

The ageing of rural populations:

evidence on older farmers in low- and middle-income countries



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HelpAge International helps older people claim their rights, challenge discrimination and overcome poverty, so that they can lead dignified, secure, active and healthy lives.

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Executive summary

Rural populations are ageing across the world. This report focuses on low- and middle-income countries where little is known about the level, pace and implications of this trend. The report presents an analysis of existing data sets to help fill this knowledge gap. The findings show a universal trend across regions, from sub-Saharan Africa and Asia to Latin America and the Caribbean: there is an increase in the proportion of older people living in rural areas and a decline in the proportion of younger people.

Moreover, the proportion of older farmers specifically is significant and growing. The percentage of farmers over 55 is 7.1 per cent in sub-Saharan Africa, 12.1 per cent in Asia, 25.3 per cent in the Caribbean and 12.3 per cent in Latin America. The emerging picture of an ageing farm population is confirmed by the data on agricultural holders (defined as the person who exercises management control over the agricultural holding and makes major decisions around resource use): globally, 27.5 per cent of agricultural holders are aged over 55. The average proportion of agricultural holders over the age of 55 is 26.8 per cent in Africa, 28.5 per cent in Asia, 44.7% in the Caribbean and 29.8% in Latin America.

Figure 1: Average proportion of the overall farm population and agricultural holders over the age of 55

Region	% of farm population 55+	% of agricultural holders 55+
The Caribbean	25.3	44.7
Central and South America	12.3	29.8
Asia	12.1	28.5
Africa	7.1	26.8

Source: Most recent and accessible agricultural census data for 55 countries across the four regions (see Annex 1 for details)

Although the ageing of the farm population is evident across regions, the pace and levels of ageing differ significantly between as well as within regions. Rapid rural ageing is occurring in southern Africa and South East Asia, which have seen significant increases in the proportion of farmers over 55 in less than a decade. However, in a number of sub-Saharan African countries, the farm demographic structure has remained relatively static for the past two decades.

Agriculture continues to be the most important source of employment for older people in low- and middle-income countries. In Asia, 75 per cent of economically active people over 60 cite agriculture as their primary source of income, while in sub-Saharan Africa, 73 per cent of economically active older people are employed in agriculture. In Latin America, this figure is comparably low, at 35 per cent. The data shows that agriculture is particularly important for older women. In Asia, 62 per cent of economically active older women cite agriculture as their main source of income, followed by 59 per cent in sub-Saharan Africa and 25 per cent in Latin America. These proportions are significantly higher than those of younger women.

This emerging demographic reality demands attention from policy-makers and practitioners alike. The prevailing and over-simplistic view, which labels older farmers as unproductive and unable to adopt new technologies and practices, is unhelpful, as it prevents an adequate response to the challenges and opportunities presented by the trend of rural population ageing. Given that the majority of economically active older people in rural areas derive their primary income from agriculture, it is crucial to ensure that they have equal access to productive resources and support. All stakeholders – including governments, donors, international and national non-government organisations (NGOs), and the private sector – need to develop a better understanding of opportunities and constraints that farmers face across the life course.

1. Introduction

1.1 Background

The ageing of farm populations has been receiving increased attention from media and governments in recent years. Some observers have commented on the rising average age of farmers in low- and middle-income countries and its potentially negative implications for agricultural production and food security. Others have been more cautious in their analysis, arguing that there is little evidence on which to base such negative claims.¹ Despite the increasing importance of rural and farm population ageing, little is known about the level and pace of rural demographic change in developing countries.² Analyses of rural and farm population ageing are more than a decade old, leading to calls for a stronger evidence base to inform a more adequate policy and practice response.³

This report begins to address this knowledge gap by analysing existing data sets in order to look at the changing rural and farm demographic structures in Asia, sub-Saharan Africa, Latin America and the Caribbean. The datasets used to do this include United Nations Department of Economic and Social Affairs (UN DESA) Population Division data, national agricultural censuses and Labour Force Surveys (LFS).

1. Sumberg, 2013

2. Stloukal, 2000

3. Sumberg et al, 2013



Joanne Hill/HelpAge International

1.2 Structure of this report

Section 2 provides an overview of rural population ageing trends in low- and middle-income countries, using UN DESA data. Section 3 moves on to explore the demographic ageing of farmers. Using agricultural censuses, this section describes the different trends by region and within regions, comparing the pace and level of rural ageing with trends in overall levels of ageing in specific countries. Using Labour Force Survey data, Section 4 explores the extent to which older farmers are represented within the agricultural workforce, presenting data disaggregated by sex and age group. The final section presents conclusions, highlighting the implications of the data for policy-makers and practitioners as well as areas that could benefit from further research.

1.3 Data sources and methodology

UN DESA Population Division data

UN DESA Population Division data is used to analyse trends in rural population ageing across different regions. This data has its limitations as it draws on estimations that are grounded in linear projections between census years rather than structural demographic models. The data has also been derived from national census data in which urban and rural definitions may vary significantly. Another complicating factor is that the distinctions between urban and rural frontiers are increasingly becoming blurred. Despite these limitations, the UN DESA data is the best available source for examining the trends in rural population ageing in the countries included in this paper.

Agricultural census data

The main data sources used to explore farm population ageing are agricultural censuses. Agricultural censuses collect information on agricultural holdings and the demographic attributes of the persons attached to them. An “agricultural holding” consists of a holder, other persons belonging to the holders’ household and hired permanent and/or temporary workers. Other categories of the rural population, such as landless workers, persons engaged in hunting, forestry and fisheries are thus by definition excluded.⁴ While this is a limitation, agricultural census data is overall a valuable and accessible source for the analysis of the demographic ageing of farmers.

