The Health & Wellbeing of Seniors in Central Uganda Region

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ROTOM

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Executive Summary

Sub-Saharan Africa (SSA) is the fastest aging global region. Older persons living in SSA have the highest burdens of disease and lowest levels of subjective wellbeing in the world. In order to understand the health and wellbeing of the current and future aging population, we undertook a research project in the Greater Mukono District of Central Uganda in partnership with Reach One Touch One Ministries (ROTOM) between 2017-2018. Data included interviews, focus groups and a secondary survey.

This research had **four objectives**:

1) To investigate the links between age and subjective wellbeing among older adults;
2) To explore the political-economic, health system, socio-cultural, and environmental drivers of health and wellbeing in old age;
3) To examine how gender inequalities over the life course shape health and wellbeing in old age;
4) To assess the key social, economic and health differences between ROTOM supported seniors and non-ROTOM seniors.

Key findings reveal:

- Old age is directly associated with poor subjective wellbeing rankings for women and men. However, this relationship is positively influenced by social factors (e.g. connections, groups participation), and made worse by economic factors (e.g. employment status, asset level). These relationships vary by gender.
- Main drivers of senior's poor health and wellbeing are: ageism in government ministries, health system deficiencies, changing family and community systems, climate variations and poor housing structures.
- Women reported that their disadvantaged social position made them age at an accelerated rate and a slower rate compared to men. Women also reported that their disadvantaged social position in earlier life shaped positive and negative experiences of wellbeing in old age.
- Men reported their advantaged social position made them age at an accelerated rate and a slower rate compared to women. Men also reported that their advantages in earlier life shaped both positive and negative experiences of wellbeing in old age.
- Seniors supported by ROTOM reported better social, economic and health outcomes compared to non-ROTOM supported seniors.

These findings point to many **policy opportunities** for government and organization consideration:

- First, there is the need to enhance opportunities for social engagement among seniors through fellowship programs, skills development, community programs.
- Second, there is the need to strengthen economic opportunities and support for seniors by implementing a national universal pension scheme, extending the SAGE program to all districts and extending the mandatory retirement age.
- Third, environmental barriers should be addressed. This means addressing societal ageism, ill-equipped health systems, gender inequalities, natural environmental systems and built environment conditions.

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1.0 Introduction

Uganda's older population (60+) is increasing. By 2050, seniors are projected to rise from 1.3 to 5.5 million. This increase raises many important issues. First, while seniors in high income countries experience improved subjective wellbeing (i.e. life satisfaction, happiness) with increasing age, seniors in Uganda see a decline. In fact, older Ugandans experience an increased prevalence of worry, stress and unhappiness with increasing age. Second, seniors are living in changing social environments marked by shifting family systems, heavy childcare responsibilities, and poverty. Third, while Uganda's older population is aging, women make up a larger portion of this growth due to their longer life expectancy. This raises concerns for women's wellbeing given that inequalities accumulate in old age.

To begin addressing these gaps, research was conducted with elderly individuals and individuals who work with seniors in the Greater Mukono District in 2017-2018.

2.0 Objectives

The **objectives** of this study were to:

Objective 1: Investigate the links between age and subjective wellbeing among older adults;

Objective 2: Explore the political-economic, health system, socio-cultural, and environmental drivers of health and wellbeing in old age;

Objective 3: Examine how gender inequalities over the life course shape health and wellbeing in old age;

Objective 4: Assess the key social, economic and health differences between ROTOM supported seniors and non-ROTOM seniors.

3.0 Data sources

Quantitative (i.e. survey) and qualitative data (i.e. in-depth interviews with 53 men and women 50 years and above, focus groups with 150 men and women 50 years and above, 34 key informant interviews with individuals who represent the aging population in the region in a variety of roles including NGOs, government and health providers/educators) were used. The first objective used secondary data from the World Health Organization 2013 Uganda Study on Global Ageing and Health. The second objective used data from 15 focus groups with men and women 50 years and above and 34 key informants. The third objective used data from 53 in-depth interviews with men and women 50 years and above and 34 key

informants. Lastly, the fourth objective used in-depth interviews (n=53) and focus group (n=15) data from men and women 50 years and above. All research was conducted in the four districts of the Greater Mukono Region (e.g. Mukono, Buikwe, Kyunga, Buvuma) and Kampala. See table 3.0 for a breakdown of the characteristics of the participants in this research.

Table 3.0 Participant Characteristics

District	Method		
	In Depth Interviews (53)	Focus Groups (n=15) (10 people in each)	Key Informant Interviews (n=34)
Mukono	15	4 (40)	11
Buikwe	11	5 (50)	6
Kayunga	16	4 (40)	2
Buvuma	11	2 (20)	7
Kampala	—	—	8
TOTAL	53	15 (150)	34

Of the 53 interviews, 15 were conducted with ROTOM supported seniors. Of the 15 focus groups, 2 were conducted with ROTOM supported seniors. See table 3.1 for a breakdown of the characteristics of ROTOM and non ROTOM seniors.

