KENYA NATIONAL SEMINAR ON CENSUS DATA ANALYSIS
Nairobi, Kenya
19-22 March 2012

REPORT

TABLE OF CONTENTS

OBJECTIVES OF THE NATIONAL SEMINAR

1.   The Kenya Seminar on Census Data Analysis was held in Nairobi, Kenya from 19 to 22 March 2012. The main objective of the national seminar was to provide an opportunity for the staff member of the Kenya National Bureau of Statistics (KNBS), and other relevant organizations in Kenya, to further analyze data from the 2009 population and housing census of Kenya on selected topics. The Seminar was organized under the auspices of the project "Strengthening National Capacity to Analyse, Present, and Disseminate Census Data for Evidence-based Policy Making" which is funded by the Government of Italy, and implemented by the United Nations Statistics Division (UNSD).

2.   The national seminar provided training on the following topics: (i) analysis of data on gender issues; (ii) analysis of data on international migration, and (iii) population projections at sub-national and sectoral level. See Annex 1 for the seminar agenda. Following the training, participants were expected to produce thematic analytical reports on the topics of the national seminar.

ATTENDANCE

3.   The Kenya National Seminar on Census Data Analysis was attended by 21 participants of whom 8 were from the Kenya National Bureau of Statistics, 9 from the Population Studies and Research Institute of the University of Nairobi, 1 each from the National Coordinating Agency for Population and Development and the Civil Registration Department and 2 from the United Nations Statistics Division. The list of participants is presented in Annex 2.

OPENING OF THE NATIONAL SEMINAR

4.   Opening remarks were made by KNBS and UNSD, in that order. Mr. Kilele the Director General of KNBS thanked UNSD for organizing the National Seminar. He pointed out that the National Seminar was yet another of the many collaborative efforts between UNSD and KNBS. Mr. Kilele reaffirmed KNBS's commitment to participating in the training as this would enhance capacity building in the Bureau and ultimately the production of analytical reports on the selected topics. He added that it was encouraging to see that the Kenyan Government and data users in general were looking for more and more data for informed decision making. He acknowledged that the support of UNSD's through the funding of the project by the Italian Government was timely and relevant. Mr. Kilele concluded by stating that KNBS looked forward to more capacity building in the future on the analysis of on additional census topics.

5.   Ms. Margaret Mbogoni gave opening remarks on behalf of Mr. Paul Cheung, Director of UNSD, welcoming the participants and introducing the project, funded by the Italian project and implemented by UNSD. The opening remark emphasized the importance of taking full advantage of the data collected through a national census programme as the data collected through a census are crucial for public and private sector planning, policy-making and administrative and research purposes. She emphasized that in order for census data to be truly useful for these diverse purposes, the data have to be fully analyzed and widely disseminated since a census is not considered complete until the information collected is made available to users in the form suited to their needs. Ms. Mbogoni informed participants that it was against this

backdrop that the United Nations Statistics Division initiated the project to promote a greater level of analysis and dissemination of census data at the national level. The impetus behind the project was the growing need to maximize the use of census data for better assessment of national economic, social and demographic circumstances and for providing information essential for evidence-based decision making.

ORGANIZATION OF THE TRAINING

6.   Training at the national seminar was conducted by three experts from the Population Studies and Research Institute of the University of Nairobi: Dr. Lawrence Ikamari on gender analysis, Dr. Alfred Agwara Otieno on analysis of data on migration, and Mr. Ben Jabari Obonyo on population projections.

7.   The training was structured into lecture presentations and hand-on exercises on the three topics using appropriate demographic analysis software. The participants used the 2009 Kenyan population and housing census data for the practical exercises. Participants were also trained in the use of applications for analysis of migration data and for projections. Enough time was allotted for questions and answers, and for general discussions. Lecture presentations on the three topics are available on the UNSD 2010 World Population and Housing Census Programme website at http://unstats.un.org/unsd/demographic/meetings/wshops/Kenya/2012/list_of_docs.htm. Outlines of the lectures are presented as annexes to the present report.

GENDER ANALYSIS

8.   Dr. Lawrence Ikamari presented on gender analysis. In his presentation, he stated that the purpose of this session was enable the participants to appreciate the important of taking gender dimensions into account in development planning at all levels and to equip the participants with the knowledge and skills on how to carry out analysis of census data from different gender perspectives. He also indicated that at the end of the session, participants would be able to: (i) state the rationale for gender disaggregated data; (ii) describe the key gender concepts; (iii) describe how to prepare data to be used in gender analysis; (iv) describe how to carry out gender analysis; and (v) describe how to present gender disaggregated data. See Annex 3 for the outline of the training on gender analysis.

