平成26年度上半期に、the Kenyan Medical Research Institute (KEMRI)に対する具体的な研究計画書（事前倫理審査承認が必要）を作成し提出する予定である。調査の承認が得られれば以下の事項について研究を進める。

(1)　高齢者の健康状態の把握

その第一ステップとして、ケニア国保健省から、データ利用の許可が下り次第、既存データ（HDSSによって過去5年間に蓄積された住民情報）の分析を行い、高齢者およびその予備郡の壮年層を含む健康状態の把握を行う。

(2)　コミュニティー・レベル調査の実施

ケニアにおけるHDSSを活用した高齢者の個人・家族レベルの生活調査に加えて、共助の機能の評価として地域社会に関する調査を行う必要がある。(地域住民団体の情報等)

(3) 政策課題の情報整理と理論の構築

これまでの主として人類学的観点からの高齢者の生活に焦点を合わせてきたが、最終年度には情報の少ないアフリカ各国の高齢者福祉政策に関するレビューが必要である。この点に関しては、たとえば南アフリカ共和国における非拠出型年金についてアジア経済研究所の牧野久美子氏が報告しているが（牧野久美子「南アフリカ：一家の生活を支える高齢者手当」『アジ研ワールドトレンド』2011年5月号所収)、他の諸国家についてはその情報収集と整理は未着手である。

アフリカにおける老年学は近代化論スキームにしたがって理解されてきたが、ここ10年あまりのアフリカ諸社会の急激な変貌を理解するには近代化論はもはや時代遅れであるとの認識を持たざるを得ない。とりわけ高齢者ケアの行く末を考えるにあたっては、ケアや介護の面を含めた、広く社会全般の質的変化を理解することが必要であり、アフリカにおける高齢者研究はアフリカ社会の動態研究の一部を構成すると考えるのが適当であろう。上に述べた政策課題の検討をあわせて、アフリカにおける政治や経済の専門家との協働も模索すべき段階に来ていると言える。

E．健康危険情報

該当なし

F．研究発表

1. 論文発表

Abu G. Moges, Nanako Tamiya, Hideki Yamamoto, Emerging Population Ageing Challenges in Africa: A Case of Ethiopia、Journal of International Health, 29(1), 11-15, 2014

2. 学会発表

第28回日本国際保健医療学会、「Population Ageing and Family Policy in Africa」, Moges D. Abu 平成25年11月2日、沖縄県名護市

第28回日本国際保健医療学会自由集会、「グローバルエイジングへの国境なき挑戦」(代表者：山本秀樹、田宮菜奈子) 平成25年11月2日、沖縄県名護市

G．知的所有権の取得状況の出願・登録状況

1. 特許取得

なし

2. 実用新案登録

なし

3. その他

なし

資料1

平成26年3月6日にケニア国クワレ郡にて開催されたワークショッププログラム

"The 1st International Workshop on Aging in Africa: Perspective and Promotion from Public Health and Ethnology"

■参加者

【ケニア側参加者】

Dr. Muthoni GICHU A. P., Unit of Health and Aging, Ministry of Health Kenya From Mombasa / Kwale

Dr. Hajar ELBUSAIDY, County Director of Health, Kwale

Dr. Benard MAKENZI, County Pharmacist/ CASCO, Kwale

Mr. Rocky NAKAZELA, County Lab Coordinator, Kwale

Mr. Ester MWALILI, County Probation Officer, Kwale

Mr. Silas Nzaka GANDI, DMLT, Kinango

Mr. Lawrence TANUI, DHMT, Kwale

Mr. Abdulatif MOHAMED, HDSS Manager, NUITM, Kwale

Mr. Juma Changoma MWATASA, Site Project Manager, NUITM, Kwale

Ms. Marrianne WAKIO, Office Assistant, NUITM, Kwale

【日本側参加者】

Dr. Ken MASUDA, Associate Professor, Graduate School of International Health Development, Nagasaki University

Prof. Hideki YAMAMOTO, MD, MPH, Ph. D., Professor, Teikyo University School of Public Health

Prof. Haruko NOGUCHI, School of Political Science and Economics, Waseda University

Dr. Gen TAGAWA, Associate Professor, Faculty of International Studies, Hiroshima City University

Dr. Shinji MIYAMOTO, Associate Professor, Faculty of Biosphere-Geosphere Science, Okayama University of Science

Dr. Itsuhiro HAZAMA, Assistant Professor, Graduate School of International Health Development, Nagasaki University

Ms. Kaori MIYACHI, Assistant Professor, Gender Equality Promotion Office, Saga University

Ms. Mariko NOGUCHI, Ph. D Candidate, ASAFAS, Kyoto University

■発表演題

Ken MASUDA

"Overview of the study group of "Aging in Africa and Asia""

