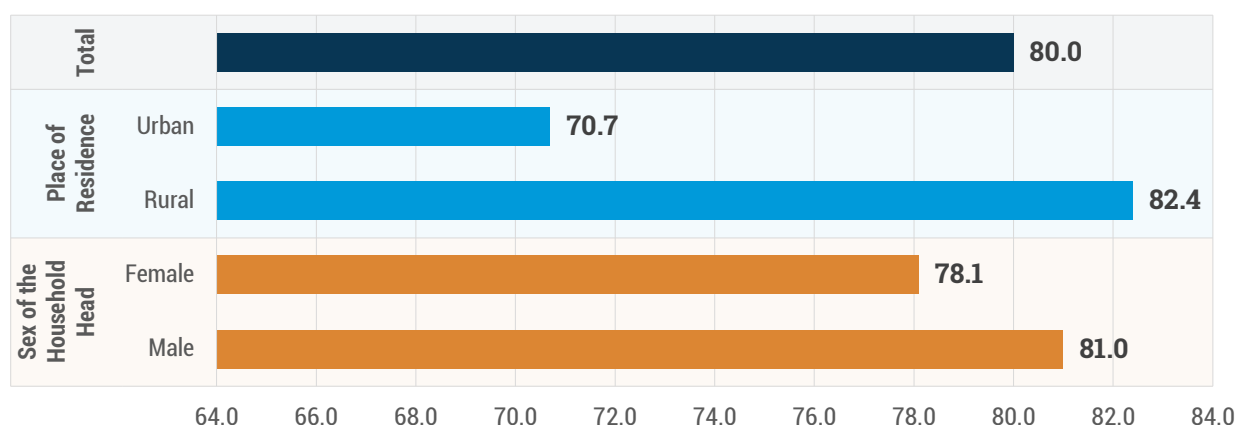
Source: 2015/16 Kenya Integrated Household Budget Survey.

Figure 3 shows the number of households that practiced crop farming and owned at least one parcel of land. Owning at least one parcel of land translates to owning land. The total number of households that practiced

crop farming and owned at least one parcel of land were 4,881,708 households translating to 80.0 per cent. Male headed households had the highest proportion with at least one parcel of land at 81.0 per

cent compared to female headed households with 78.1 per cent. Households in rural areas are more likely to own at least one parcel of land for crop farming (82.4 per cent).

Figure 3 : Proportion of Households that own at least one Parcel of Land by Sex of the Household Head and Area of Residence



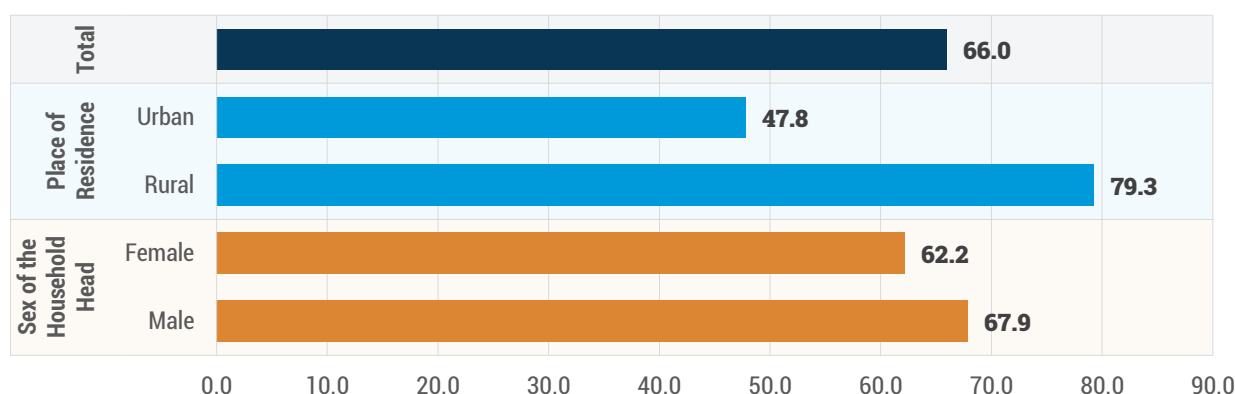
Source: 2015/16 Kenya Integrated Household Budget Survey.