9.   The presentation discussed the importance of gender disaggregated data providing a rationale for having these data, including for monitoring of international and national commitment to promote gender equality and women's empowerment. It also introduced definitions of key concepts related to gender analysis, such as gender, sex, gender relations, gender aware planning, gender mainstreaming, gender gap, gender parity index, etc. Dr. Ikamari also covered in his presentation how to analyze key demographic parameters on the basis of gender such as age, marital status, and mortality. The presentation also covered how to analyze and present census data on education and labour force, and also on disability, on the basis of gender.

ANALYSIS ON MIGRATION CHARACTERISTICS

10.   Dr. Alfred Otieno was responsible for the sessions on analysis of data on migration

characteristics. The purpose of the training on this topic was for participants to be able to measure migration from census data by being able to (i) describe and distinguish types of migration; (ii) describe how to measure the extent of migration from census data; and (iii) describe how to prepare migration data to be used in sub-national projections. Annex 4 presents the outline of the training on analysis of migration characteristics.

11.   The presentation included a general definition of migration as a form of spatial mobility involving change of residence which may or may not be permanent. It was pointed out that short term mobility which does not result in change of residence does not constitute migration. Other concepts which were defined during the presentation include: international migration, internal migration, emigration, immigration, gross migration, net migration, etc. Dr. Otieno also presented on the rationale for collecting data on migration, census questions from which data are derived for direct estimation of migration (both internal and international), as well as techniques for indirect estimation of migration based on data from two or more censuses. He also presented some information related to theories of migration including on its causes and explanations.

12.   As part of the training on analysis of data on migration characteristics participants had hands-on exercises on the use of census survival rate indirect estimation of internal migration by provinces of Kenya based on data from successive censuses using the PASEX[1] software program which consists of 45 spreadsheets with tools for analyzing age structure, mortality, fertility, migration, distribution of the population, and urbanization, which allow users to generate population projections.

POPULATION PROJECTIONS

13.   Mr. Ben Jarabi Obonyo was in charge of the sessions on population projections. In terms of objectives the training on this topic was aimed at ensuring that at the end of the session, participants would be able to: (i) outline the relevance of population projections, (ii) detect and adjust errors in age reporting, (iii) prepare necessary inputs for a population projection, (iv) outline projection methodologies, (v) generate a population projection at national level, (vi) generate a population projection at sub-national level, and (vii) generate sectoral population projections. An outline of the session is presented in Annex 5.

14.   In his presentation, Mr. Obonyo defined the term population projections and also provided some rationale for the projections, in the context of Kenya. The presentation also discussed the importance of evaluating and making adjustments to the base population before making the projections. This is because accurate baseline data on population size and age structure, as well as on fertility, mortality, and net migration rates, are critical to producing accurate population projections. Mr. Obonyo also discussed techniques for evaluating data by age and sex in order to detect errors in reporting, as well as techniques for adjusting and smoothing the data to correct for these errors. Participants worked with data from the 2009 census of Kenya to practice how to generate indices of estimation of error in age data and of making the adjustments by various techniques.

---

[1] PASEX has been developed by the United States Census Bureau International Programs Center. For more information, see http://www.census.gov/population/international/software/.

15.   The presentation by Mr. Obonyo also covered the preparation of the necessary inputs for a population projection. It also presented a summary of the different methodologies for making the projections as well as on how to generate national and sub-national level projections, and also sectoral projections. The presentation was reinforced by extensive hands-on exercises by the participants on how to prepare the input data and generate these various types of projections. The hands-on exercises were carried out with the aid of the PASEX software.

16.   The following are some of the salient issues that came up during the session on projections: (i) the accuracy of the projections depends on the quality of the input data and the assumptions made about the course of future changes; (ii) documentation of procedures for adjustment and smoothing of the data, and of assumptions for levels of components of population changes is very crucial; (iii) the longer the time span for the projections, the greater the potential deviation of the projected from the actual population; and (iv) projections should be checked periodically and adjustments made as necessary.