Agricultural censuses can tell us two different but complementary pieces of information:

- a. the age of the population of members of holders’ households (in this report referred to as “farm population”) and**
- b. the age of the sub-group of “agricultural holders”. An agricultural holder, as defined by the FAO, is the person who makes the major decisions around resource use and exercises management control over the agricultural holding’s operation.⁵**

The ageing of these two categories is likely to be dissimilar, with different policy implications.⁶ Section 3 of this report compares the ageing of farm populations and agricultural holders across different countries and regions.

4. The data may also include people who are not deriving their livelihood from agriculture (artisans, small business owners, etc).

The number of people reported in agricultural census data may thus either be smaller or larger than the agricultural population (defined as everyone deriving their livelihood from agriculture). Similarly, the data from agricultural censuses are different from data on rural populations collected by national population censuses.

There have been some attempts to reconcile these categories (see: Naman, K. et al. 2010, Collecting Agricultural Data from Population Census: Overview of FAO recommendations and experiences of Burkina Faso and other countries, paper presented at The Fifth International Conference on Agriculture Statistics, Kampala, October 2010.)

5. FAO, 2010

6. Stloukal, 2000

In order to analyse the pace and level of farm population ageing, this report compares agricultural census data for the members of the agricultural holder’s household (ie, the farm population) with general demographic data from UN DESA. When the year of the agricultural census differs from the UN DESA data (which are based on five-year intervals), the most conservative estimate for the interval years is taken. As the UN DESA data is based on linear projections and therefore project upward trends in ageing, this is a reasonable approach.



Antonio Olmos/HelpAge International

There are a number of limitations that stem from comparability of the data reviewed. First, there is variation in the design of different national censuses; there are also differences in definitions and enumeration criteria, extent of coverage and general problems with sampling. The censuses are also conducted infrequently (every decade or so) and therefore longitudinal data is often unavailable. Comparisons between countries thus have to bear in mind that data collection approaches vary.

There is also variation in how different countries define rural areas. Alongside this, there are important non-demographic socio-economic, cultural and political factors that have an effect on ageing. For example, the relatively high proportions of older agricultural holders in sub-Saharan Africa may reflect the practice of communal use of natural resources, whereby older members of households and communities generally exercise authority over land use and management.

Despite these data limitations, national agricultural censuses are currently the best available source of data with which to assess demographic differences between farming populations in low- and middle-income countries in different regions of the world. According to the Food and Agriculture Organization of the United Nations (FAO), these censuses are a reliable but under-utilised data source for examining overall levels of ageing among the population attached to agricultural holdings.⁷

Labour Force Surveys

The data sources used to explore older people's participation in the agricultural labour force (and specifically older women) are Labour Force Surveys and UN Statistics Division (UNSD) data on economic activity. Labour Force Surveys are national household-based surveys of work-related statistics that include demographic and labour-related characteristics, conducted under International Labour Organization (ILO) guidelines. Information is collected on a household's usual residents as well as any that are temporarily absent. UNSD collects data on economic activity from national statistical offices and disseminates these.

The report considers the distribution of older and younger people's employment by sector. The definitions used for employment refer to persons over 15 years old who worked one or more hours (remunerated or not) during the reference period as well as temporarily absent workers. It includes informal sector work, non-remunerative work and subsistence farming. Both the LFS and UNSD data use internationally comparable concepts and definitions to classify employment and economic activity which are set by the ILO. National methodologies are relatively consistent; however, classifications around "sectoral employment" may vary by national standards.

The main data limitation here stems from coverage of the LFS. Sampling is done on a population census basis, which is only conducted every decade. This means parts of the population may be excluded: notably, marginalised groups such as the non-settled population, as well as large parts of the agricultural population that are hard to reach. In some countries, the geographic coverage of a labour force survey completely excludes rural areas.

Moreover, concepts such as "economic activity" are less useful in rural settings where the seasonal nature of the agricultural cycle shapes the activity of individuals who are engaged in a multiplicity of activities.⁸ Due to the informal nature of women's agricultural work, female labour is also underestimated in LFS. In addition, the economic role and activity of older people should be viewed in the social context of the household to which they belong, as their livelihood strategies will depend on the composition of the household.

The next section presents an overview of the phenomenon of rural population ageing in sub-Saharan Africa, Asia, and Latin America. Due to a lack of data, this analysis could not be carried out for the Caribbean.

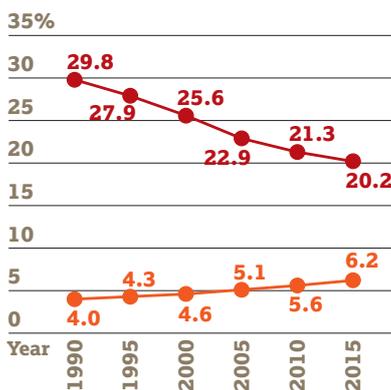
7. Stloukal, 2000

8. Cain, 1991

2. Rural population ageing: an overview

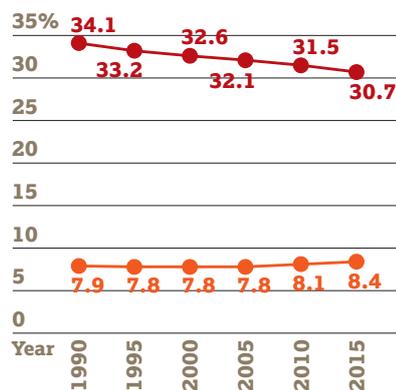
Rural population ageing is a global phenomenon that hasn't been sufficiently studied across low and middle-income countries. The data shows a universal increase in the proportion of older people and a decline in the proportion of younger people living in rural areas. Figures 2, 3 and 4 illustrate this trend for Asia, sub-Saharan Africa, and Latin America. Despite differences in the pace and level of ageing, the evidence suggests that many rural populations are ageing, and this trend is expected to continue apace.