Table 3.1 ROTOM Status of Participants in the Mukono District

ROTOM Status	In-depth interviews (15)	Focus groups (n=2) (10 in each)
ROTOM Supported	8	2 (20)
Non-ROTOM Supported	7	2 (20)

3.2 Key Informant Characteristics

Thirty-four interviews were also conducted with key informants who work with the elderly. Participants were from all levels of government, the health sector, education, and non-governmental organizations. See table 3.2 for a breakdown of key informant characteristics.

Table 3.2 Key Informant Characteristics

Key Informants	Department/Organization
Federal Government	- Focal Person for the Ministry of Gender, Labour and Social Development - Dept. Elderly and Disability - Focal Person for the Department of Disability and Rehabilitation Ministry of Health - Chair of the National Council for Older Persons - Vice Chair of the National Council for Older Persons
District/Sub-County Government	- Local Council 5 Members
Village/Parish Government	- Town council members - Community development officers
Health Services	- Community Health Workers – Nurses in Public and Private Health Centers and Hospitals – Doctors in Public Hospitals
Non-Governmental Organizations (NGOs)	– ROTOM (Executive Director, Country Administrator, Field Staff, Volunteer Staff, Doctor, Nurse) – Help Age International (Manager) – Uganda Reach the Aged Association (URA) (Executive Director) – Providence House (Executive Director)

The following section provides an overview of the key results for each objective.

4.0 Results

4.1 Objective 1: Links between old age, subjective wellbeing and gender

Results reveal that age is directly associated with poor subjective wellbeing for both men and women. This means that seniors who provide community support, participate in group activities and have higher numbers of close relatives report a better subjective wellbeing compared to their socially isolated counterparts. The findings also reveal that seniors' poor subjective wellbeing is made worse by economic factors (e.g., working status, asset level, financial status and financial improvement over the last 3 years). This means that seniors who are not working, have a low asset level and have no financial improvement in the last 3 years report worse subjective wellbeing compared to their economically advantaged counterparts.

The results also found important gender differences in the relationship between old age and subjective wellbeing:

1) Social factors (e.g. providing community support, participating in group activities, and having a higher number of close relatives) have a stronger and more positive effect on women's but not men's, subjective wellbeing.

2) Economic factors (e.g., working status, asset level, good financial status and financial improvement over the last 3 years) have a stronger and more positive effect on men's but not women's subjective wellbeing.

3) Marital status for men has a more positive impact on subjective wellbeing in old age than women. Men who are married report a better subjective wellbeing compared to married women.

4) Caregiving responsibilities have a negative impact on subjective wellbeing for women and men, but are not associated with age.

5) Being female has a direct negative effect on subjective wellbeing. This indicates that being an older woman automatically translates into poorer subjective wellbeing.

4.2 Objective 2: Drivers of health and wellbeing

The findings reveal important political-economic, health system, sociocultural and environmental drivers of senior's health. These drivers are discussed below:

4.2.1 Political-Economic Drivers

The results reveal that 93% of seniors and 65% of key informants reported governmental ageism[1] as a main driver of senior's poor health and wellbeing. The results found ageism stems from the demographic composition of Uganda's population:

- Around 70% of seniors and key informants indicated that because the population is so young, the government is focused on capturing the demographic dividend[2] by directing social and economic services to the young.
- Because of this, 70% of key informants reported seniors are neglected in most policies, pension schemes and development strategies.
- 70% of key informants reported this neglect was due to the perception that older people have little value, are unable to contribute to society, and perceived as a resource waste.
- 75% of key informants indicated the National Policy for Older Person does not function due to a lack of political will, no prioritization of senior's needs, and a shortage of funding for older people.

This political context negatively impacted senior's health and wellbeing in **three ways**:

1) Employment Refusal
- 73% of seniors reported being refused work because they were too old and considered to have little value by potential employers.
- Employment denial was reported to cause sadness, anger and feelings of marginalization.

[1] Ageism is defined as prejudice or discrimination on the grounds age.
[2] The demographic dividend is defined by the UN to mean the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, 65 and older).

2) Lack of Pensions

- All seniors reported a lack of government pension negatively impacted their health and wellbeing.
- A lack of pensions was reported to undermine senior's financial security. This restricted their ability to purchase food, pay for health care transportation, and limit the ability to provide for orphans and vulnerable children.

3) National Policy for Older Person

- All seniors indicated that despite having the National Policy for Older Persons, the government continued to neglect them in all services.
- Government neglect resulted in seniors reporting feeling of neglect, anger, sadness and stress.
- See Appendix A (Table 4.2.1) for more information.

4.2.2 Health System Drivers

The results found **three main drivers** of poor health related to the health system.

1) Denial of health care due to age

- 100% of seniors reported having been denied medical services because they were too old.
- Healthcare denial was reported to intensify senior's health problems, increase levels of sadness and cause seniors to resort to herbal medicine from local providers.