DISCUSSION ON FUTURE PLANS

17.   UNSD briefed the participants what is expected of the national project and provided the framework on the way forward. This mainly related to activities towards the writing of analytical reports that were envisaged following the national seminar. The following steps were identified:
   (i)   While still at the national seminar, participants would be divided into working groups along the lines of the three topics that were covered at the national seminar
   (ii)   Within each group, participants, in consultation with the respective experts from the Population Studies and Research Institute (PSRI), would then be expected to choose a leader and to identify topics to be included in the analysis. Each group would determine a tentative time table for activities and delivery of outputs.
   (iii) Following the national seminar, PSRI experts would provide relevant reading lists and also technical guidance to their corresponding team members on the development of outlines for analytical reports.
   (iv)   PSRI experts would submit to UNSD the analytical report outline and list of possible tabulations to be included in the analysis
   (v)   Over a three-month period, teams would undertake report writing by teams with technical assistance of PSRI experts
   (vi)   Upon completions, the analytical reports would be submitted by the PSRI experts to UNSD

18.   KNBS assisted to group the participants into three teams along their lines of competence and interest (see Annex 6 for team membership). The participants, through three break-away teams carried on their discussions which focused, among other things, on the content of monographs on the three thematic areas selected for in-depth analysis, as well as work plans and time lines for each team. UNSD was instrumental in creating the synergy that was critical to kicking off the work within each team.

19.   Following the group discussions, the three teams reported back to plenary on the major issues discussed, formats of the final drafts of the monographs; deadlines for submissions of deadlines. The plenary further discussed the work of the teams, and made several comments and suggestions. What follows is what was reported by the three teams by thematic area:

<u>Gender analysis:</u>

20.   Taking into account the outline of a thematic report on the subject which has already been drafted by KNBS and is being finalized, the team members discussed what other possible areas could be analyzed without duplicating what has already been done. The team then decided that the monograph should be on gender and the labour force with analysis of data up to county level. Other areas of analysis related to gender that the team was considering were education and also ownership of household amenities. The team also decided to meet the week after the national seminar to work on a preliminary outline of the monograph, literature review; data availability, etc. The team further agreed to meet every two weeks to discuss the work done in the interim.

<u>Migration:</u>

21.   The team decided to focus on estimation of intercensal net migration based on analysis of the 1989, 1999 and 2009 census data. The team decided that as a starting point, they will review existing monographs for trends in migration flows, inter-regional flows, and characteristics of migrants. The team further decided on the division of work among themselves and also to meet two weeks after the national seminar. The expert from PSRI had already provided the team with a list of documents for the literature review. During the plenary, the team was asked if they were going to analyze data on emigrants and remittances that was collected during the 2009 census but cautioned that this may not be possible as the data from the "Emigration Short Questionnaire". It was revealed that these data are not yet ready for analysis as they have not been fully captured and edited.

<u>Population projections:</u>

22.   This team considered the KNBS 2009 census monograph on population projections and decided to focus their work on projections of the youth population (15 to 35 years of age - according to the Kenyan definition); the elderly (60 years of age and over); and women of reproductive age (15 to 49 years of age). Projections will be made at the national, provincial and county administrative levels. The team shared the task of reviewing relevant literature and also on establishing the rationale for the choice of topic. The team indicated that they were planning to meet on April 4 to finalize the table of contents for the monograph on population projections.

<u>General considerations on drafting of monographs:</u>

23.   Following the presentation of the teams during the plenary, the following general guidelines were suggested for consideration during the drafting of the monographs:
   (i)   The monographs will be prepared for easy reading using graphs and illustrations.
   (ii)   The monographs will follow the KNBS standard regarding style of referencing/documentation and numbering of tables.

(iii)   Each monograph should be structured to include a section each on introduction/background, source and limitations of data, main findings, and a concluding chapter which spells out policy and programme implications of the study.

(iv)   References should be relevant to the work at hand.

<u>Time table for delivery of outputs</u>

24.   At the outset, KNBS cautioned against the analysis of the three selected topics creating inconsistencies with already published 2009 census outputs. KNBS further mentioned that it would provide an enabling working arrangement for the teams and also ensure that data processing support is adequate. It emphasized, however, that in order for the work to be effectively undertaken, team members should meet regularly in order to exchange ideas. KNBS, however, requested that UNSD provide assistance with professional editing of the monographs.

25.   Regarding the time table for the drafting and completion of the monographs, KNBS indicated that their senior management would soon meet to come up with a realist schedule taking into account existing activities. KNBS, however, stressed its commitment to have these monographs completed within 5 months but not later than end of October 2012. It was further mentioned that the time table would be submitted to UNSD together with the annotated outlines and suggested list of tables for the monographs.