Figure 2: Rural population ageing in Asia



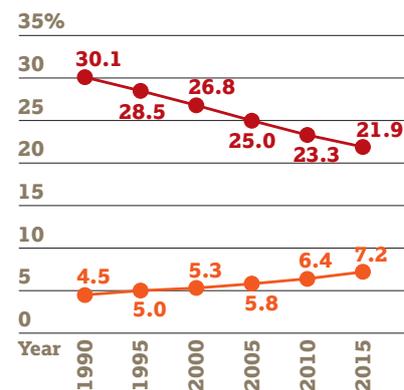
Source: Calculations based on UN DESA Population Division data.⁹

Figure 3: Rural population ageing in sub-Saharan Africa*



Source: Calculations based on UN DESA Population Division data.¹⁰

Figure 4: Rural population ageing in Latin America



Source: Calculations based on UN DESA Population Division data.¹¹

● Under 10

● Over 65*

*Due to the lack of sufficient disaggregated data for sub-Saharan Africa for the over 65, data for the over 55 is used for this region.

Our findings are corroborated by other studies, which note that the absolute number of older people in rural areas of developing countries has been growing faster and reaching higher absolute levels than in more developed regions.¹² Compared to urban areas, rural areas also remain disproportionately home to older people in the majority of countries.¹³

Asia is experiencing rapid rural population ageing. From 1990-2015, there was an increase of 2.2 per cent in the proportion of people over 65 living in rural areas, and a 9.6 per cent decrease in the proportion of children (under ten years). In sub-Saharan Africa, the same trend is evident, though less pronounced. Over the same 25-year period, the region saw a marginal increase of 0.5 per cent in the proportion of people over 55 years living in rural areas, and a decrease of 3.4 per cent in the proportion of children. Finally, Latin America has seen an increase of 2.7 per cent in the proportion of older people living in rural areas, and an 8.2 per cent decrease in the proportion of children.

The reasons for rural population ageing reflect an array of complex factors. The overarching reason is the age-selective nature of rural-urban migration, which sees younger people migrating to the towns and cities, leaving older people behind. In some cases, return migration of older adults from urban cities back to their rural homes is also a reality.¹⁴ Rural ageing is a complex phenomenon; it is not likely to follow a uniform pattern, but will depend on context-specific social and economic factors. It is therefore over-simplistic to attribute rural demographic ageing trends across the developing world to younger people's migration to cities. There are many other important factors, such as the impacts of changes in fertility and mortality rates on population age structures, rates of urbanisation and the complex patterns of migration, and the continuing effects of HIV and AIDS, which also need to be taken into account. As well as differences between countries, there will inevitably be important differences within countries. Further research is required to better understand these differences.

9. Countries include Bhutan, Cambodia, Lao People's Democratic Republic, Myanmar, Nepal, the Philippines, Thailand and Vietnam. This selection is based on the availability of data.

10. Countries include Benin, Botswana, Burkina Faso, Cameroon, Cape Verde, Comoros, Congo (DRC), Djibouti, Ethiopia, The Gambia, Guinea, Guinea Bissau, Lesotho, Madagascar, Malawi, Mali, Mozambique, Namibia, Niger, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. This selection is based on the availability of data.

11. Countries include: Argentina, Bolivia, Brazil, Colombia, Nicaragua and Peru. This selection is based on the availability of data.

12. UN, 1993

13. Kinsella, 2001

14. Kinsella, 2001



Antonio Olmos/HelpAge International

3. Older farmers and farm population ageing: regional differences

This section compares the ageing of farm populations and agricultural holders across different countries and regions.

Agriculture Census data shows that farming populations are ageing across sub-Saharan Africa, Asia and Latin America. This is happening most rapidly in South East Asia and southern Africa. For example, in Thailand, Vietnam, Botswana and Lesotho there was a significant increase (an average increase of almost 5 per cent) in the number of people over 55 in the farm population, mirrored by a decrease in the number of younger people in less than a decade. There is limited data available for the Caribbean and Central and South America, so it is not possible to make more general statements for these two regions.

An analysis of the sub-group of agricultural holders shows that 27.5 per cent of agricultural holders in these regions are over the age of 55 years.¹⁵ This is significant, as it means that, in a significant proportion of farms, it is older farmers who exercise management control and make major decisions about resource use. Agricultural holders are, on average, older than the overall farm population, as can be seen in the various tables presented in this paper.

3.1 Sub-Saharan Africa: a diverse picture

Evidence on agricultural holders

For Africa, there is regional diversity for the level and pace of farm population ageing. The most recent census data shows that 26.8 per cent of all agricultural holders are aged over 55 years. Generally, there is a concentration of older agricultural holders in the region: for 15 out of 22 countries for which data is available for agricultural holders, more than one-third of agricultural holders are over 55. All of the countries in the region have more than 20 per cent of older agricultural holders.

The population of older agricultural holders has been increasing in some countries and decreasing in others. Two stark examples of this are Lesotho and Ethiopia. Lesotho (see Figure 5) has seen a 5 per cent increase in the proportion of older agricultural holders between 1990 and 2010, such that nearly 50 per cent of agricultural holders were above the age of 55 years by 2010. Moreover, the proportion of holders over the age of 65 years increased by 6 per cent between 2000 and 2010, to nearly 30 per cent.

Figure 5: Agricultural holders in Lesotho

Country	Census year	Agricultural holders		
		total 000	%55+	%65+
Lesotho	1990	229	43.6	22.7
	2000	338	40.8	22.2
	2010	225	48.6	28.2

Source: Lesotho agricultural censuses

15. There is no standard numerical criterion to refer to the older population. Age group classifications recommended by FAO for national agricultural censuses are used in this paper. Interpolation of country data for countries that did not follow the proposed FAO classifications was carried out. This chapter gives the reader a choice of different age cohorts to classify old age; above 55 and above 65 years.