2) Medical shortages and competing priorities

- 80% of seniors and 70% of key informants indicated that because health centers were understocked, available medicine would go to treating infants, children, and youth.
- Key informants reported that health workers would treat the young because they were perceived to live longer and contribute more to society than the seniors.
- Seniors reported denial of treatment worsened their health problems, deterred future health care treatment in clinics and reduced their ability to complete daily tasks due to illnesses.

3) Lack of geriatric services

- A lack of geriatric services was a main driver of poor health.
- 73% of seniors reported a lack of geriatric health services led to improper medical diagnosis, deficient medical treatment, and prolonged and worsened illnesses.
- See Table 4.2.2 Health System Drivers of Health (Appendix B) for more information.

4.2.3 Socio-cultural drivers

Changing family and community systems was seen to be a main driver of poor health. These changes negatively impacted senior's health and wellbeing in **three ways**:

1) Loss of material and social family support

- 80% of seniors reported family systems were changing from intergenerational family systems to those based on the nuclear family system.
- Changing family systems was reported by 80% of seniors to negatively impact seniors health and wellbeing due to the loss of financial support and material goods.
- This restricted seniors' ability to purchase necessities (food, water, electricity).
- Changing family systems was reported to increase feelings of social isolation, loneliness and loss of social connections.

2) Loss of community interaction and support

- 80% of seniors reported village life was changing from communal living to an individualist society.
- Changing community systems were reported to negatively impact health and wellbeing.
- 80% reported feeling not supported and/or socially isolated from the community.

3) Childcare responsibilities

- 93% of seniors reported their health was negatively impacted by caregiving responsibilities.
- Caring for orphans and vulnerable children was reported to increase poverty and livelihood uncertainty due to the costs associated with care (i.e. food, school fees, clothing, etc.).
- Around 70% of seniors reported childcare made them sacrifice their daily food consumption and personal needs to ensure their grandchildren had enough food and material necessities.
- Food restriction was reported to make seniors weaker and more susceptible to sicknesses like the flu, malaria and pneumonia.
- Around 70% of seniors reported childcare was associated with stress, anxiety and poor health.
- Daily caregiving stress was reported to cause headaches, dizziness and facilitate high blood pressure.
- See Appendix C (Table 4.2.3) for more information.

4.2.4 Environmental Drivers

The findings reveal **four environmental drivers** of poor health:

1) Changing weather patterns

- 87% of seniors reported changing weather patterns restricted their ability to harvest crops and obtain sufficient nutrients.
- A lack of nutrients was reported to reduce immunity, increased the likelihood of sickness and cause health complications (e.g. the flu, pneumonia anemia).
- Irregular food consumption was reported to cause stomach ulcers and extreme pain.
- Severe rains were reported by 73% of seniors to reduce air temperature and increase the likelihood of developing bronchitis and pneumonia.

2) Unavailable and inaccessible water

- 93% of seniors reported a lack of available and accessible water in villages was a main driver of poor health.
- Due to no available water in communities, seniors reported being forced to walk long distances to acquire water.
- Due to physical limitations, seniors reported being forced to pay someone to fetch their water.
- Due to a lack of strength and money, 80% of seniors would go without water.
- Water shortages were reported to cause weakness, dizziness, headaches and dehydration.

3) Lack of age appropriate latrines

- 93% of seniors reported a lack of age appropriate latrines was a driver of poor health.
- Seniors reported that when they would use a latrine, they would touch the ground of the latrines and the surrounding bodily fluids there.
- 87% of seniors reported being unable to clean themselves after latrine use due to a lack of water.
- A lack of water was reported to expose seniors to opportunistic bacteria, sicknesses and disease.

4) Poor housing structures

- 93% of seniors reported poor housing structures was a driver of poor health.
- Seniors reported poor household ventilation and structures (e.g. holes, leaking, dirt floor) increased household pests, bed bugs, and rodents.
- Seniors reported poor housing was associated with anemia, pneumonia, TB, colds, flus and congested breathing.

Although the majority of seniors discussed environmental factors as drivers of poor health, key informants rarely mentioned these issues. No key informant reported changing seasons, prolonged droughts, unavailable and/or inaccessible water, or housing structures as drivers of seniors' poor health. See Table 4.2.4 (Appendix D) for more information.

4.3 Objective 3: Life course gender inequalities and wellbeing in old age

The results reveal gender differences in perceptions surrounding the aging process, including gender differences in self reported health and wellbeing in old age.

4.3.1 Women's Aging Process

Accelerated Aging
- Around 80% of women reported they aged at an accelerated rate compared to men.
- Women reported accelerated aging was due to menstruation, child birth, heavy workloads and stress of being a caregiver for children and family members.
    - Around 80% of key informants supported this view.
- 60% of women reported their accelerated aging was due to their lower societal position and experiences of gender-based violence when young.