Figure 4 presents households' agricultural land ownership according to the 2014 KDHS. Data show that

66.0 per cent of the households owned agricultural land with the highest proportion being among male-headed

households (67.9 per cent) and among households that are in rural areas (79.3 per cent).

Figure 4 : Agriculture land ownership (% of households) by Sex of Household Head and Place of Residence, 2014



Source: 2014 Kenya Demographic and Health Survey.

Table 13 shows the type of legal documents possessed by households to demonstrate ownership of their parcels of land. Overall, there is no ownership documents for 40.2 per cent of parcels, with slightly higher

proportion for parcels owned by female headed households (42 per cent) as compared to those owned by male headed households (39.4 per cent). In absolute terms, we have more male headed households owning land

(4,090,285) and having ownership documents compared to female headed household (1,907,185). In general, a title is the document that is most possessed for the parcels owned by the households (45.9 per cent).

Table 13: Ownership Documents for Parcels Owned (% of Parcels) by Sex of the Household Head

Ownership Document	Male		Female		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Title	1,891,500	46.2	858,348	45.0	2,749,848	45.9
Share certificate	73,864	1.8	27,350	1.4	101,214	1.7
Allotment	278,832	6.8	133,869	7.0	412,700	6.9
Temporary Occupation License	34,821	0.9	12,279	0.6	47,100	0.8
Letters of Offer	90,456	2.2	28,130	1.5	118,586	2.0
None	1,613,096	39.4	800,185	42.0	2,413,282	40.2
Other	102,816	2.5	39,935	2.1	142,751	2.4
Don't Know	4,899	0.1	7,089	0.4	11,988	0.2
Total	4,090,285	100.0	1,907,185	100.0	5,997,470	100.0

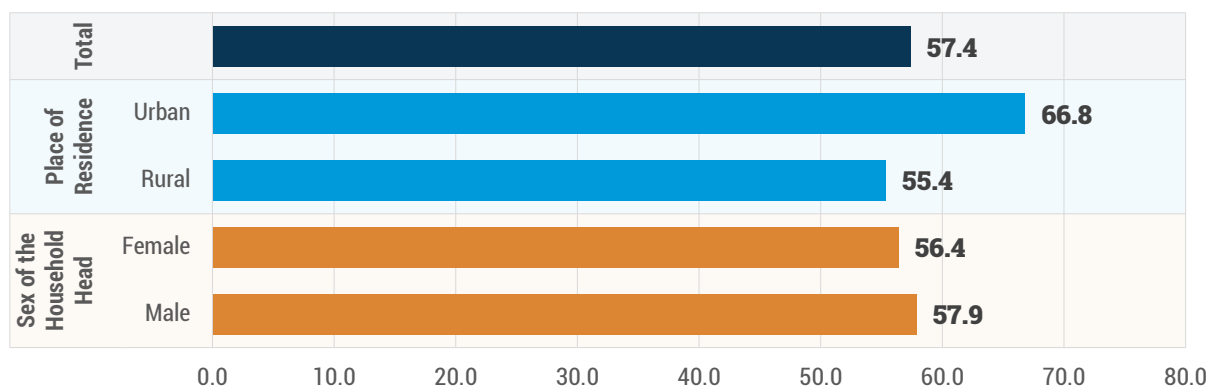
Source: 2015/16 Kenya Integrated Household Budget Survey.

Figure 5 presents the proportions of households that own agricultural land with legal land documents. From the choices that were provided in the questionnaire, legal land documents included Title, Share Certificate, Allotment Letter, Temporary Occupation

License and Letters of Offer. Out of the 4,882,366 households that owned land, 2,803,975 households translating to 57.4 per cent had legal land documents for at least one parcel of land. The proportion of male headed households with legal documents for agricultural

land was slightly higher (57.9 per cent compared to 56.4 per cent for female headed households). Household residing in urban areas are more likely to have legal documents for agricultural land (66.8 percent compared to 55.4 per cent for rural households).

Figure 5 : Proportion of Households that own Agricultural land with legal land documents by Sex of the Household Head and Place of Residence, 2015/16



Source: 2015/16 Kenya Integrated Household Budget Survey.