Hideki YAMAMOTO

"The Role of the Community for the Aging Society - Experiences in Japan and Zambia"

Haruko NOGUCHI

"Struggle for LTC in Japan, Demographic and Economic Analysis"

Muthoni GICHU A. P

"NCDs and Aging Issues in Kenya"

Ken MASUDA

"Gerontocracy in the on-going modernization: Changes and Continuity of Lifecycle among the Banna, Southern Ethiopia"

Itsuhiro HAZAMA

"Elderly people in Pastoral Society: A Case Study of the Karimojong in Uganda"

Mariko NOGUCHI

"Daily Life of the Elderly in Rural Southwestern Ethiopia"

Kaori MIYACHI

"Meaning of "Aging" for Women: Comparison of Kenya and Japan"

Shinji MIYAMOTO

Comments for the session

資料2

Research Proposal for Collaborative work with Nagasaki University Institute of Tropical Medicine (NUITM) and The Kenya Medical Research Institute (KEMRI)

1. Backgrounds of the Minister of Health, Labour and Welfare Research Grant Project with NUITM and KEMRI

"World Population Ageing: 1950-2050" by UN (2002) reported that the population ageing is an enduring and global phenomenon as a result of the demographic transition from high to low levels of fertility and mortality. Also, it finds that by 2050, nearly one in five people in developing countries will be over 50 and the number of those aged 60 years or over in the world will exceed the number of young persons under 15 years for the first time in history.

We are only beginning to figure out the impacts of this "graying world" (by Peter G. Peterson) on socio-economic and political factors in the society, such as economic growth and labor markets, pensions and health care, family composition and housing, migration trends and voting patterns. "Global health and ageing" by WHO (2011) raises awareness not only about the critical link between global health and aging, but also about the importance of rigorous and coordinated research to close gaps in our knowledge and the need for action based on evidence-based policies.

Major goals of the entire project are (1) international evidence-based comparisons of health and welfare of elderly population among various developing and developed regions in east Asia, south-east Asia, Africa, Europe, north and south America; (2) and collective deliberation over public choices based on "evidence" and creating international partnership for the well-being of aging society.

2. Population Aging, Urbanization, and Health-Related Issues in Kenya

Although population aging is currently not a major interest of the society in the Kenya, Figure 1 shows that population in Kenya will be rapidly aging in the next several decades, like other developing world. In 2010, the number of 60+ is 168 million for box

sexes (4.1% of entire population) will raise to 950 million (13.4%) in 2050 (Figure 1). Therefore, it would be profound for the society to examine a mechanism how socio-economic and other factors are correlated to well-being (most significantly, health status) of old population.

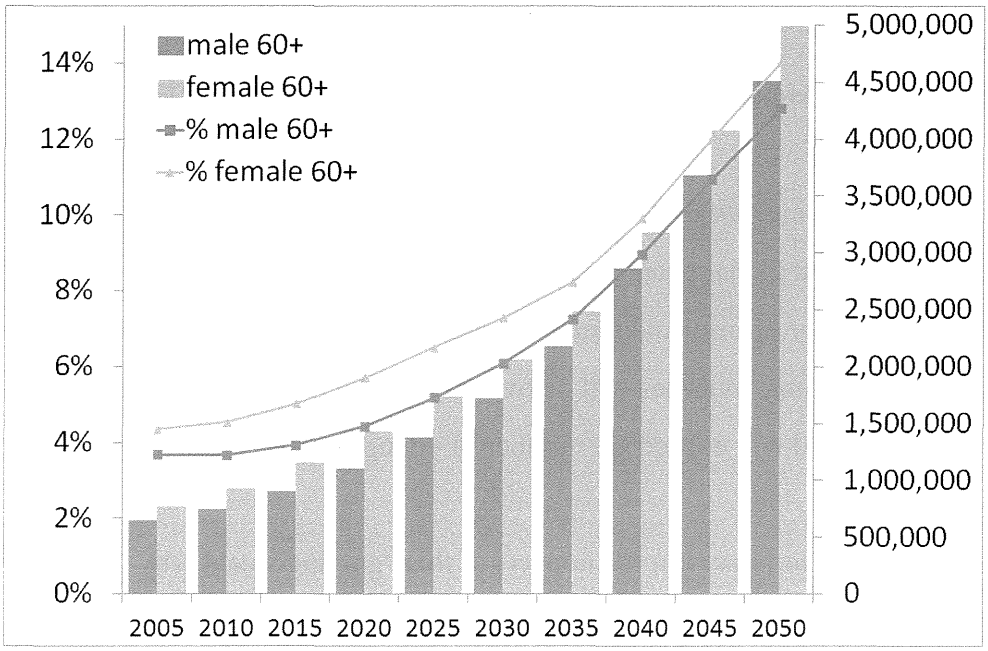

Figure 1: Projection of Vital Statistics in Kenya-Population and Ratio by Sex, 65 and Older
Source: United Nations, Department of Economics and Social Affairs, Population Division, Population Estimates and Projections Section