Slower Aging
- Around 20-30% reported aging more slowly than men.
- Women reported slower aging was due to their physical strength and ability to cope with challenges associated with aging.
- See Appendix E (Table 4.3.1) for more information.

4.3.2 Men's Aging Process

Accelerated Aging
- Around 80% of men reported aging at an accelerated rate compared to women.
- Men reported their accelerated aging was due to their engagement in heavy manual labour and stress associated with providing for their families.

Slower Aging
- Around 30% of men reported aging slower than women.
- Men reported their slower aging was due to their strength and engagement in physical manual labour when young.
- See Appendix F (Table 4.3.2) for more information.

4.3.3 Women's Wellbeing in Old Age

Positive Wellbeing
- Around half of the women reported their wellbeing was better compared to men.
- Women reported their positive wellbeing was linked to:
    - Their ability to age and continue with their normal life (weaving, selling eggs, informal agriculture).
    - Their ability to collaborate and support other women in the community.
    - Their inferior societal position and experiences of gender-based violence because it helped them develop inner strength useful in old age.

Negative Wellbeing
- Around half of the women reported a poorer wellbeing compared to men.
- Women reported their poor wellbeing was linked to their earlier roles as caregivers and experiences of gender violence.
- These factors were reported to cause stress, emotional weakness and physically deteriorated.
- Women's inability to inherit property and re-marry in old age was reported to negatively impact their wellbeing.
- See Appendix G (Table 4.3.3) for more information.

4.3.4 Men's Wellbeing in Old Age

Positive Wellbeing

- 25% of men reported their wellbeing was better compared to women.
- Men reported their positive wellbeing was linked to:
    - 'Babying' and care from their wives
    - Family respect and care

Negative Wellbeing

- Around 75% of men reported a poor wellbeing compared to women.
- Men's negative wellbeing was linked to:
    - Their loss of identity when they retired
    - Restrictive employment laws
    - Social isolation
    - Family abandonment
- Men's poor wellbeing was reported by 60% of men and 50% of key informants to be associated with increased alcohol consumption
    - Alcohol consumption was reported as a coping strategy to deal with negative emotions
- Less than half of the key informant s reported men had a poor wellbeing in old age.
- See Appendix H (Table 4.3.5) for more information.

4.4 Objective 4: Differences between ROTOM supported seniors and non-ROTOM seniors

Psychosocial, health and economic changes in seniors before and after ROTOM enrollment were uncovered in this study. The results also revealed important psychosocial, health and economic differences between ROTOM supported and non-ROTOM supported seniors in Mukono.

4.4.1 Psychosocial Changes Before and After ROTOM

After becoming a ROTOM member, seniors reported better psychosocial wellbeing.

- Seniors reported more socialization (e.g. bi-weekly fellowships, ROTOM community volunteers and staff visitations), the development of friendships, and increased ability to share feeling and problems with others.
- See Appendix I (Table 4.4.1 A) for more information.

ROTOM supported seniors reported feeling more socially connected, having more friends and receiving more social visits compared to non-ROTOM seniors. Those who were not supported by ROTOM reported feeling lonely, socially isolated and sad more often than those who were supported by ROTOM. See Appendix J (Table 4.4.1) for more information.

4.4.2 Health

After becoming a ROTOM member, seniors reported improved health outcomes.

- Seniors reported improved availability of health care (i.e. all times of day), easier access to health care (i.e. medical pick ups, ambulance services), available medicine (i.e. in stock), free medication, age appropriate medication, respectful health care, and good quality health care (see table 4.10).
- Seniors reported these factors enhanced their physical health and psychosocial wellbeing.
- See Appendix K (Table 4.4.2 A) for more information.

Compared to seniors who were not ROTOM supported, those that were supported reported having better self-rated health, having the ability to access health care when needed, receiving medication when needed, receiving health care without cost, and being treated with more respect in health facilities. See appendix L (Table 4.4.2 B) for more information.

4.4.3 Economic and livelihoods

After becoming a ROTOM member, seniors reported a greater sense of economic and livelihood security.

- Seniors reported improved financial assistance, the provision of food and seeds, the provision of clothing and the construction of houses.
- See Appendix M (Table 4.4.3 A) for more information.

Compared to seniors who were not ROTOM supported, those that were reported being in a better financial situation, being more food secure and having the ability to grow their own food. See Appendix N (Table 4.4.3 B) for more information.

5.0 Organizational challenges identified by ROTOM seniors

While ROTOM enhances the health and wellbeing of seniors, ROTOM supported seniors identified two challenges. These relate to:

a) Health care transportation.
b) Interpersonal and community conflict.

5.1. Health care transportation

ROTOM seniors reported **two** health care transportation issues:

1) Transportation coverage

- Seniors reported a high level of confusion regarding the fees associated with transportation to the ROTOM health center.
- 50% of ROTOM seniors reported that although health care transportation was supposed to be covered under their ROTOM membership, they still had to pay for transportation.
- Seniors reported that since they did not know if their travel costs would be reimbursed, they would not seek medical care even if they needed it.