By contrast, Ethiopia saw a decrease of 1.3 per cent in the number of older agricultural holders over roughly the same period (see Figure 6). There was a more substantial decrease of 8.3 per cent in the proportion of holders above the age of 65 years. In fact, this large decrease weighs down a 7 per cent increase in the proportion of holders in the 55-64 age group. This decrease in the proportion of older holders can be partly attributed to Ethiopia's high fertility rates, which resulted in an almost three-fold increase in the rural population during this period.

Figure 6: Agricultural holders in Ethiopia

Country	Census year	Agricultural holders		
		total 000	%55+	%65+
Ethiopia	1992	6,193	24.0	14.0
	2002	–	–	–
	2012	15,031	22.7	5.7

Source: Ethiopia agricultural censuses

Evidence on the ageing of the farm population

The farm population over the age of 55 accounts for 7.1 per cent in sub-Saharan Africa. There are vast differences between countries however; the proportion of older farmers ranges from 6.3 per cent in Niger to 15.9 per cent in the Seychelles (see Annex 1 for indicators of rural demographic ageing by region and country).

Within sub-Saharan Africa, there are also regional disparities in overall levels of farm population ageing. The trend is occurring most rapidly in southern Africa. Two countries which illustrate this are Botswana and Lesotho, which have both seen significant increases in the proportion of people over 55 attached to agricultural holdings over the past decade, mirrored by a decrease in the proportion of younger people.



Kate Hoyt/HelpAge International

Botswana has seen an ageing of the farm population, and the farm population is now older than the general population. As Figure 7 shows, from 1993 to 2004, among agricultural holders' households, there was a 1.4 per cent increase in the proportion of people aged 65 and above. Over this same period, the proportion of people over 55 increased, albeit marginally by 0.7 per cent. There was also an increase in the absolute number of older people as the farm population grew. Alongside this, the data shows an overall decrease of 1.2 per cent in the proportion of younger people (aged below 44).

The rate at which the farm population is ageing is marginally slower than for the overall rural and urban population (see Figure 8). The increase in the proportion of older farmers (2.1 per cent) is largely similar to the increase in the proportion of older rural residents (1.9 per cent). These figures might inevitably contain some overlap, as in practice, the vast majority of agricultural holdings (the unit of enumeration for agricultural censuses) are managed by households (the unit of enumeration for population and housing censuses). Levels of ageing among the farm and rural populations are both more rapid than in urban areas, which showed a 1.1 per cent increase in older urban residents for the same period (1990-2005).

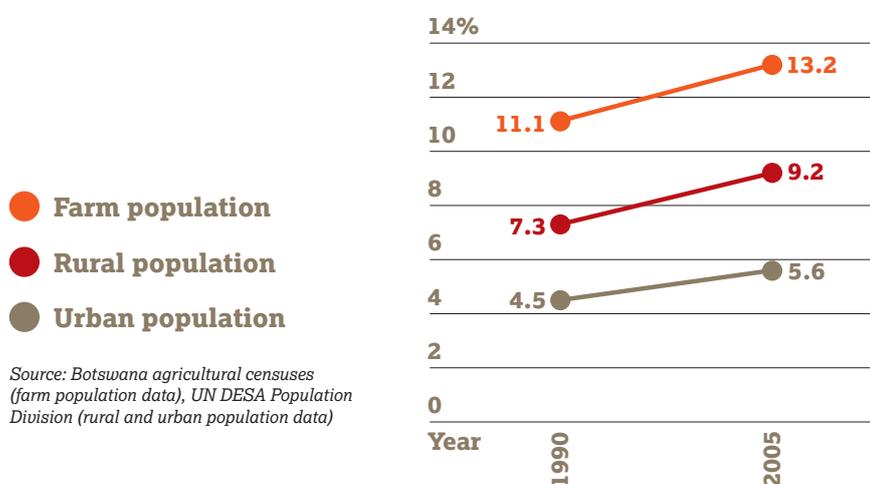
However, the farm population in Botswana is older than the rest of the population. The proportion of older farmers attached to agricultural holdings is larger than the proportion of older people living in rural and urban areas. In 2004, the proportion of farmers above 65 years in Botswana was 8 per cent. This is significantly larger than the 4.3 per cent of older rural residents and 2.3 per cent of older urban residents in 2005.

Figure 7: Age of members of the holder's household for Botswana, 1993-2004

Year	Total farm population	>10	10-24	25-34	35-44	45-54	55-64	65+	Age not reported
1993	539,753 %	176,533 32.7%	158,524 29.4%	52,579 9.7%	47,321 8.8%	32,862 6.1%	24,318 4.5%	35,807 6.6%	11,809 2.2%
2004	553,682 %	143,277 25.9%	189,647 34.3%	62,515 11.3%	43,772 7.9%	41,494 7.5%	28,868 5.2%	44,109 8.0%	0 0.0%

Source: Botswana agricultural censuses

Figure 8: Proportion of people over the age of 55 years in different demographic data for Botswana



Source: Botswana agricultural censuses (farm population data), UN DESA Population Division (rural and urban population data)

Lesotho shows rapid farm population ageing over a 10-year period. The farm demographic structure changed significantly from 2000 to 2010, with the proportion of older people (above 55 years) rising by almost 9 per cent (see Figure 9). The increase was largest (almost 5 per cent) in the over 65 age group. This increase in the proportion of older people among the farm population has been mirrored by a decrease in younger age groups (under 44 years) of 12.6 per cent.

Levels of ageing are more rapid among the farm population than the rest of the population. When compared to overall levels of ageing, the change in the proportion of older people among the farm population was larger. As illustrated in Figure 10, there was little change in the proportion of older people living in rural and urban areas over this same period of time. This is in stark contrast to the rapid ageing of the farm population.