Further, Kenyan society has been experiencing a common phenomenon with Japanese society that is a concentration of population in urban areas. Like the population aging, Figure 2 shows that more developed countries has been facing with urbanization much faster than less developed regions within the century from 1950. In particular, the population in east Asian countries, such as Japan, Republic of Korea and China, have been concentrating into the urban areas more rapidly than other countries. Although the speed of urbanization in Kenya is slower than these countries, the rate of population living in the urban area increased from 5.6% in 1950 to 23.6% in 2010, and it would be raising up to 45.7% in 2050. The experience by Japanese society-the fastest and simultaneous population aging and urbanization in the world-would be providing lots of lessons to less developed societies, like Kenya.

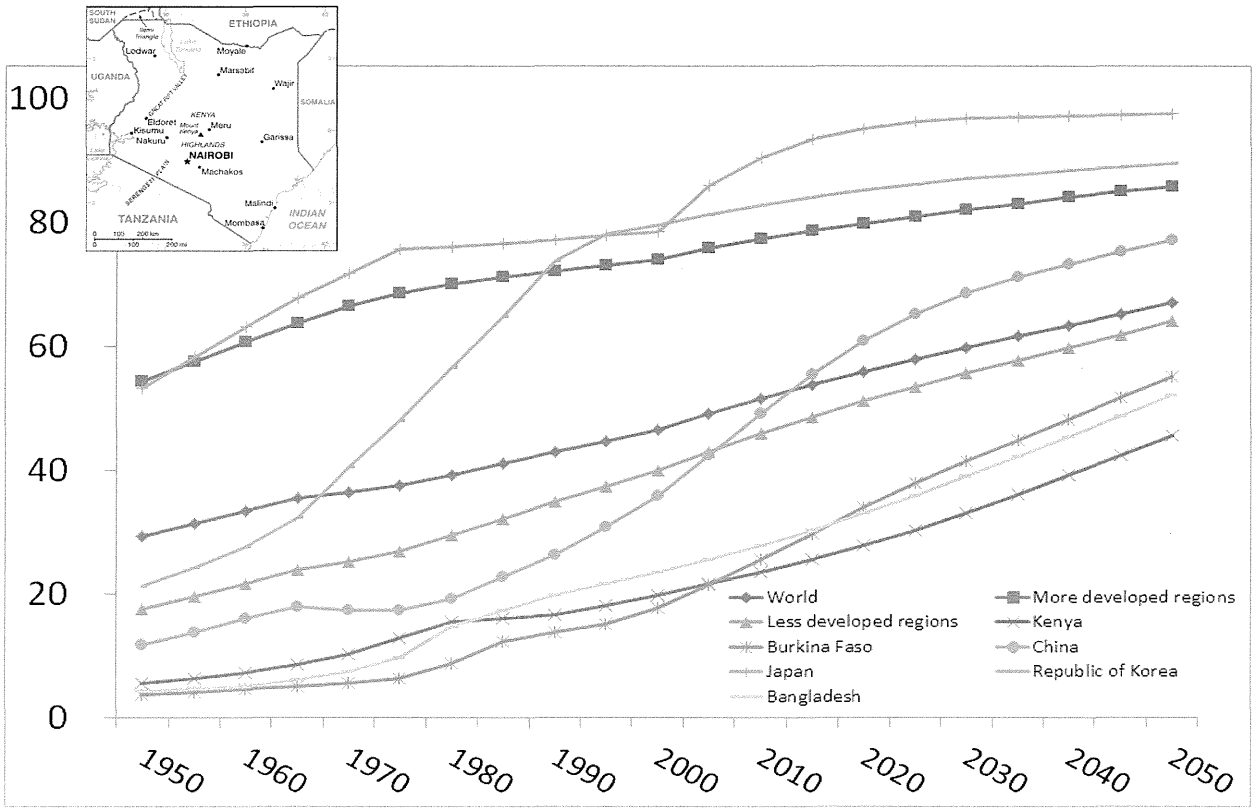

Figure 2: World Urbanization Prospects
Source: United Nations (2011) "World Urbanization Prospects", http://esa.un.org/unup/CD-ROM/Urban-Rural-Population.htm

Third, the results in Figure 3 show that the incidence of recent sickness and chronic illness increases with age. About half of those aged 70 years and above reported a recent sickness compared to one-fifth of those aged 20 – 29 years. At the same time about 6 percent of those in the 20-29 years age cohort reported having a chronic disease while among those aged 70 years and above the proportion was 29 percent[1]. Conquest of major communicative diseases like tuberculosis and a venereal diseases would largely