CLOSING OF THE NATIONAL SEMINAR

26.   In his closing remarks, Mr. Macdonald Obudho, Acting Director, Population and Social Statistics at KNBS expressed his appreciation to UNSD and the Italian Government for their support through the project. He mentioned that KNBS as well as Kenya in general had benefitted from the training during the seminar which included different methodologies and programs to enhance skills necessary for the development of the three thematic reports. Mr. Obudho further pointed out that the participation in the training of NCPD, Civil Registration and students from Population Studies Research Institute, University of Nairobi would bring forth different skills and opinion during the preparation of the reports.

27.   Ms. Margaret Mbogoni, on behalf of UNSD, thanked KNBS for the collaboration on organizing the national seminar and commended the trainees from the different organizations for their active participation during the seminar. She observed that the participation in the training of the numerous agencies was a testament to the existing collaboration between KNBS and the other agencies and also of the commitment that Kenya attached to the project. Ms. Mbogoni also recognized the technical expertise which the trainers from the PSRI had demonstrated during the four-day national seminar.

28.   One of the students from the PSRI, on behalf of his colleagues, thanked both UNSD and KNBS for the opportunity that was offered to the students to participate and benefit from the training at the national seminar. He confirmed their commitment to contribute to the writing of the three monographs.

EVALUATION OF THE NATIONAL SEMINAR

29.   In general, the national seminar was favourably evaluated by the participants. For example, the overall value of the national seminar was rated 4.2 out of 5 while the extent to which the seminar achieved its objectives was rated 4. Similarly, participants gave a value of 4 to the clarity of conclusions reached after each session and of 4.2 to the overall planning and organization of the national seminar. The substantive sessions of the national training – gender analysis, migration and population projections – were also highly rated receiving rating that ranged from 4.1 to 4.9. Participants, however, indicated that the duration of the national seminar was not adequate and that more time should have been allocated particularly for the hands-on exercises.

Time	Subject	Responsibility
	Monday, March 19, 2012	
09:00 – 09:30	Session I: Opening of the national seminar	KNBS, UNSD

09: 30-10: 30	Session II: Introduction to Gender Analysis
	  – Why Gender Analysis?
	  – Key Concepts in Gender Analysis
	  – Methodology
		Lawrence Ikamari (PSRI)

10: 30 – 10:45	*Coffee break*	
10: 45-12: 30	Session III: Analysis of Census data on key demographic parameters taking into account gender perspective	
12:30 – 13:30	*Lunch break*	
13: 30-15: 00	Session IV: Analysis of data on education and labour force taking into account gender perspective	
15: 00 – 15:15	*Coffee break*	
15: 15-17: 30	Session V: Analysis of data on disability taking into account gender perspective	
	Tuesday, March 20, 2012	

09: 00-10: 30	Session VI: Analysis of data on international migration
	  – Rationale
	  – Key concepts
	  – Sources of international migration data,
	  – Measurement of international migration
		Alfred Otieno (PSRI)

10:30 – 10:45	*Coffee break*	

10: 45-12: 30	Session VI: Analysis of data on international migration (contd.)
	  – Indirect estimation of estimation of International migration from census data
	  – Exercise: participants work on data using PASEX program	

12: 30-13: 30	*Lunch break*	

13: 30-15: 00	Session VII: Analysis of data on internal migration
	  – Rationale, key concepts
	  – Direct and Indirect estimation of internal migration
	  – Participants use of PASEX program for exercises
	  – Critique of the methods – Discussion of the presentations	

15:00 – 15:15	*Coffee break*	
15: 15-17: 00	Session VII: Analysis of data on internal migration (contd.) – Preparing migration data for projections – participants work on their data for preparation for sub national projections	
	Wednesday, March 21, 2012	
	Session VIII: Population Projections	Ben Jarabi (PSRI)
09:00-10:30	A. Introduction (Relevance, Methodology, Inputs) B. Evaluation and adjustment of the age-sex structure of the 2009	

Time	Subject	Responsibility

	population
	  – Detecting errors in age reporting
	  – Adjusting the population distribution for age misreporting by smoothing the age structure
	  – Practical: Evaluation and adjustment	

10:30–10:45	*Coffee break*	

10:45-12:30	C. Preparation of inputs for national and sub-national projections
	  – Estimating a population by age and age at a specified date
	  – Projecting fertility
	  – Projecting mortality
	  – Projecting migration
	  – Practical: Preparation of inputs	