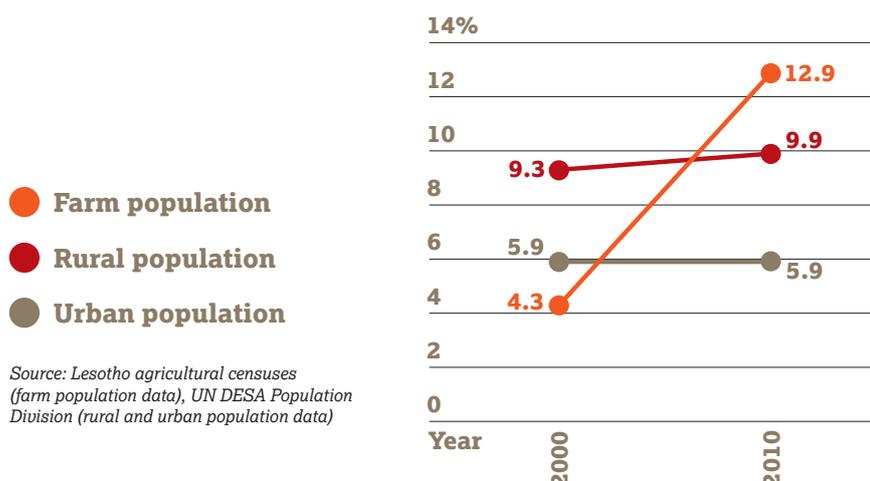
The proportion of older people attached to agricultural holdings remains higher than the proportion of older people living in rural and urban areas. In 2010, there were 7.1 per cent of older farmers (aged over 65) among the farm population, compared with only 4.9 per cent and 2.4 per cent of older people living in rural and urban areas respectively. There was an increase in the absolute number of older farmers between the census rounds, despite an overall decrease in the farm population, as shown in Figure 9.

Figure 9: Age of members of the holder's household for Lesotho, 1999/00-2010

Year	Total farm population	>10	10-24	25-34	35-44	45-54	55-64	65+
1999/00	1,486,332 %	421,987 28.4%	670,779 45.1%	182,584 12.3%	91,845 6.2%	56,291 3.8%	30,586 2.1%	32,260 2.2%
2010	1,162,524 %	250,029 21.5%	429,421 36.9%	150,991 13.0%	93,321 8.0%	88,512 7.6%	67,321 5.8%	82,929 7.1%

Source: Lesotho agricultural censuses

Figure 10: Proportion of people over the age of 55 years in different demographic data for Lesotho



Source: Lesotho agricultural censuses (farm population data), UN DESA Population Division (rural and urban population data)

In West and eastern Africa, in contrast to southern Africa, there has been only marginal change in the demographic structure of the farm populations. In these sub-regions, a pervasive feature of the farm demographic structure continues to be a large young population, with 60 per cent under the age of 25 years. One example of a country where farm demographic structures have remained relatively static is Uganda.

In **Uganda**, the demographic structure of the farm population has remained unchanged for a 15-year period. The proportion of farmers over 55 has decreased by 0.3 per cent (see Figure 11). There have been marginal increases of just over 1 per cent in the groups (25-34 and 35-44). However, there has been an overall decrease of 3.8 per cent in the proportion of younger people (all those aged under 25) among the farm population.

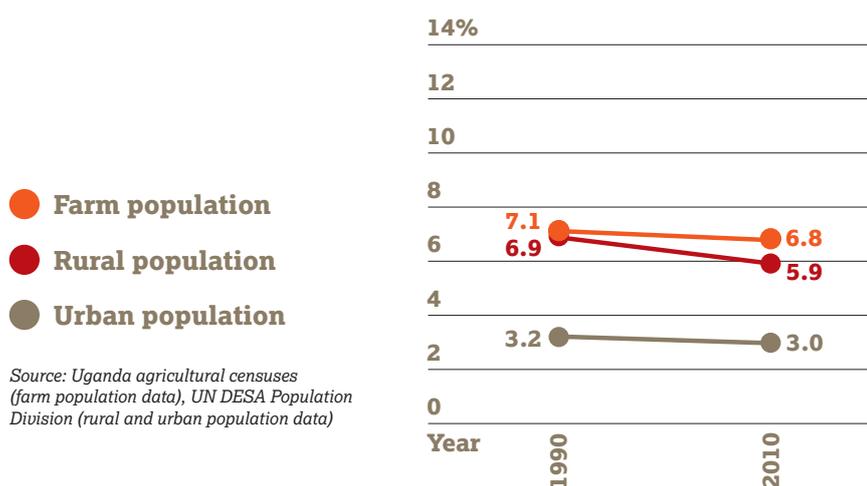
These marginal changes in farm demographic structure are mirrored in the overall demographic data, which shows little change in the proportion of older people for a similar period (see Figure 12). However, the proportion of older people attached to agricultural holdings is slightly higher than the proportion of older people living in urban and rural areas.

Figure 11: Age of members of the holder's household for Uganda, 1991-2008/9

Year	Total farm population	>10	10-24	25-34	35-44	45-54	55-64	65+
1991	9,537,469 %	3,394,073 35.6%	3,011,502 31.6%	1,180,799 12.4%	776,921 8.1%	501,355 5.3%	368,381 3.9%	304,437 3.2%
2008/9	18,862,000 %	6,040,000 32.0%	5,918,656 31.4%	2,638,090 14.0%	1,856,405 9.8%	1,127,052 6.0%	664,135 3.5%	617,662 3.3%

Source: Uganda agricultural censuses

Figure 12: Proportion of people over the age of 55 years in different demographic data for Uganda



Source: Uganda agricultural censuses (farm population data), UN DESA Population Division (rural and urban population data)

3.2 Asia: rapid farm population ageing

Evidence on agricultural holders

For Asia as a whole, there is evidence that farm populations and the sub-group of agricultural holders are ageing. The most recent census data shows that 28.5 per cent of holders are over the age of 55. There is variation between countries: Lao PDR has 22.1 per cent of older holders, meanwhile Lebanon has 43.7 per cent. These variations can be seen in Annex 1. There are signs that this proportion is increasing, particularly in South East Asia.