[1]National Council For Population, Development and Division of Reproductive Health, and Ministry of Gender and Social Services (2012/June). "Policy Brief" No.25. Also, the statement is based on the presentation by Dr. Muthoni Gichu (Head of Health and Aging Unit, Ministry of Health, Kenya), at 1st International Workshop on Aging in Africa and Asia: Perspective and Prospective from Public Health and Ethnography, which was held at Shimba Hills Lodge and National Research in Kenya on March/6/2014 (PI: Dr. Ken Masuda at Nagasaki University).

contribute a decrease in mortality and an increase in longevity, while population aging causes the prevalence of non-communicative chronic diseases. Therefore, there is a time-lag between the conquest of major communicative diseases and the prevalence of non-communicative diseases in most developed society. However, Kenyan society has suffered from a simultaneous prevalence of communicative and non-communicative (or chronic) diseases, which is a similar phenomenon with south-east Asian countries like Bangladesh. According to Dr. Muthoni Gichu (Head of Health and Aging Unit, Ministry of Health, Kenya), HIV/AIDS has still remains one of the most serious communicative diseases in African society.

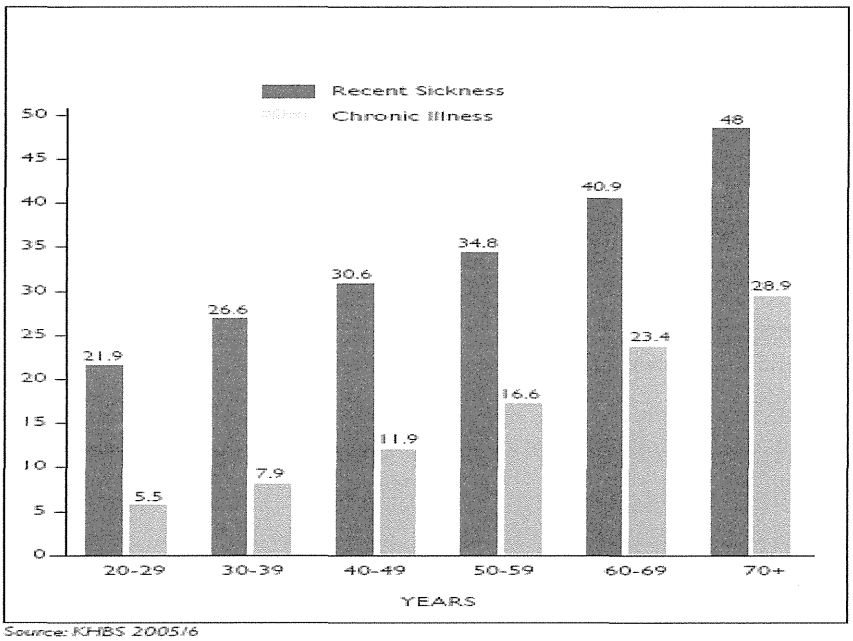

Figure 3: Percent Reporting Recent Sickness and Chronic Illness by Age
Source: National Council For Population, Development and Division of Reproductive Health, and Ministry of Gender and Social Services (2012/June). "Policy Brief" No.25

In sum, some issues are common and comparable between developing countries like Kenya and Bangladesh and more developed countries like Japan, while others could be not be simply comparable and it would be difficult to apply lessons from experiences by developed world to developing world. To our major goals-an international evidence-based comparisons of health and welfare of elderly population, collective deliberation over public choices, and construction of partnership-, we plan to utilize the framework of the Health and Demographic Surveillance System (HDSS) conducted by

NUITM and KEMRI.

3. Data Source

We plan to involve into the Health and Demographic Surveillance System (HDSS) conducted by NUITM and KEMRI. HDSS has been collecting process that follows population dynamics systematically and continuously for a specified population in a couple of geographically defined areas, Mbita (as of August 1, 2006) and Kwale (as of July 2010) (Figure 4). Main objective of the HDSS is to provide a platform for population-based research for disease control in Kenya. Also, its specific objectives are to: establish baseline data on demographic, socio-economic, environmental, and health characteristics; to investigate and evaluate interrelationships between health, interventions, and their impacts on morbidity and mortality; to provide a platform for scientific studies in prevention and control of diseases; and to provide a platform for education and research for researchers and students[2].