2) Increased public transportation fees

- Most ROTOM seniors reported being charged a higher fee (most often twice as much) for public transportation to the health center compared to non-ROTOM seniors.
- Seniors reported this was due to the community perception that they were wealthy due to sponsorship.
- ROTOM seniors reported this treatment restricted their ability to access health care when in need due to cost and stigma associated with their ROTOM membership.

5.2 Family and Communal Conflict

ROTOM seniors reported **four challenge**s related to family and community dynamics.

1) Family neglect and abandonment

- Several ROTOM seniors reported once they became a ROTOM member, their families did not visit them or feel responsible to care for them.
- Seniors reported this family neglect increased stress, sadness and loneliness.

2) Additional childcare

- ROTOM seniors reported that due to their membership, their adult children would give them their young children to raise.
- ROTOM seniors reported this occurred because their adult children perceived them to be in a better socio-economic position to support a child compared to themselves due to the seniors' ROTOM status.
- Added care responsibilities were reported to decrease feelings of self-worth and negatively impact their physical health.

3) Community resentment

- ROTOM seniors reported community resentment and fracturing social relationships due to their ROTOM status.
- ROTOM seniors reported community members were hostile towards them because they were perceived as wealthy and privileged.
- ROTOM seniors reported this increased their stress, social anxiety, and ability to live peacefully in their community.

4) ROTOM childcare programs

- ROTOM seniors reported family conflict because of ROTOM's childcare programs.
- ROTOM seniors reported that because ROTOM only supports young girls in their programs, the young boys were neglected.
- ROTOM seniors who were caring for both young girls and boys reported this caused household conflict and confusion.
- Seniors reported feeling stressed, anxious and uncertain as they would have to deny young boys the same opportunities as the young girls under their care.

6.0 Program and Policy Implications

Many policy recommendations emerge from this research.

6.1 Strengthen Social Opportunities

Results indicate social support structures and group activities positively impact senior's health and wellbeing. Government and organizations should:

- Develop programs that promote group interaction such as fellowship programs, skill development, community exercise programs.
- Implement technology assisted interventions.
    - For example, telephone programs can connect older adults with a volunteer in the community to discuss a variety of topics (e.g. current events, culture, health, sport).
- Offer community activities for seniors to learn new skills, such as reading, writing, etc.

6.2 Strengthen Economic Opportunities

Results indicate economic security is a main driver of positive health and wellbeing. The government should strengthen economic security of seniors through several strategies:

- Implement a national universal pension scheme
- Extend the SAGE pension scheme to all districts
- Remove age restrictions of SAGE pensions
- Remove mandatory retirement ages/extend mandatory retirement age
- Implement laws that make age discrimination illegal
- Increase intergenerational teams in employment environments

6.3 Promote Enabling Environments

Results indicate key sociocultural and physical (i.e. built and natural) barriers to health and wellbeing in old age. Barriers to health and wellbeing are societal ageism, ill-equipped health systems, gender inequality, natural and built environmental conditions.

To address these, government systems should:

Ageism:
- Develop communication campaigns that increase knowledge and understanding about aging in different venues (e.g. television, radio, newspaper)
- Implement campaigns to different social groups (e.g. general public, policymakers, employment, service providers) that depict aging in a positive way

Health System:
- Develop home base health care provision programs
- Implement community health visitations
- Provide travel stipends for health care
- Implement basic training about geriatric and gerontological issues during medical training
- Offer professional development courses for health professionals that target geriatric and gerontological issues
- Include gerontology in health and medical curricula
- Offer gerontology courses in college and university
- Update existing medicine purchasing guidelines to include medication specifically for older adults
- Develop geriatric unites in health centers and hospitals

Gender Inequality:
- Establish links between the elderly, especially older women and paralegals to ensure protection and security
- Address issues of property inheritance for older women
- Ensure equal access to education for girls and boys
- Ensure equal access to employment for women and men
- Implement training on gender-based violence and its long-term impacts

Natural/Built Environment:
- Provide older persons with food and nutritional support, perhaps through supplementary feeding sites
- Provide seniors with rain barrels for easy access to water
- Develop community programs that assist in the provision of safe water for seniors
- Provide age appropriate latrines for seniors to reduce sickness and disease
- Develop a comprehensive housing modification package to enhance health and safety

6.4 ROTOM Specific Program and Policy Recommendations

Results provide evidence that ROTOM services have a positive impact on the health and wellbeing of seniors in Mukono District. However, to address the two unintended consequences of ROTOM services policies could be modified to:

- Implement all services equally to avoid confusion and health care avoidance among seniors
- Implement programs for both young girls and boys
- Implement community-based programs to reduce interpersonal and communal conflict, such as community gardens, water tanks, latrines, skill development workshops.