Nepal is one example of an Asian country that has seen an increase in the proportion of older agricultural holders (over 55 years), rising by just over 3 per cent between 1992 and 2002 (see Figure 13). Considering that the agricultural holder population increased by almost 1 million during this period, this represents a significant increase in the absolute number of older farmers.

Figure 13: Agricultural holders in Nepal

Country	Census year	Agricultural holders		
		total 000	%55+	%65+
Nepal	1992	2,736	22.3	7.4
	2002	3,364	25.5	9.4

Source: Nepal agricultural censuses



Antonio Olmos/HelpAge International

Evidence on the ageing of the farm population

In Asia, the average proportion of farmers over the age of 55 is 12.1 per cent. Two Asian countries that exemplify the trend of farm population ageing are Thailand and Vietnam.

In **Thailand**, the farm population is ageing, but at broadly the same pace as the rest of the population. There has been an increase of 4.4 per cent in the proportion of older farmers between 1988 and 2002 (see Figure 14). This meant that in 2002, 16.1 per cent of the total farm population was over the age of 55 years. The largest increase (3 per cent) took place in the over 65 age group. This was mirrored by a 14.5 per cent decrease in the farm population below the age of 25 years.

Compared to overall levels of population ageing in the country, there is evidence that the farm population is ageing slightly more rapidly. The demographic data for rural populations shows a marginally smaller increase in the proportion of older people for the same period. There was a small decrease in the proportion of younger people (below 25 years) living in rural areas. The pace of demographic ageing among members of the holder's household is therefore slightly more pronounced than in the rural population as a whole. This can be seen in Figure 15.

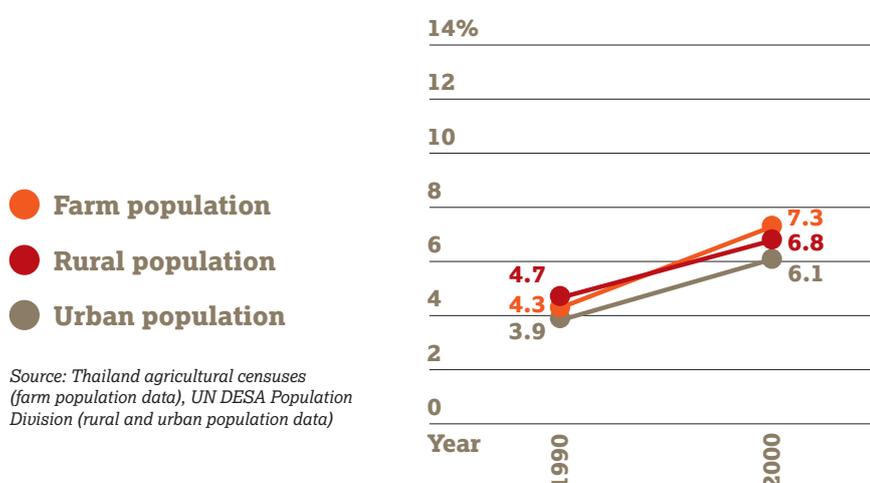
The proportion of older people in the farm and rural populations are largely similar (Figure 15). In 2000, the proportion of older people (over 65) living in rural areas was 6.8 per cent, compared to 7.3 per cent among members of the holder's household. Proportionately, there are fewer older people living in urban areas compared to rural areas, and this is not predicted to change.

Figure 14: Age of members of the holder's household for Thailand, 1988-2002/3

Year	Total farm population	>10	10-24	25-34	35-44	45-54	55-64	65+
1988	22,894,060 %	4,526,642 19.8%	6,682,694 29.2%	3,622,705 15.8%	2,840,604 12.4%	2,542,181 11.1%	1,685,310 7.4%	993,924 4.3%
2002/3	22,192,937 %	3,021,234 13.6%	4,635,329 20.9%	3,905,957 17.6%	3,839,378 17.3%	3,217,976 14.5%	1,952,979 8.8%	1,620,084 7.3%

Source: Thailand agricultural censuses

Figure 15: Proportion of people over the age of 65 years in different demographic data for Thailand



Source: Thailand agricultural censuses (farm population data), UN DESA Population Division (rural and urban population data)

In **Vietnam**, farm population ageing is occurring. From 2006 to 2011, there was a 3.6 per cent increase in the proportion of the farm population over the age of 55. As a result, in 2011, 12.3 per cent of the farm population was over the age of 55, with the absolute number of older farmers increasing by over half a million (as shown in Figure 16). Alongside this, there was a decrease in younger farmers (under 25) by over 1.5 million during this five-year period.