Table 14 shows the proportion of households that own at least one parcel of agricultural land and with legal land documents by the type of tenure and sex of the household head. The total

number of households that own land with legal documents were 2,803,975, out of which 68.3 per cent were headed by men (31.7 per cent were headed by

women). Freehold tenure is the most dominant type of tenure for agricultural land among men and women at 98.0 per cent.

Table 14: Proportion of Households that own at least one parcel with legal land document by type of tenure and Sex of Household Head

Proportion with legal land document	Male		Female		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Total	1,914,588	68.3	889,387	31.7	2,803,975	100.0
Of which: Freehold	1,873,720	97.9	873,699	98.2	2,747,419	98.0
Leasehold	34,897	1.8	12,045	1.4	46,941	1.7
Other Specify	5,274	0.3	3,643	0.4	8,917	0.3
Don't Know	647	0.0	-	0.0	697	0.0

Source: 2015/16 Kenya Integrated Household Budget Survey.

Table 15 shows the proportion of households that own at least one parcel of land and with legal land documents by the type of tenure and

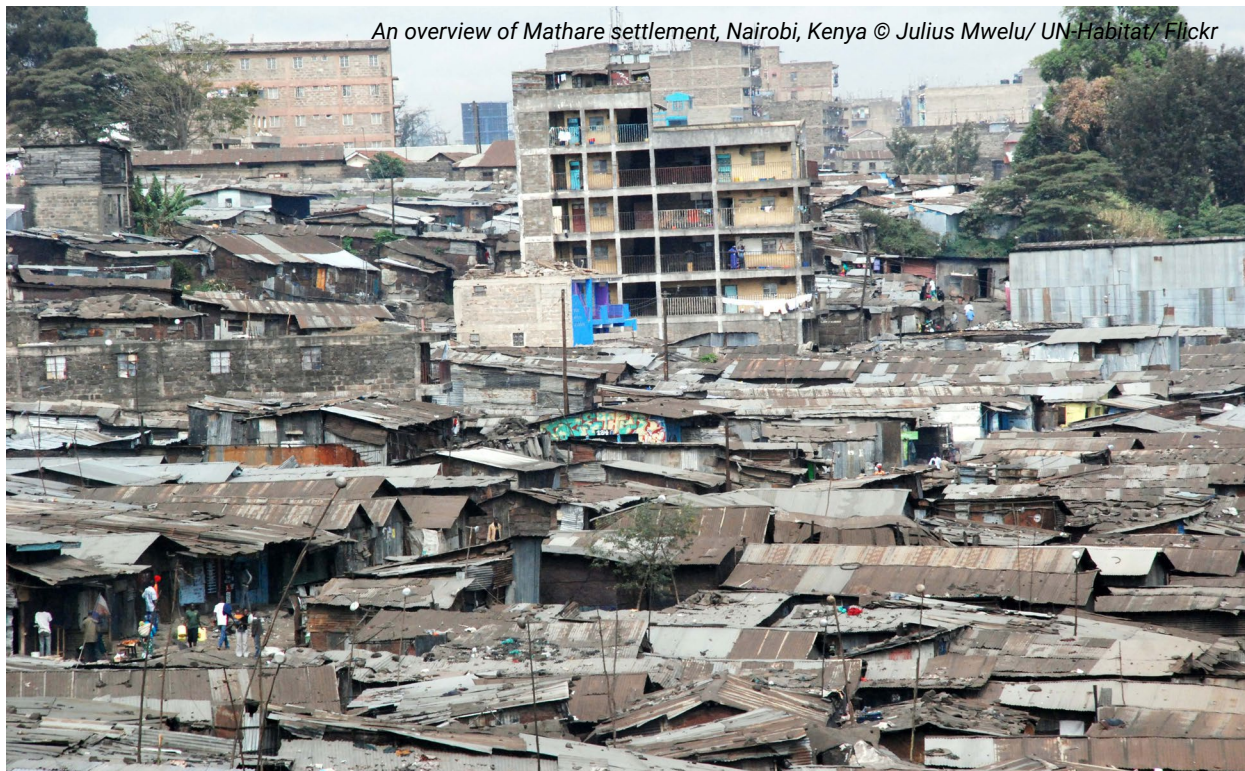
area of residence. The total number of households that own land with legal documents were 2,803,975, out of which 79.6 per cent were in rural areas

(20.4 per cent were in urban areas). Freehold tenure is the most dominant type of tenure both in urban and rural areas.