Appendices

Appendix A: Table 4.2.1 Political-Economic Drivers of Health

Political- Economic Drivers	Number of Mentions (# of Groups/Informants) (% of Groups/Informants)	
	Focus Groups (15 with 10 people in each)	Key Informants (n=34)
Ageist attitudes	131 (14) (93%)	22 (22) (65%)
Fear of aging	97 (9) (60%)	25 (25) (71%)
Stigma towards aging	118 (12) (80%)	23 (23) (68%)
Lack of pensions	141 (15) (100%)	25 (25) (71%)
Negative employer attitudes	107 (11) (73%)	13 (13) (38%)
Political neglect	143 (15) (100%)	26 (26) (76%)
Failed promises	142 (15) (100%)	—
Competing demographic priorities	147 (15) (100%)	24 (24) (71%)
Demographic dividend	113 (10) (67%)	23 (23) (68%)
Political disconnect	116 (11) (73%)	26 (26) (76%)

Appendix B: Table 4.2.2 Health System Drivers of Health

Health System Drivers	Number of Mentions (# of Groups/Informants) (% of Groups/Informants)	
	Focus Groups (15 with 10 people in each)	Key Informants (n=34)
Health care ageism	143 (15) (100%)	17 (17) (50%)
Stigma towards aging	118 (12) (80%)	23 (23) (68%)
Denied health care	122 (14) (100%)	19 (19) (56%)
Competing medical priorities	143 (15) (100%)	24 (24) (70%)
Medication shortages	105 (12) (80%)	24 (24) (70%)
Lack of geriatric knowledge	106 (11) (73%)	24 (24) (71%)

Appendix C: Table 4.2.3 Socio-cultural Drivers of Health

Sociocultural Drivers	Number of Mentions (# of Groups/Informants) (% of Groups/Informants)	
	Focus Groups (15 with 10 people in each)	Key Informants (n=34)
Extended family collapse	119 (12) (80%)	26 (26) (76%)
Loss of monetary support	119 (12) (80%)	25 (24) (77%)
Loss of material support	119 (12) (80%)	24 (21) (62%)
Loss of family social connection	116 (12) (80%)	25 (23) (67%)
Collectivist to individualist society	115 (13) (87%)	27 (27) (80%)
Loss of community support	108 (12) (80%)	(24) (70%)
Socially isolated from community	102 (11) (73%)	25 (23) (67%)
OVCs	127 (14) (93%)	31 (31) (91%)
Food/basic need restriction	87 (10) (68%)	12 (10) (34%)
Caregiving stress	87 (10) (68%)	30 (28) (82%)

Appendix D: Table 4.2.4 Environmental Drivers of Health

Environmental Drivers	Number of Mentions (# of Groups) (% of Groups/Informants)	
	Focus Groups (15 with 10 people in each)	Key Informants (n=34)
Changing seasons	116 (13) (87%)	—
Prolonged droughts	132 (13) (87%)	—
Famine	118 (12) (80%)	3 (3) (9%)
Intensified rains	112 (11) (73%)	4 (4) (12%)
Unavailable water in community	116 (13) (87%)	—
Water inaccessibility	127 (14) (93%)	—
Water shortages for consumption	117 (12) (80%)	—
Inappropriate latrines	133 (14) (93%)	—
Lack of hygiene and sanitation	122 (13) (87%)	—
Housing deterioration	114 (14) (93%)	—
Poor housing ventilation	110 (12) (80%)	2 (2) (6%)
Pest filled houses	117 (13) (87%)	—

Appendix E: Table 4.3.1 Perceptions of Women's Aging Experience

Women's Aging Experience	Number of Mentions (# of participants) (% of participants)	
	Interviews	Key Informants
	Women's Perceptions (n=27)	Key Informant Perceptions (n=34)
Accelerated Aging		
Menstruation/blood loss	35 (21) (78%)	8 (5) (15%)
Childbirth	34 (21) (78%)	33 (29) (85%)
Child rearing	26 (20) (74%)	32 (29) (85%)
Heavier workloads (family, farming, childcare)	27 (21) (78%)	31 (28) (82%)
Co-wife competition	17 (15) (55%)	11 (9) (26%)
Lack of autonomy to make decisions	20 (18)	32 (29) (85%)
Gender based violence	18 (15) (55%)	30 (28) (82%)
Inferior position in society	20 (17) (63%)	32 (30) (88%)
Slower Aging		
Stronger	8 (5) (19%)	—
Ability to go without food for longer	6 (4) (15%)	—
Able to cope with challenges	10 (8) (30%)	10 (7) (21%)
More socialization	11 (8) (30%)	11 (10) (29%)
More relaxed	10 (8) (30%)	5 (5) (14%)
Better health seeking behaviour (women)	—	15 (12) (35%)