12:30-13:30	*Lunch break*	

13:30-15:00	C. Preparation of inputs (Continued)
	  – Practical: Preparation of inputs
	D. Projection strategy for different levels of geography
	  – Cohort component – national and provincial levels
	  – Ratio method – county level	

15:00–15:15	*Coffee break*	

15:15-17:00	E. National and provincial projections
	  – National projection
	  – Provincial projections
	  – Practical: Cohort component	

Thursday, March 22, 2012		

09:00-10:30	F. Sub-national population projections
	  – County projections
	  – Practical: Sub-national projections	

10:30-10:45	*Coffee break*	
10:45-12:30	F. Sub-national population projections (Continued) – Practical: Sub-national projections	
12:30-13:30	*Lunch break*	

13:30-15:00	G. Sectoral population projections
	  – Projected school-age population
	  – Projected labour force
	  – Practical: Sectoral projections	

15:00-15:15	*Coffee break*	
15:15-17:00	Session IX: Discussion on future plans and closing ceremony	UNSD, KNBS

ANNEX 2: LIST OF PARTICIPANTS

	Name	Title	Affiliation
1.	Rosemary Kongani	Senior Statistics Officer	Kenya National Bureau of Statistics
2.	Mary Wanyonyi	Senior Manager	Kenya National Bureau of Statistics
3.	James N. Munguti	Manager	Kenya National Bureau of Statistics
4.	Michael M. Musyoka	Manager	Kenya National Bureau of Statistics
5.	Samuel Kipruto	Manager	Kenya National Bureau of Statistics
6.	Godfrey Otieno	Manager	Kenya National Bureau of Statistics
7.	John Makam	Manager	Kenya National Bureau of Statistics
8.	VivianneNyarunda	Statistician	Kenya National Bureau of Statistics
9.	Mugo E. Waweru	Student	Population Studies and Research Institute, University of Nairobi
10.	Janet MamboreoNyarinda	Student	Population Studies and Research Institute, University of Nairobi
11.	Kaaria Lucy Mukami	Student	Population Studies and Research Institute, University of Nairobi
12.	Mashara Janet Naisoi	Student	Population Studies and Research Institute, University of Nairobi
13.	Milton Moses Adieri	Student	Population Studies and Research Institute, University of Nairobi
14.	Kamunya Francis Mwangi	Student	Population Studies and Research Institute, University of Nairobi
15.	Ben Jarabi	Lecturer	Population Studies and Research Institute, University of Nairobi
16.	Lawrence Ikamari	Director	Population Studies and Research Institute, University of Nairobi
17.	Alfred A. Otieno	Senior Lecturer	Population Studies and Research Institute, University of Nairobi
18.	NzomoMulatya	Assistant Director of Population	National Coordinating Agency for Population and Development
19.	Willy Wambua	Civil Registrar	Civil Registration Department
20.	Margaret Mbogoni	Statistician	United Nations Statistics Division
21.	YacobZewoldi		Consultant (United Nations Statistics Division)

ANNEX 3: OUTLINE OF PRESENTATION ON GENDER DIMENSIONS

Goal: The purpose of this session is enable the participants to appreciate the important of taking gender dimensions into account in development planning at all levels and to equip the participants with the knowledge and skills on how to carry out analysis of Census Data from different gender perspectives.

Objectives: At the end of the session participants will be able to:

- State the rationale for gender disaggregated data
- Describe the key gender concepts
- Describe how to prepare data to be used in gender analysis.
- Describe how to carry out gender analysis
- Describe how to present gender disaggregated data

Session outline

- Discussion on the importance of gender disaggregated data
- Introduction: definitions of key concepts in gender Analysis
- Presentation of Census data on key demographic parameters taking into account gender perspective
- Presentation of Census data on education and labour force taking into account gender perspective
- Presentation of Census data on disability taking into account gender perspective

Part One: Rational and definitions of key concepts in gender dimensions

Rational for gender/sex disaggregated data

Exercise on the rationale for gender disaggregated data at all level

Agenda

Time	Content	Activity	Materials needed
15 min	Rationale for gender disaggregated data	Activity 1: Brainstorm on the rationale for gender disaggregated data Ask the participants to provide the rationale gender disaggregated data	Flip charts and markers Provide the rationale in the slides