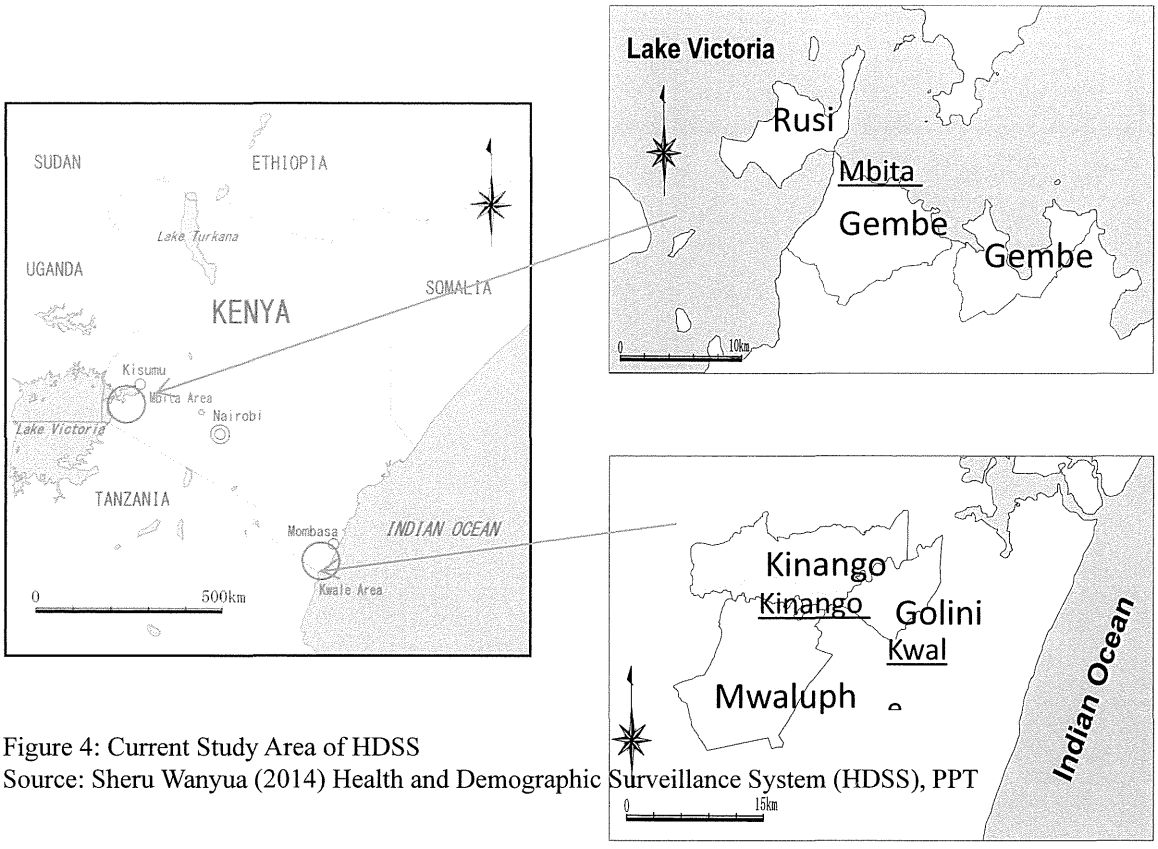

Figure 4: Current Study Area of HDSS
Source: Sheru Wanyua (2014) Health and Demographic Surveillance System (HDSS), PPT

[2] Sheru Wanyua (2014) Health and Demographic Surveillance System (HDSS), PPT.

The HDSS includes major four factors; (1) vital events: birth, death, migration; (2) Population characteristics: (2-1) demographic-name, dates of birth, gender; (2-2) socio-economic- household items, employment; (2-3) environmental-house structure, waste treatment; (2-4) health data- pregnancy, jigger, nutrition; (3) additional data: for other research projects- dental, school, hand-washing utilities, bed net use; and verbal autopsy – to infer cause of death[3]. The following Appendix tables show major variables of HDSS.

[3] Sheru Wanyua (2014) Health and Demographic Surveillance System (HDSS), PPT.

Appendix Table 1: Major variables of HDSS[4]

Name of variables	DEFINITIONS
1. MEMBER TABLE	
id	
memid	Unique identification number assigned by program to each member
famid	Unique identification number assigned by program to each family
houseid	Unique identification number assigned by program to each house
status	shows whether or not a member is present in the HDSS
statdesc	describe reason for absence in HDSS
memstatus	status of the existing members
visitdate	date and time when the person was first visited
fname	first name
sname	second name
other	other (surname)
sex	gender
dob	date of birth
falive	is the father alive
father	memid of the father
fatherarea	area where father lives
malive	is the mother alive
mother	memid of the mother
motherarea	area where mother lives
fi	Field Interviewer identification
fiarea	Area covered by field interviewer
edittime	date and time when any editing was last done to the data
area	
location	
migother	
sublocation	
clan	
migreason	
migdate	
registered	
flag	whether or not member has been followed up
migration	whether or not member has migrated
pregnancy	whether or not member is pregnant
death	whether or not member is dead
events	
link	
mig seq	number of times the person has migrated
preg seq	
child seq	
popflag	whether or not member has been followed up
round	number of data collection survey
2. HOUSEHOLD TABLE	
hhid	
houseid	Unique identification number assigned by program to each house
temphouseid	
famid	Unique identification number assigned by program to each family
visit	date and time when the person was first visited
head	name of household head
consent	whether or not the consent form was signed
status	the situation the house is in

[4] Appendix Table is created by Sheru Wanyua at NUITM.