Table 15: Proportion of Households that own at least one parcel with legal land document by type of tenure and Area of Residence

Proportion with legal land document	Male		Female		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Total	2,231,841	79.6	572,133	20.4	2,803,975	100.0
Of which: Freehold	2,189,108	98.1	558,311	97.6	2,747,419	98.0
Leasehold	35,935	1.6	11,007	1.9	46,941	1.7
Other Specify	6,327	0.3	2,590	0.5	8,917	0.3
Don't Know	471	0.0	226	0.0	697	0.0

Source: 2015/16 Kenya Integrated Household Budget Survey.



An overview of Mathare settlement, Nairobi, Kenya © Julius Mwelu/ UN-Habitat/ Flickr

4. CONCLUSION AND RECOMMENDATIONS

Responsible land governance and secure land tenure are critical in the social, economic and cultural development of Kenya and in the achievement of the Sustainable Development Goals. However, it is imperative that efforts towards responsive land governance be guided and informed by a timely, reliable, and accessible evidence base. From this assessment, it is evident that official data on SDG indicators 1.4.2 and 5.a.1 is not readily available thus, monitoring of land tenure security as enshrined in the SDGs framework is limited. Nonetheless, the assessment demonstrates the enormous potential within Kenya's National Statistical System to collect data and report on the two SDG indicators through the joint methodology for collecting data and reporting on SDG indicators 1.4.2 and 5.a.1. This is evidenced by the availability of surveys inter alia: the Kenya Demographic and Health Survey (KDHS), the Kenya Integrated Household Budget Survey (KIHBS),

Kenya National Housing Survey, Kenya Continuous Housing Survey Programme (KCHSP) and censuses such as the Kenya Population and Housing Census and administrative sources all of which can be leveraged in data collection and reporting efforts for monitoring of SDG indicators 1.4.2 and 5.a.1.

Integrating essential questions on land tenure security in future rounds of surveys and censuses conducted by the Kenya National Bureau of Statistics is imperative to enable standardized monitoring and reporting on the two indicators. As such, upcoming surveys such as the 2021 KDHS, 2025/26 KIHBS and the KCHSP provide an opportunity for inclusion of these questions from the joint module developed by the custodian agencies. While it may not be possible to include the whole module in surveys such as the 2021 KDHS and the KCHSP because of time and cost implications, specific versions of the module can be

contextualized and integrated in the 2025/26 KIHBS.

The Ministry of Lands and Physical Planning (MoLPP) has available administrative data in its repository that is compiled in the process of documenting land rights that can be used to report on SDG indicator 1.4.2. As such, the launching of the Ardhisasa platform - Kenya Land Information Management System (LIMS) in April 2021 is a great milestone in not only ensuring and promoting transparency and accountability by the government to the citizens but also in enhancing accessibility of land-related data for reporting on regional and global commitments such as Africa's Agenda 2063 and the Agenda 2030 for Sustainable Development. The platform will help in providing updated information on age, sex, region and county where parcels are located once the digitization process is complete. Given that the information will be digitally and cumulatively linked to the national personal identification

records, the system will be very useful for efficient monitoring and reporting on SDG indicator 1.4.2 in Kenya.

As such, it is critical for administrative data and information on land governance and any other statistical information are validated in collaboration with the MoLPP before dissemination. This can be done through the Environment Statistics Technical Committee (ESTeC). Already, the TWG for Agriculture, Nutrition and Environment Committee (ANES) set up to review, harmonize and validate agricultural statistics can be leveraged to improve data production by the Ministry of Agriculture, Livestock, Fisheries and Cooperatives to facilitate capturing of information that can be used to monitor the SDG land indicators especially indicator 5.a.1.