Appendix F: Table 4.3.2 Perceptions of Men's Aging Experience

Men's Aging Experience	**Number of Mentions (# of participants) (% of participants)**	
	Interviews	Key Informants
	Men's Perceptions (n=26)	Key Informant Perceptions (n=34)
Accelerated Aging		
Heavier workloads outside home	28 (23) (88%)	13 (11) (32%)
Greater burden to provide for family (financially, sustenance)	27 (24) (92%)	14 (12) (32%)
Heavier manual labour	26 (23) (88%)	18 (14) (41%)
Inability to cope with material deprivation	23 (20) (76%)	26 (21) (62%)
Interact less frequently with health services	—	28 (24) (71%)
More psychosocial stress	22 (19) (73%)	25 (21) (62%)
More physical stress	20 (18) (69%)	16 (14) (41%)
Mental instability	7 (6) (23%)	21 (18) (53%)
Slower Aging		
Stronger	12 (8) (30%)	13 (13) (38%)
Physically intact	14 (9) (35%)	9 (11) (32%)
Ability to exercise	11 (8) (30%)	10 (8) (24%)
Easier life	9 (7) (27%)	17 (13) (38%)

Appendix G: Table 4.3.3 Perceptions of Women's Wellbeing in Old Age

Women's Wellbeing	**Number of Mentions (# of participants) (% of participants)**	
	Interviews	Key Informants
	Women's Perceptions (n=27)	Key Informant Perceptions (n=34)
Wellbeing is better	16 (13) (48%)	10 (11) (32%)
Able to continue normal life	17 (14) (52%)	21 (19) (56%)
More resourceful	16 (13) (48%)	22 (20) (59%)
Collaboration	17 (14) (52%)	23 (22) (67%)
Psychosocial support	16 (14) (52%)	24 (21) (62%)
Able to cope with challenges	16 (14) (52%)	20 (18) (52%)
Gender based violence (GBV)	15(12) (44%)	—
Wellbeing is worse	18 (14) (52%)	28 (23) (68%)
Lifetime of stress	18 (15) (56%)	26 (20) (59%)
Drained	16 (14) (52%)	24 (21) (62%)
Emotionally weak	14 (13) (48%)	22 (19) (56%)
Negative thoughts	13 (12) (44%)	13 (12) (35%)
Gender based violence	17 (14) (52%)	31 (24) (71%)
Patriarchal inheritance structures	23 (19) (70%)	30 (26) (76%)
Inability to secure land title	22 (20) (74%)	26 (23) (68%)
Homeless	17 (15) (56%)	22 (19) (56%)
Inability to re-marry	23 (19) (70%)	19 (18) (53%)

Appendix H: Table 4.3.5 Perceptions of Men's Wellbeing in Old Age

Men's Wellbeing	**Number of Mentions (# of participants) (% of participants)**	
	Interviews (Men)	Key Informants
	Men's Perceptions (n=26)	Key Informant Perceptions (n=34)
Wellbeing is better	9 (6) (23%)	22 (21) (61%)
Respected by family/community	11 (9) (35%)	20 (18) (53%)
Special treatment from wife	15 (13) (50%)	20 (18) (53%)
Wellbeing is worse	24 (20) (77%)	14 (13) (38%)
Restrictive employment laws	20 (16) (62%)	17 (13) (38%)
Perceived uselessness	21 (19) (73%)	13 (11) (32%)
Loss of identity	22 (19) (73%)	12 (10) (29%)
Alcohol dependency	18 (16) (62%)	19 (16) (47%)
Socially isolated	23 (20) (77%)	14 (12) (35%)
Mourn prior life	19 (17) (65%)	11 (8) (24%)
Loss of fellowship	18 (15) (58%)	15 (12) (35%)
Shorter life expectancy	18 (15) (58%)	29 (25) (74%)
Inability to cope with financial adversity	17 (16) (62%)	20 (17) (50%)
Family abandonment	21 (18) (69%)	23 (19) (71%)

Appendix I: Table 4.4.1 (A) Psychosocial Differences between individual before and after ROTOM membership

Psychosocial factors	Number of Mentions (# of participants) (% of participants/groups)			
	Before ROTOM		After ROTOM	
	IDI (n=8)	FG (n= 2)	IDI (n=8)	FG (n= 2)
Available social interaction	3 (3) (37%)	7(2) (100%)	8 (8) (100%)	17 (2) (100%)
Frequent social interaction	2 (2) (25%)	6 (2) (100%)	9 (8) (100%)	18 (2) (100%)
Development of friendships	3 (2) (25%)	4 (2) (100%)	9 (8) (100%)	17 (2) (100%)
Share feelings/problems with others	1 (1) (13%)	4 (2) (100%)	8 (8) (100%)	17 (2) (100%)
Comfortable with self	3 (2) (25%)	4 (2) (100%)	7 (7) (88%)	16 (2) (100%)
Happy	2 (2) (25%)	5 (2) (100%)	9 (8) (100%)	18 (2) (100%)
At peace with self	3 (3) (37%)	4 (2) (100%)	8 (8) (100%)	17 (2) (100%)
Positive wellbeing	2 (2) (25%)	6 (2) (100%)	9 (8) (100%)	18 (2) (100%)