Definitions of key concepts

Exercise on definitions of key concepts

Time	Content	Activity	Materials needed
15 min	Definitions of concepts: Gender Sex Gender Analysis Gender relations Gender Aware Planning/Mainstreaming	Activity 2: Brainstorm on the definitions of the key concepts: Ask the participants to define key concepts	Flip charts and markers Provide definition of key concepts in the slides

Part Two: Presentation of census data taking into account gender perspective

Demographic parameters taking into account gender perspective

Time	Content	Activity	What is needed
1.45 hours	Presentation on key demographic parameters taking into account gender perspective	How to analyses key demographic parameters on the basis of gender	Power point presentation. Flip charts and markers. 2009 Population and Housing Data in Excel spreadsheets

Data requirement for Analysis of Census data on key demographic parameters taking into account gender perspective

1 Crosstab of population by sex
2 Crosstab of population by 5-year age groups (0-4, 5-9, 10-14,… 75+) and by sex
3 Crosstab of population aged 0-14 years by sex and province
4 Crosstab of population aged 15-24 years by sex and province
5 Crosstab of population aged 15-64 years by sex and province
6 Crosstab of population aged 65+ years by sex and province
7 Crosstab of population aged at least 15 years in each province by 5 year age groups (15-19, 20-24, 25-29, --- 45-49) by sex and marital status
8 Crosstab of population by sex and rural-urban residence

Gender dimension in education and labource data

Time	Content	Activity	What is needed
2.15 hours	Presentation on Census data on education and labour force taking into account gender perspective	How to analysis and present data on education and labour force on the basis of gender	Power point presentation. Flip charts and markers. 2009 Population and Housing Data in Excel spreadsheets

Data requirement for analysis of Census data on education and labour force taking into account gender perspective

Key tabulations on education and sex

1   Crosstab of population aged 3 years and above by school attendance and sex
2   Crosstab of population aged 3 years and above in each type of residence by school attendance and by sex and by 5 year age group
3   Crosstab of population aged 3 years and above in each province by school attendance and sex
4   Crosstab of population aged 3 years and above in each province by education and sex
5   Crosstab of population aged 3 years and above in each type of residence by education and sex
6   Crosstab of population aged 3 years and above in each county by education and sex

Key tabulations on labour force and sex

1   Crosstab of population aged 5 years and above by economic activity and sex
2   Crosstab of population aged 5 years and above in each type of residence by economic activity and by sex and by 5 year age group
3   Crosstab of population aged 5 years and above in each province by economic activity and sex
4   Crosstab of population aged 5 years and above in each province by economic activity and sex
5   Crosstab of population aged 5 years and above in each type of residence by economic activity and sex
6   Crosstab of population aged 5 years and above in each county by economic activity and sex
7   Crosstab of population aged 5 years and above by economic status and sex
8   Crosstab of population aged 5 years and above in each type of residence by economic status and by sex and by 5 year age group

9   Crosstab of population aged 5 years and above in each province by economic status and sex

10 Crosstab of population aged 5 years and above in each province by economic status and sex

11 Crosstab of population aged 5 years and above in each type of residence by economic status and sex

12 Crosstab of population aged 5 years and above in each county by economic status and sex

Gender dimension in disability data

Time	Content	Activity	What is needed
1.15 hour	Presentation on Census data on disability taking into account gender perspective	How to analysis and present data on disability on the basis of gender	Power point presentation. Flip charts and markers. 2009 Population and Housing Data in Excel spreadsheets

Data required for analysis of data on disability taking into account gender dimensions

1   Percentage of PWDs by School attendance Status and Sex
2   Percentage of PWDs by Type of disability, education attendance and sex
3   Percentage of PWDs by education attainment and sex
4   Percentage of PWDs by economic Activity, Sex, and Province

References

Henry S. Shryock and Jacob S. Siegel. 1976. The Methods and Materials of Demography. (Condensed edition by Edward G. Stockwell.] New York. Academic Press.
Republic of Kenya: Kenya Vision 2030, Medium Term Plan (2008-2012)
Republic of Kenya: Millennium Development Goals, Status Report for Kenya 2007
Republic of Kenya, 2010. The Constitution of Kenya
United Nations, 2009. Statistics and Indicators on Women and Men:http://unstats.un.org
United Nations, 2009. The World's Women 2000: Trends and Statistics
United Nations. 1995. Report of the Fourth World Conference on Women. Beijing.
United Nations, Report of the World Summit for Social Development. Copenhagen
United Nations, 2008 Official list of MDG Indicators, http://mgds.un.org/unsd/mdg.host..
United Nations Human Settlements Programme: Violence Against Women