Appendix Table 2: Major variables of HDSS (to be continued)

Name of variables	DEFINITIONS
closedate	date when house was closed
fi	Field Interviewer
fiarea	Area covered by field interviewer
edittime	date and time when any editing was last done to the data
flag	
location	administrative location in which the house is located
sublocation	administrative sublocation in which the house is located
village	administrative village in which the house is located
longitude	longitude of the house
latitude	latitude
grid	grid in which house is located
subgrid	subgrid in which house is located
popflag	whether or not popup questionnaire for the house has been completed
finishdate	
Houseflag	
dflag	whether or not the house has been followed up
updatetime	
round	number of data collection survey
famid	Unique identification number assigned by program to each family
famname	family name that is common to the area given by the field interviewer
owner	head of the family
famstatus	whether or not family is present in the HDSS
updatetime	
closedate	
edittime	date and time when any editing was last done to the data
delreq	delete request: to request data manager to delete family record
delreason	reason for request to delete
delother	other reason for request to delete
location	administrative location in which the family lives
sublocation	administrative sublocation in which the family lives
clan	administrative village in which the family lives
grid	grid in which house is located
subgrid	subgrid in which house is located
longitude	longitude of the house
latitude	latitude
fi	Field Interviewer
fiarea	Area covered by field interviewer
flag	
sched_num	
round	number of data collection survey
3. DEATH TABLE	
id	
memid	Unique identification number assigned by program to each member
famid	Unique identification number assigned by program to each family
visitdate	date and time when the person was first visited
round	number of data collection survey
deathdate	date and time when the person died
edittime	date and time when any editing was last done to the data
fi	Field Interviewer
fiarea	Area covered by field interviewer
flag	
place	place where person died

Appendix Table 2: Major variables of HDSS (to be continued)

Name of variables	DEFINITIONS
hospital	hospital where person died
fname	first name
sname	second name
other	other (surname)
4. MIGRATION TABLE	
id	
memid	Unique identification number assigned by program to each member
famid	Unique identification number assigned by program to each family
round	number of data collection survey
edittime	date and time when any editing was last done to the data
seqno	number of migration times
type	type of migration
reason	reason for migration
schooling	where children go to school
schoolname	name of school
migother	other reason for migration
migdate	date and time for migration
migindate	date and time for out migration
migoutdate	date for in migration
fname	first name
sname	second name
other	other (surname)
visitdate	date and time when the person was first visited
area	area where person has migrated from/to
location	administrative location where person has migrated from/to
sublocation	administrative sublocation where person has migrated from/to
clan	village where person has migrated from/to
fi	Field Interviewer
fiarea	Area covered by field interviewer
flag	status of migration
previd	previous id
5. PREGNANCY TABLE	
id	
memid	Unique identification number assigned by program to each member
pregid	number of times woman has been pregnant
famid	Unique identification number assigned by program to each family
round	number of data collection survey
outcome	outcome of pregnancy
monthd	month of delivery
yeard	year of delivery
visitdate	date and time when the person was first visited
edittime	date and time when any editing was last done to the data
tba	whether or not TBA was visited
hospital	whether or not hospital was visited
clinic	whether or not clinic was visited
antinatal	whether or not woman received antenatal care
herbalist	whether or not herbalist was visited
witch	whether or not witch was visited
pastor	whether or not clinic was visited
pregfacility	health facility visited during pregnancy
doe	date of event/birth
fi	Field Interviewer identification
fiarea	Area covered by field interviewer

Appendix Table 2: Major variables of HDSS (to be continued)

Name of variables	DEFINITIONS
flag	if pregancy has been followed up
place	place of delivery
fname	first name
sname	second name
other	other (surname)
6.POPUP TABLE	
Id	
round	number of data collection survey
qno	questionnaire
type	questionnaire type eg individual level, household level
famid	Unique identification number assigned by program to each family
memid	Unique identification number assigned by program to each member
fname	first name
sname	second name
other	other (surname)
dob	date of birth
house	Unique identification number assigned by program to each house
q1	question 1
q2	question 2
q3	question 3
q4	question 4
q5	question 5
q6	question 6
q7	question 7
q8	question 8
q9	question 9
q10	question 10
fi	Field Interviewer identification
fiarea	Area covered by field interviewer
starttime	start of interview
endtime	end of interview
edittime	date and time when any editing was last done to the data

4. Target Population of This Study

We focus on population aged 50 and older. Since life expectancy at birth are 61 years and 57.5 years for females and males of HDSS population, respectively, the ordinal definition of old population (65+) in developed countries would not be appropriate for target population for ageing study in Kenya (Figure 5).