Appendix J: Table 4.4.1 (B) Psychosocial differences between ROTOM Seniors and non-ROTOM Seniors

Psychosocial Factors	Number of Mentions (#of participants) (% of participants/groups)			
	In-depth interviews		**Focus groups** (10 participants in each)	
	ROTOM seniors (n=8)	Non-ROTOM seniors (n=7)	ROTOM seniors (n=2)	Non-ROTOM seniors (n=2)
Positive				
Feeling socially connected to community	10 (8) (100%)	2 (2) (29%)	19 (2) (100%)	5 (2) (100%)
Socially engaged	10 (8) (100%)	3 (3) (43%)	18 (2) (100%)	4 (2) (100%)
Friendship	9 (7) (88%)	2 (2) (29%)	17 (2) (100%)	4 (2) (100%)
Happy	9 (7) (88%)	3 (2) (29%)	19 (2) (100%)	4 (2) (100%)
Joy	10 (8) (100%)	2 (2) (29%)	18 (2) (100%)	3 (2) (100%)
Negative				
Sadness	1 (1) (13%)	8 (6) (86%)	1 (1) (50%)	14 (2) (100%)
Loneliness	1 (1) (13%)	9 (7) (100%)	—	17 (2) (100%)
Socially isolated	1 (1) (13%)	8 (6) (86%)	—	17 (2) (100%)
Socially rejected	—	9 (7) (100)	—	15 (2) (100%)

Appendix K: Table 4.4.2 (A) Health differences before and after ROTOM membership

Health factors	**In depth interviews**	
	Number of Mentions (#of participants) (% of participants)	
	Before ROTOM (n=8)	After ROTOM (n=8)
Available health care when needed	3 (2) (25%)	8 (8) (100%)
Available medicine	4 (2) (25%)	8 (8) (100%)
Free medicine	—	8 (8) (100%)
Age appropriate medicine	1 (1) (13%)	8 (8) (100%)
Quality health care	—	8 (8) (100%)
Respectful health care	—	8 (8) (100%)

Appendix L: Table 4.4.2 (B) Health differences between ROTOM members and non-ROTOM members

Health Factors	**Number of Mentions (Number of participants) (% of participants/groups)**			
	In-depth interviews		Focus groups (10 participants in each)	
	ROTOM seniors (n=8)	Non-ROTOM seniors (n=7)	ROTOM seniors (n=2)	Non-ROTOM seniors (n=2)
Good self-report health	8 (8) (100%)	2 (2) (29%)	17 (2) (100%)	4 (2) (100%)
Poor self-report health	—	6 (5) (71)	3 (2) (100%)	17 (2) (100%)
Receive health care when needed	9 (8) (100%)	3 (2) (29%)	17 (2) (100%)	5 (2) (100%)
Receive medication when needed	8 (8) (100%)	2 (2) (29%)	18 (2) (100%)	4 (2) (100%)
Receiving health care without cost	8 (8) (100%)	—	18 (2) (100%)	—
Respectful health care provision	8 (8) (100%)	1 (1) (14%)	10 (2) (100%)	2 (2) (100%)

Appendix M: 4.4.3 (A) Economic/Livelihood differences of seniors before and after ROTOM membership

Economic/livelihood factors	Number of Mentions (Number of participants) (% of participants/groups)			
	Before ROTOM		After ROTOM	
	IDI (n=8)	FG (n=2) (10 in each)	ID I (n=8)	FG (n=2) (10 in each)
Receive financial assistance (any source)	4 (3) (38%)	6 (2) (100%)	10 (8) (100%)	17 (n=2) (100%)
Free clothing	—	—	8 (8) (100%)	18 (n=2) (100%)
Free seeds	—	—	9 (8) (100%)	18 (n=2) (100%)
Food provision	3 (2) (25%)	—	8 (8) (100%)	20 (n=2) (100%)
Construction of stable housing	—	—	6 (6) (75%)	13 (n=2) (100%)

Appendix N: 4.4.3 (B) Economic differences between ROTOM and Non-ROTOM seniors

Economic/Livelihood Factors	Number of Mentions (Number of participants) (% of participants/groups)			
	In-depth interviews		Focus groups (10 participants in each)	
	ROTOM seniors (n= 8)	Non-ROTOM seniors (n= 7)	ROTOM seniors (n= 2)	Non-ROTOM seniors (n= 2)
Receive financial assistance (any source)	8 (8) (100%)	2 (2) (100%)	17 (2) (100%)	5 (2) (100%)
Receive seeds (any source)	9 (8) (100%)	—	19 (2) (100%)	2 (2) (100%)
Receive food (any source)	8 (8) (100%)	2 (2) (100%)	20 (2) (100%)	4 (2) (100%)