Analysis of existing data show interesting findings although statistics produced are only proxies for the recommended SDG indicators 1.4.2 and 5.a.1 for several reasons:

- a) The 2014 KDHS asked questions on whether households owned land for agriculture and where the dwelling structure sits at household level. Households that own non-agricultural land away from where their dwelling structure sits were not considered in the survey. The question on land ownership was also asked for individuals aged 15-49 years for women and 15-54 years for men, meaning that the whole range of adult population is not properly captured. In addition, questions on availability of legal land documents and the type of tenure were not asked.
- b) The 2015/16 KIHBS only asked questions on ownership, legal documents and land tenure for agricultural households that are engaged in crop farming. The questions were not asked to households that were engaged in livestock farming and those that own other land apart from the agricultural land. So, these households were not covered in the survey.
- c) In conclusion, it is imperative for the KNBS to set up the necessary mechanisms to improve the data collection tools to capture data for monitoring SDG indicators 1.4.2 and 5.a.1 for accurate and comparable reporting at national and international levels. Key data producers such as the Ministry of Lands and Physical Planning (MoLPP) and the Ministry of Agriculture, Livestock, Fisheries and Cooperatives will play a key role in this process.

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20. The Big Four Agenda- Kenya

Endnotes

- 1 https://monitoring.planning.go.ke/wp-content/uploads/2020/10/Big-Four-Agenda-Report-2018_19.pdf
- 2 <https://vision2030.go.ke/>
- 3 <https://repository.uneca.org/handle/10855/593>
- 4 National Council for Population and Development (NCPD). "Kenya Population Situation Analysis." In: Kenya Population Situation Analysis. Nairobi: National Council for Population and Development (NCPD); 2013.
- 5 https://glttn.net/wp-content/uploads/2019/08/190824_Measuring_Individuals_Rights_to_Land_publishing_web.pdf
- 6 In November 2020, UN-Habitat- joint custodians of SDG indicator 1.4.2 and FAO, custodian of SDG Indicator 5.a.1, organized a 2-day virtual technical workshop on enhancing the capacity of Kenya to collect land tenure security data and report on the two SDG indicators. The workshop was attended by technical officers from KNBS and the Ministry of Lands and Physical Planning (MoLPP) who are responsible for survey design, land registration, management, and reporting on the SDGs. During the workshop, the officers were introduced to the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) approved methodology for measuring SDG indicators 1.4.2 and 5.a.1 and held discussions on the adoption of module questionnaires in future surveys.
- 7 <https://www.knbs.or.ke/>
- 8 Kenya Strategy for the Development of Statistics, 2019/20 –2022/23
- 9 For the purposes of SDG indicator 5.a.1, and to ensure comparability of the indicator across time and context, the adult agricultural population is defined as: All adult individuals living in agricultural households – i.e., households who operated land for agricultural purposes and/or raised/tended livestock in the past 12 months, regardless of the final destination of the production. It is important to note that households in which members were engaged in agriculture only through wage labour are excluded from the reference population.
- 10 Kenya National Bureau of Statistics, Ministry of Health/Kenya, National AIDS Control Council/Kenya, Kenya Medical Research Institute, National Council for Population and Development/Kenya, and ICF International. 2015. Kenya Demographic and Health Survey 2014. Rockville, MD, USA: Kenya National Bureau of Statistics, Ministry of Health/Kenya, National AIDS Control Council/Kenya, Kenya Medical Research Institute, National Council for Population and Development/Kenya, and ICF International.
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- 14 The Ministry derives its mandate from among others: The Constitution of Kenya 2010; Sessional Paper No. 3 of 2009 on National Land Policy; Land Act 2012; Land Registration Act 2012; Community Land Act 2016; Land Control Act Cap. 302 of the Laws of Kenya; Registration of Documents Act Cap 285; Sectional Properties Act No. 2 of 1987; Trustees (Perpetual Succession) Act Cap 164; Survey Act Cap 299; Land Adjudication Act Cap 284; Land Consolidation Act Cap 283; Physical and Land Use Planning Act; Stamp Duty Act Cap 480; Valuation for Rating Act Cap 267; Land Value Amendment Act 2019; Public Procurement and Asset Disposal Act of 2015; Valuers Act Cap 532; Estate Agents Act Cap 533.
- 15 <https://lands.go.ke>
- 16 This is an initiative by the MoLPP to accelerate issuance of titles across the Country by holding consultative forums with the stakeholders to address challenges hindering at 100 per cent titling
- 17 Report by the Cabinet Secretary, MoLPP to the National assembly 2021 (draft report)
- 18 Community or customary land is catered for under the Constitution of Kenya 2010 and the Community Land Act, 2016
- 19 <https://lands.go.ke/electronic-regulations/>
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6. ANNEX 1