ANNEX 4: OUTLINE OF PRESENTATION ON MIGRATION

Goal: The purpose of this session is for participants to be able to analyze migration data from census data

Objective (s): At the end of the session participants will be able to:

- Describe and distinguish types of migration
- Describe how measure extent of migration from census data
- Describe how prepare migration data to be used in sub national projections.
-

What we will learn: Measurement of migration levels from census data

Session Outline
- Introductions: definitions of key concepts
- Types of migration data and their use
- Direct estimation of migration flows (internal and international
- indirect estimation of migration from two or more censuses
- Developing tabulation plans

Introduction: definitions and key concepts

Time	Content	Activity	Materials needed
10 min	Concept of Migration: Definition of migration Type of change of boundary (internal vs. international); Direction of the move (rural-rural, rural –urban etc); Distance covered; Timing of stay (long term verses short term); Periodicity (repetitive). Voluntary vs involuntary migration	*Activity 1: Brainstorm on the opening of the session:* *Ask the participants to define in their own the meaning of the migrations* *Brief discussion on various measures and problems of measurement*	Flip charts and markers Provide definition of key concepts as in the slides

Part I: Rationale

Time	Content	Activity	What is needed

15min	1) Reasons for statistics on migration
	2) Sources of data for migration statistics
	    a. General
	    b. Census
	    c. Review of census questions since 1989
		Discussion	Power point presentation.
			
			Flip charts and markers.
			
			Slide presentation

Part II: Direct estimation of migration (internal and international)

Data required: data to be provided in excel spread sheet
1) Cross tab of Place of birth and place of enumeration (by province) – group international place of birth as East Africa, Other African, Europe, North America Asia , other
2) Cross tab of Place of current and place of enumeration (by province) – group international place of birth as East Africa, Other African, Europe, North America Asia , other
3) Age sex distribution
    a. For each province, cross tab persons born elsewhere and enumerated in the province by sex and age group(1-4, 5-9,10-14,15-19……70+)
    b. For each province, cross tab persons who were living elsewhere in August 2008 and enumerated in the province by sex and age group (1-4, 5-9,10-14,15-19……70+)

Time	Content	Activity	What is needed
20 min	Presentation on migration matrix Lifetime migrants Current migrants	*Discussion on how to identify migrants from the matrices generation from place of birth and current place of residence* *Matrices obtained by cross classification on place of enumeration and place of residence 1 year ago* *Exercise participants work on provincial data to obtain in-out migration rates; gross migration flows; migration streams*	Power point presentation. Flip charts and markers. Data in excel spreadsheet (2009 KPHC)

Time	Content	Activity	What is needed
20 min	Use of duration of stay	*Discussion on how to utilize duration of stay in 1999 and 2009 censuses* *Develop tabulation plans*	Power point presentation. Flip charts and markers. Data in excel spreadsheet (2009 KPHC)

Part III: Indirect estimation of migration

Data required: in excel spreadsheet
Age -sex distribution of population by province (age to be provided in under 1, 1-4, 5-9 etc For 1999 and 2009 censuses

Time	Content	Activity	What is needed
50 min	Presentation on use of two or more censuses to estimate international and internal migration	*Activity1: presentations* *Participants work on exercises use both forward and reverse survival \use of composite methods*	Power point presentation. Flip charts and markers. Chart Data in excel spreadsheet (2009 and 1999 KPHC)
20 min	Weaknesses of indirect estimates	*Discussion*	

Part IV: Developing Tabulation Plans for international and internal migration

Time	Content	Activity	What is needed
		Participants prepare tabulation plans for analysis of internal migration and prepare internal migration data for use in projections	
		Participants prepare data for further analysis of international migration	

Conclusion

Time	Content	Activity	What is needed
3-5 min		Presentation on the way forward	
2-3 min			

References

Arriaga, Eduardo et al. 1994. Population Analysis with Microcomputers. Washington, D.C.:
U.S. Census Bureau, chapter V.

Henry S. Shryock and Jacob S. Siegel. 1976. The Methods and Materials of Demography.
(Condensed edition by Edward G. Stockwell.] New York. Academic Press.