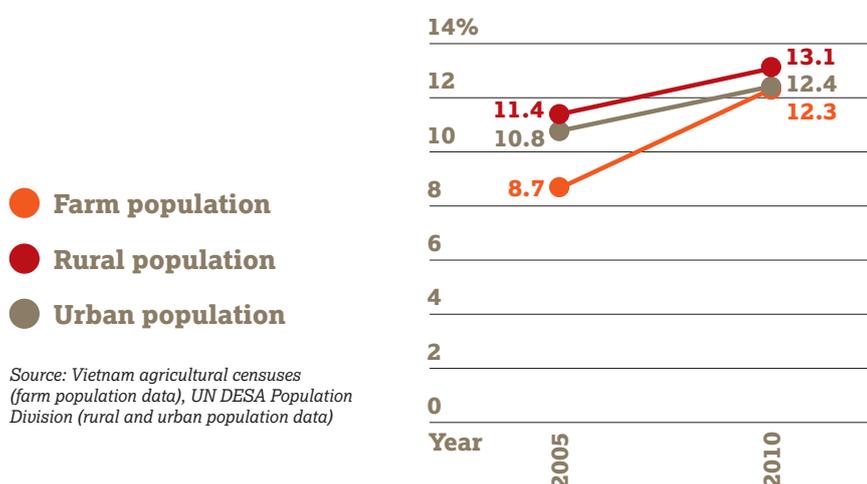
Farm population ageing is happening more rapidly than for the rest of the population in Vietnam. As can be seen in Figure 17, the increase in proportion of older farmers (3.6 per cent) was double the increase in older persons living in rural and urban areas (1.7 and 1.6 per cent respectively). This indicates that the farm population is ageing more rapidly compared to the rest of the Vietnamese population. It must be noted, that overall the proportion of older farmers has increased from a lower base, as the proportion of older people in the general population is similar. The agricultural census data points to genuine demographic change in the farming population.

Figure 16: Age of members of the holder's household for Vietnam, 2006-2011

Year	Total farm population	>10	10-24	25-34	35-44	45-54	55+
2006	22,928,876 %	884,721 3.9%	4,404,269 19.2%	6,239,067 27.2%	6,044,154 26.4%	3,351,926 14.6%	2,004,739 8.7%
2011	20,558,242 %	660,094 3.2%	3,117,917 15.2%	5,239,091 25.5%	5,465,980 26.6%	3,537,050 17.2%	2,538,109 12.3%

Source: Vietnam agricultural censuses

Figure 17: Proportion of persons over the age of 55 years in different demographic data for Vietnam



Source: Vietnam agricultural censuses (farm population data), UN DESA Population Division (rural and urban population data)

In **Myanmar**, there are signs of a gradual change in the rural demographic structure. There was a marginal (1 per cent) decrease in the percentage of farmers over 55 years between 1993 and 2003. The younger population (under the age of 25) attached to the land decreased by almost 6 per cent, while the older farm population (over 65) increased very slightly (by 0.2 per cent) during the same period. The biggest change has occurred in the middle age groups, with an increase of almost 7 per cent in the 25-54 age group.

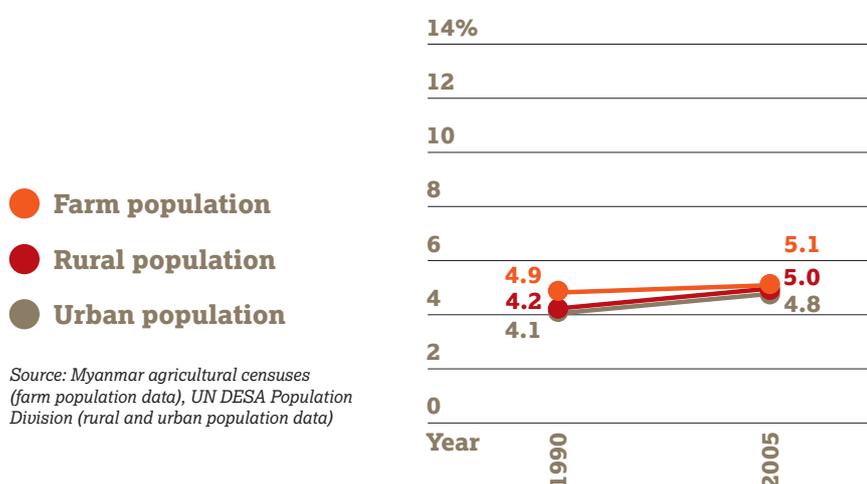
When the agricultural census data is compared to UN DESA data, there are marginal differences. First, the proportion of older persons in the farm population is slightly larger than in the rural and urban populations. Second, the pace of change is slightly more rapid among rural and urban populations than among the farm population for the same period. As Figure 19 shows, the pace of rural population ageing in Myanmar is gradual, but nonetheless occurring at a steady rate. Another interesting thing to note is that there continues to be a greater proportion of older people living in rural areas than in urban areas.

Figure 18: Age of members of the holder's household for Myanmar, 1993-2003

Year	Total farm population	>10	10-24	25-34	35-44	45-54	55-64	65+
1993	15,876,566 %	3,605,929 22.7%	4,991,296 31.4%	2,431,122 15.3%	1,783,972 11.2%	1,226,621 7.7%	1,056,821 6.6%	780,804 4.9%
2003	17,464,398 %	3,088,974 17.7%	5,348,820 30.6%	3,041,538 17.4%	2,368,772 13.6%	1,765,596 10.1%	949,133 5.4%	901,566 5.1%

Source: Myanmar agricultural censuses

Figure 19: Proportion of persons over the age of 65 years in different demographic data for Myanmar



Source: Myanmar agricultural censuses (farm population data), UN DESA Population Division (rural and urban population data)

3.3 The Caribbean: ageing is an old rather than new phenomenon

Evidence on agricultural holders and the overall farm population

The Caribbean is the oldest region, with 44.7 per cent of all agricultural holders being over 55. However, it must be noted that an ageing farm population is not a new phenomenon in this region, as these figures are taken from the 1990 census round, which is the most recent accessible data. Please see Annex 1 for more detail.

A large share of older agricultural holders is the norm for the region. The proportion of holders above the age of 55 ranges from 32.2 per cent in St Vincent and the Grenadines to 62.8 per cent in Puerto Rico.

There are also signs that agricultural holders are ageing. In St Vincent and the Grenadines, for example (see Figure 20), the proportion of holders above 65 years increased by more than 2 per cent in just over a decade. There was an overall decrease in the rural population during this period, suggesting that relative rural population ageing is occurring.