1. Application for Combination Form LRA 26
2. Application for Issue of a Certificate of Title Lease Form LRA 19
3. Application for Partition Form LRA 29
4. Application for Reparcellation Form LRA 28
5. Application for Replacement Certificate of Title Lease on Loss Destruction of a Previous Title Form LRA 12
6. Application for Reconstruction of a Land Register Form LRA 14
7. Application for Severance of Joint Ownership Form LRA 37
8. Application to the Registrar for Approval of a Document for use Where no Form has been prescribed Form LRA 86
9. Certificate of Title Form LRA 20
10. Certificate of Lease Form LRA 21
11. Consent by the Encumbrancer to Transfer Form LRA 34
12. Deed of Indemnity Form LRA 17
13. Form of Consent of a Chargee to a Partition Form LRA 32
14. General Application for Registration Form LRA 9
15. Irrevocable Power of Attorney Form LRA 7
16. Lease Form LRA 62
17. Lease (Long Term) Form LRA 64
18. Mutation Form-LRA-27
19. Notice for Issue of a Replacement Title Form LRA 13
20. Transfer of Undivided Share Form LRA 35
21. Register of Powers of Attorney Form LRA 4
22. The Land Register (Absolute Titles) Form LRA 2
23. The Land Register (Leasehold) Form LRA 3
24. Transfer of Interest in Land Form LRA 33
25. Transfer of Land by a Trustee Form LRA 52
26. Transfer of Lease Form LRA 63

7. ANNEX 2

1. Application for Customary Right of Occupancy Form CLA 9
2. Application for Registration of a Community Form CLA 3
3. Application for Recognition of Interest/ Claim on Community Land Form CLA 1
4. Application for Recognition and Adjudication of Claim on Community Land Form CLA 8
5. Certificate of Customary Right of Use and Occupancy Form CLA 10
6. Certificate of Registration Form CLA 4
7. Dispute Registration Form CLA 11
8. Disputes Register Form CLA 12
9. Inventory Form for Unregistered Community Land Form CLA 6
10. Notice Intention to Survey, Demarcate and Register Community Land Form CLA 7
11. Notification of Change in Composition of community Land Management Committee Form CLA 2
12. Register of Communities Form CLA 5

8. ANNEX 3

Table 16: Proportion of Agricultural Households by Sex of Household Head and Area of Residence, 2015/16

		Agriculture		Non-Agriculture		Total
		Number	Per Cent	Number	Per Cent	
Household Head	Male	4,808,367	62.5	2,883,890	37.5	7,692,257
	Female	2,362,148	64.0	1,329,767	36.0	3,691,915
Residence	Rural	5,594,083	87.0	838,204	13.0	6,432,286
	Urban	1,576,432	31.8	3,375,454	68.2	4,951,886
Total		7,170,515	63.0	4,213,657	37.0	11,384,172

Source: 2015/16 Kenya Integrated Household Budget Survey.

Table 17: Proportion of Households that own at least one Parcel of Land by Sex of the Household Head and Area of Residence

		Yes		No		Total
		Number	Per Cent	Number	Per Cent	Number
Sex	Male	3,306,726	81.0	775,072	19.0	4,081,799
	Female	1,574,981	78.1	441,828	21.9	2,016,809
Residence	Rural	4,025,710	82.4	862,029	17.6	4,887,739
	Urban	855,998	70.7	354,871	29.3	1,210,869
Total		4,881,708	80.0	1,216,900	20.0	6,098,608

Source: 2015/16 Kenya Integrated Household Budget Survey.