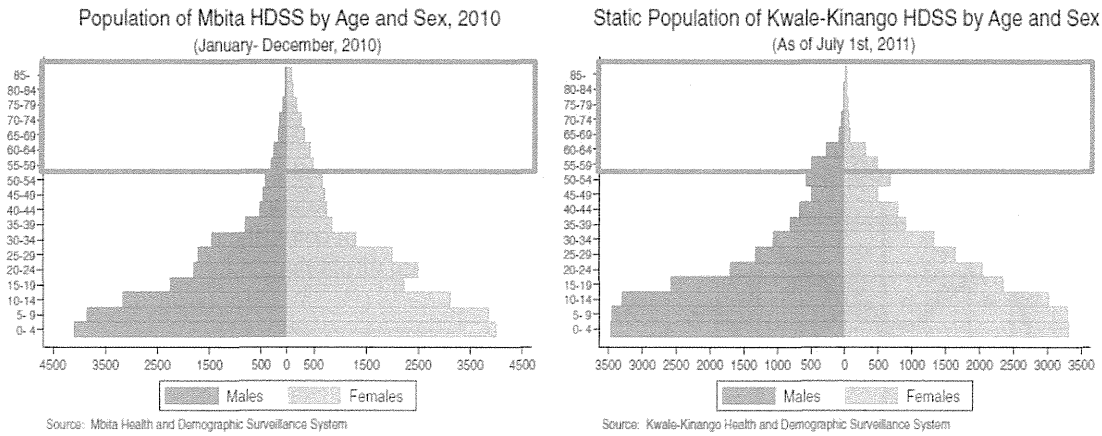

Figure 5: Population of Mbita and Kwale-Kinango HDSS by Age and Sex
Source: Kaneko S, K'opiyo, Kiche, I et al. (2012) "Health and demographic surveillance system in the western and coastal areas of Kenya: an infrastructure for epidemiological studies in Africa", Journal of Epidemiology (JE20110078)

5. Research Plan

PHASE 1

・Create Baseline Data and Mesh Data: Using the available data of current version of HDSS, we identify the number (ratio) of old population (50+) and their socio-economic and other characteristics by sex, 5-year age group, and geographic cite. The above baseline information will be mapping into Grid Geographical Address System (GGAS) (Figure 6), such as hypothetical mesh for ratio of old population.

・Identify physical address: Based on HDSS, we identify exact physical addresses of households living with old people (50+).

・Conduct Inquiring pilot survey: We plan to conduct an inquiring survey from randomly selected households living with old people, as regards their socio-economic, health, and other status (including their needs for health and long-term care).

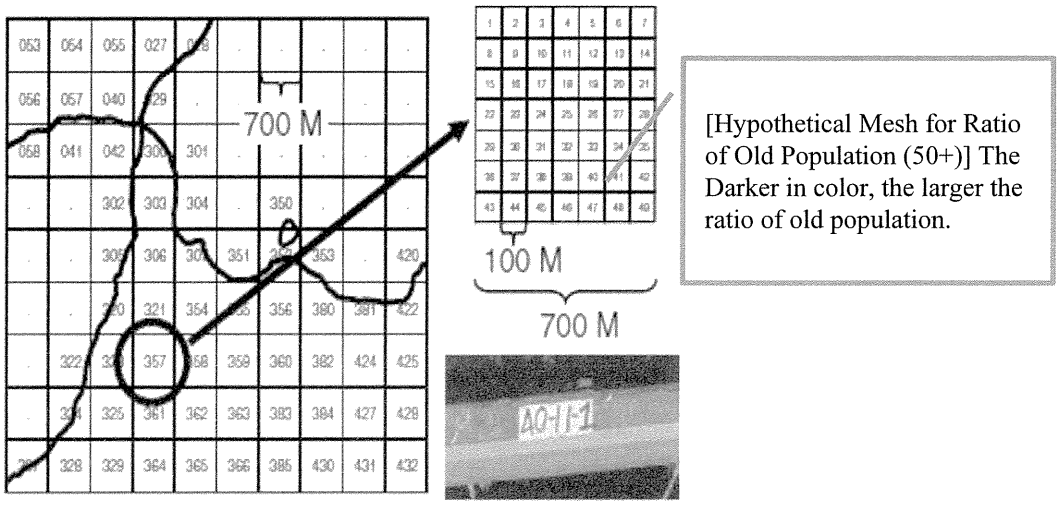

Figure 6: Grid geographical address system (GGAS)
Source: Kaneko S, K'opiyo, Kiche, I et al. (2012) Journal of Epidemiology

PHASE 2

・Create Questionnaire: Based on the inquiring pilot survey, we verify our survey design and create baseline questionnaire.