Jacob S. Siegel and David A. Swanson. 2007. The Methods and Materials of Demography,
Second Edition
Henry S. Shryock and Jacob S. Siegel. 1976. The Methods and Materials of Demography.
(Condensed edition by Edward G. Stockwell.] New York. Academic Press.

Preston, S.H., P. Heuveline and M. Guillot. 2001. Demography: Measuring and Modeling
Population Processes. Blackwell Publishers Inc, Oxford.

Rowland, DT Demographic Methods and Concepts (Oxford, 2003). This methods text probably
is more comprehensive but less technical. Of spreadsheet modules on a supplementary
CD.

United Nations. 1992. Preparing Migration Data for Subnational Population Projections.
Department of International Economic and Social Affairs, ST/ESA/SER.A/127. New
York.

United Nations (1970). *Manual VI. Methods ofMeasuring Internal Migration.* Sales No.
E.70.XIII.3.

____ (1978). *Statistics of Internal Migration: A Technical Report.* Studies in Methods.
ST/ESA/STAT/Ser.F/23.

US Census Bureau PASEX program

Exercises

1) Tabulate
   a) Foreign-born population, by country of birth, age and sex
   b) Economically active1 foreign-born population ...3 years of age and over, by period of
      arrival, occupation and sex
   c) Population, by duration of residence in locality and province age and sex

2) Tabulate:

a) Duration of current Region of residence By Sex

Previous place of residence	Duration of residence														Total
	0	1			2	3	4	5	6	7	8	9	10+		

b) Female migrants to Province by Duration of residence and age (repeat for males)

Duration of residence in current place	Age group										65-69	70+	
	0-4	5-9	10-14										
0													
1													
2													
3													
4													
5													
6													
7													
8													
9													
10+													
Not Stated													
Total													

4) Census survival ratio Method

age group	Kenya Population				Nairobi				
	1999	2009	10 year survival ratio		1999	2009	10 year survival ratio	Survivors from 1999	Net migration
"0-4									
"5-9									
"10-14									
15-19									
20-24									
25-29									
30-34									
35-39									
40-44									
45-49									
50-54									

55-59	
60-64	
65-69	
70+	
All ages	

NOTES:
- Column (3) = population 2009, age x divided by population 1999 age x-10; column (6) = column (4) (age - 10) times survival rate in column (3);
- column (7) = column (5) minus column (6)
- Forages under 10, net-migration estimates are derived as follows:

For age 0-4: 1/4 (ratio of population 0-4 to female population aged 15-44) times net migration for females aged 15-44;

For age 5-9: 3/4 (ratio of population 5-9 to female population aged 20-49) times net migration for females aged 20-49.

ANNEX 5: OUTLINE OF PRESENTATION AND TRAINING ON POPULATION PROJECTIONS

(1) Introduction (Relevance, Methodology, Inputs)

(2) Evaluation and adjustment of the age-sex structure of the 2009 population

– Detecting errors in age reporting

– Adjusting the population distribution for age misreporting by smoothing the age structure

– Practical: Evaluation and adjustment

(3) Preparation of inputs for national and sub-national projections

– Estimating a population by age and age at a specified date

– Projecting fertility

– Projecting mortality

– Projecting migration

– Practical: Preparation of inputs

(4) Projection strategy for different levels of geography

– Cohort component – national and provincial levels

– Ratio method – county level

(5) National and provincial projections

– National projection

– Provincial projections

– Practical: Cohort component

(6) Sub-national population projections

– County projections

– Practical: Sub-national projections

(7) Sectoral population projections

– Projected school-age population

– Projected labour force

– Practical: Sectoral projections

ANNEX 6: **TEAM MEMBERSHIP**

Gender analysis
1. Lawrence Ikamari – PSRI expert
2. Rosemary Kongani – KNBS
3. Mary Wanyonyi – KNBS
4. Godfrey Otieno – KNBS
5. Kaaria Lucy Mukami – PSRI student

Migration
1. Alfred Otieno – PSRI expert
2. James Munguti – KNBS
3. John Makam – KNBS
4. Milton Moses Adieri – PSRI student

Population projections
1. Ben Jarabi Obonyo – PSRI expert
2. Michael Musyoka – KNBS
3. Vivianne Nyarunda – KNBS
4. Nzomo Mulatya – NCPD
5. Willy Wambua – CRD
6. Mugo Waweru – PSRI student
7. Janet Mamboreo Nyarinda – PSRI student
8. Kamnya Francis Mwangi – PSRI student