Table 18 : Agriculture land ownership (% of households) by Sex of Household Head and Area of Residence, 2014

		Agriculture		Non-Agriculture		Total
		Number	Per Cent	Number	Per Cent	Number
Household Head	Male	16,713	67.9	7,914	32.1	24,628
	Female	7,275	62.2	4,417	37.8	11,692
Residence	Rural	16,702	79.3	4,367	20.7	21,069
	Urban	7,286	47.8	7,965	52.2	15,250
Total		23,988	66.0	12,331	34.0	36,320

Source: 2014 Kenya Demographic and Health Survey

Table 19: Proportion of Households that own Agricultural land with and without legal land documents by Sex of the Household Head and Area of Residence, 2015/16

		With Legal documents		Without Legal documents		Total
		Number	Per Cent	Number	Per Cent	Number
Sex	Male	1,914,588	57.9	1,392,139	42.1	3,306,726
	Female	889,387	56.4	686,253	43.6	1,575,640
Residence	Rural	2,231,841	55.4	1,794,527	44.6	4,026,369
	Urban	572,133	66.8	283,864	33.2	855,998
Total		2,803,975	57.4	2,078,392	42.6	4,882,366

Source: 2015/16 Kenya Integrated Household Budget Survey.

Table 20: Proportion of Agricultural Households by Sex of Household Head and Area of Residence, 2015/16

		Agriculture		Non-Agriculture		Total
		Number	Per Cent	Number	Per Cent	
Household Head	Male	4,808,367	62.5	2,883,890	37.5	7,692,257
	Female	2,362,148	64.0	1,329,767	36.0	3,691,915
Residence	Rural	5,594,083	87.0	838,204	13.0	6,432,286
	Urban	1,576,432	31.8	3,375,454	68.2	4,951,886
Total		7,170,515	63.0	4,213,657	37.0	11,384,172

Source: 2015/16 Kenya Integrated Household Budget Survey.

Table 21: Proportion of Households Engaged in Crop Farming or Livestock Farming by Sex of Household Head and Place of Residence, 2015/16

Part A: Proportion of Households in Crop Farming by Household Head and Residence, 2015/16						
Number		Yes		No		Total
		Per Cent	Number	Per Cent	Number	
Sex of Household Head	Male	4,058,980	52.8	3,633,858	47.2	7,692,838
	Female	2,009,838	54.4	1,682,077	45.6	3,691,915
Place of Residence	Rural	4,877,793	75.8	1,554,493	24.2	6,432,286
	Urban	1,191,025	24.0	3,761,442	76.0	4,952,467
Total		6,068,818	53.3	5,315,936	46.7	11,384,753
Part B: Proportion of Households in Livestock Farming by Household Head and Residence, 2015/16						
Number		Yes		No		Total
		Per Cent	Number	Per Cent	Number	
Sex of Household Head	Male	4,084,056	53.1	3,608,324	46.9	7,692,380
	Female	2,006,857	54.4	1,685,058	45.6	3,691,915
Place of Residence	Rural	4,870,445	75.7	1,561,429	24.3	6,431,875
	Urban	1,220,468	24.6	3,731,954	75.4	4,952,421
Total		6,090,913	53.5	5,293,383	46.5	11,384,296

Source: 2015/16 Kenya Integrated Household Budget Survey.

Table 22. Summary of Proxy Indicators 1.4.2 and 5.a.1 by Sex and Residence from 2014 KDHS and 2015/16 KIHBS

Indicator	Indicator Description	Total	Male	Female	Rural	Urban
1.4.2 (a) Population (Female Individuals)	The proportion of female adult population (18-49) who own land	43.1			55.2	26.6
1.4.2(a) Population (Male Individuals)	The proportion of male adult population (18-54) who own land	52.4			56.7	47.3
1.4.2(a) Household	The proportion of households that own land	70.5	71.8	67.9	84.5	51.3
1.4.2 (b)	There is no existing data on perception of land tenure security					
5.a.1 (a)	Proportion of agricultural population with ownership or tenure rights over agricultural land	57.4	57.9	56.4	55.4	66.8
5.a.1 (b)	Share of women among owners or rights bearers of agricultural land, by type of tenure		68.3	31.7		



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