・Conduct Survey: For old people in HDSS cite, we conduct the survey, applying both self-administrating (subjective) method and objective measurements. The self-administrating questionnaire will include socio-economic status; human network (inside/outside of own household); self-rated physical and mental health status (such as ability of daily living (ADL), instrumental ability of daily living (IADL), Geriatric Depression Scale (GDS)/K6/K10); self-rated life satisfaction and quality of life;

nutrition; clinical history records; utilization/needs of formal and informal health and long-term care, etc. Objective measurements will include height/weight (BMI), blood pressure, bio-marker, vaccine records, etc.

・Invite to International Conference held at Japan: We plan to invite a health related professional to speak about health and long-term care issues of Kenya to an international conference for the MHLW research project in 2014-2015.

PHASE 3

・For Evidence-Based Policy: Collaborating with researchers at NUITM and KEMRI, we will conduct empirical analysis of the survey conducted based on HDSS for establishing evidence-based policies regarding public health in Kenya.

・For Information Transmission of Collaborative works: We will submit our collaborative works to international peer-reviewed journals for sharing the information obtained from the survey.

Research Proposal for Collaborative work with Nagasaki University Institute of Tropical Medicine (NUITM) and The Kenya Medical Research Institute (KEMRI)

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1. Backgrounds of the Minister of Health, Labour and Welfare Research Grant Project with NUITM and KEMRI

"World Population Ageing: 1950-2050" by UN (2002) reported that the population ageing is an enduring and global phenomenon as a result of the demographic transition from high to low levels of fertility and mortality. Also, it finds that by 2050, nearly one in five people in developing countries will be over 50 and the number of those aged 60 years or over in the world will exceed the number of young persons under 15 years for the first time in history.

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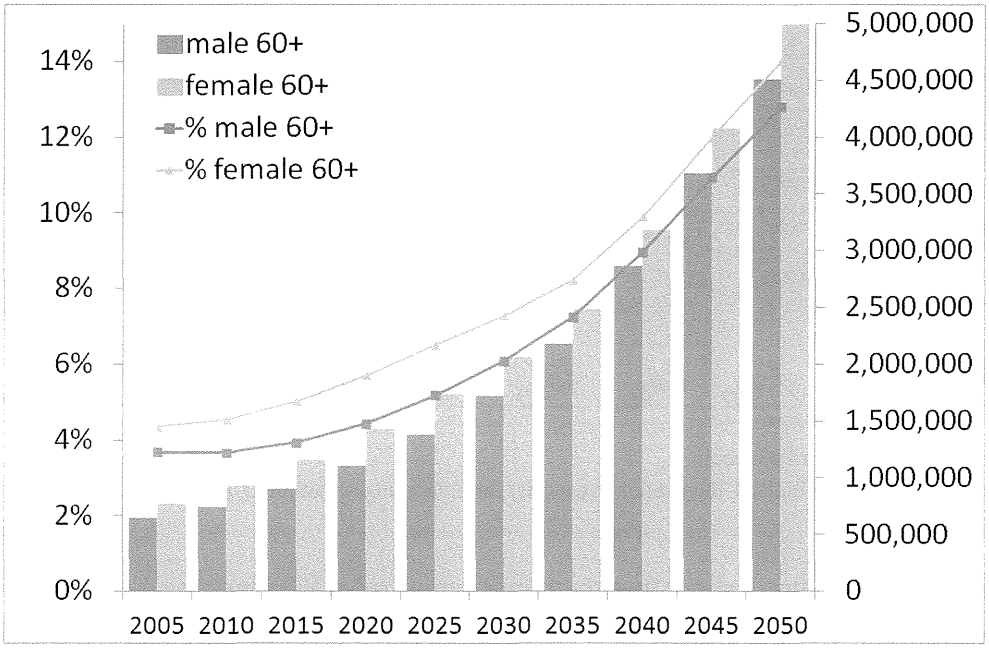

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Further, Kenyan society has been experiencing a common phenomenon with Japanese society, that is a concentration of population in urban areas. Like the population aging, Figure 2 shows that more developed countries has been facing with urbanization much faster than less developed regions within the century from 1950. In particular, the population in east Asian countries, such as Japan, Republic of Korea and China, have been concentrating into the urban areas more rapidly than other countries. Although the speed of urbanization in Kenya is slower than these countries, the rate of population living in the urban area increased from 5.6% in 1950 to 23.6% in 2010, and it would be raising up to 45.7% in 2050. The experience by Japanese society-the fastest and simultaneous population aging and urbanization in the world-would be providing lots of