The average proportion of the farm population over 55 years is 25.3 per cent, with proportions by country ranging from 15 per cent in Grenada to 35.8 per cent in St Vincent and the Grenadines. Due to the lack of longitudinal data, it was not possible to assess the pace and level of the ageing of the overall farm population in this region.

Figure 20: Agricultural holders in St Vincent and the Grenadines

Country	Census year	Agricultural holders		
		total 000	%55+	%65+
St Vincent and the Grenadines	1986	9	30.4	13.6
	2000	7	32.2	15.7

Source: St Vincent and the Grenadines agricultural censuses

3.4 Central and South America: old and ageing

Evidence on agricultural holders and the overall farm population

It is difficult to make generalisations about this region, as there was relatively little age-disaggregated data available for many countries. However, where data was available, it revealed a high proportion of older agricultural holders with the average proportion of agricultural holders being 29.8 per cent. Of these, 15.4 per cent are over 65 years old.

Argentina was notable for having a particularly high proportion of older agricultural holders. In 2002, nearly 50 per cent of agricultural holders were above the age of 55. This proportion is significantly higher than for other countries in the region. Other countries had a high proportion of holders over the age of 65, in particular Nicaragua (16.1 per cent) and Peru (15.6 per cent) (see Annex 1). Panama illustrates the ageing of agricultural holders that is taking place. From 1990 to 2000, the country saw an increase of almost 3 per cent in the proportion of agricultural holders over 55 years (see Figure 21). Over the same period, the proportion of holders aged over 65 increased by almost 2 per cent.

The average proportion of the farm population over the age of 55 is 12.3 per cent. There are regional variations behind the high proportion of older farmers. Uruguay has a relatively large older farm population, with 22.4 per cent over the age of 55 and 11 per cent over 65 (agricultural census data from 2000, see Annex 1). Meanwhile, Paraguay has a smaller older farm population, with 8.9 per cent older than 55 of whom 4.1 per cent are over 65 (Agricultural Census data, see Annex 1).

Panama illustrates the ageing of agricultural holders that is taking place. From 1990 to 2000, the country saw an increase of almost 3 per cent in the proportion of agricultural holders over 55 years (see Figure 21). Over the same period, the proportion of holders aged over 65 increased by almost 2 per cent.



Antonio Olmos/HelpAge International

Figure 21: Agricultural holders in Panama

Country	Census year	Agricultural holders		
		total 000	%55+	%65+
Panama	1990	208	32.1	15.8
	2000	232	34.8	17.5

Source: Panama agricultural censuses

In **Argentina**, there are clear signs of farm population ageing. Between 1988 and 2002, the proportion of the farm population aged over 55 increased by 3.8 per cent from 14.4 per cent to 18.2 per cent (see Figure 22). There was also an increase in the 45-54 age group by just under 2 per cent. However, the younger farm population (under 44 years old) saw a large decrease of 5.6 per cent.

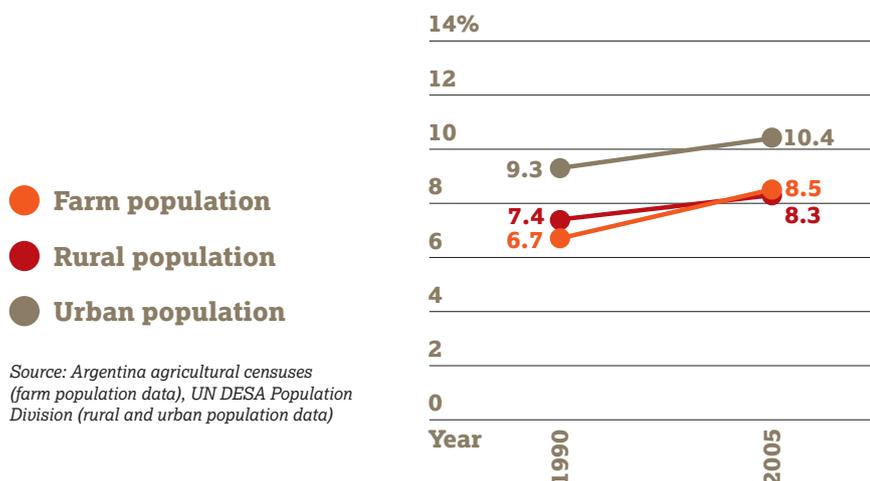
When the agricultural census data is compared to the level of demographic ageing among the general population, similarities and variations can be seen. The proportion of people aged 65 and over is almost the same in the farm population and the overall rural population (8.5 per cent and 8.3 per cent respectively). The increase of the proportion of people over 65 has been highest in the farm population (1.8 per cent), followed by an increase of 1.1 per cent in the urban population and an increase of 0.9 per cent in the rural population. It is important to note that the proportion of older people is largest in urban areas. This shows genuine demographic differences between the different regions, where Latin America is the only region where the proportion of older people living in urban areas is higher than in rural areas.

Figure 22: Age of members of the holder's household for Argentina, 1988-2002

Year	Total farm population	>10	10-24	25-34	35-44	45-54	55-64	65+
1988	1,447,365 %	263,584 18.2%	405,642 28.0%	223,664 15.5%	192,368 13.3%	153,921 10.6%	111,910 7.7%	96,276 6.7%
2002	1,230,100 %	232,404 18.9%	312,443 25.4%	160,670 13.1%	148,409 12.1%	152,135 12.4%	119,142 9.7%	104,897 8.5%

Source: Argentina agricultural censuses

Figure 23: Proportion of people over the age of 65 years in different demographic data for Argentina



Source: Argentina agricultural censuses (farm population data), UN DESA Population Division (rural and urban population data)

4. Older farmers and agriculture: their contribution, their livelihood

Agriculture continues to be the main economic activity for older people in developing regions

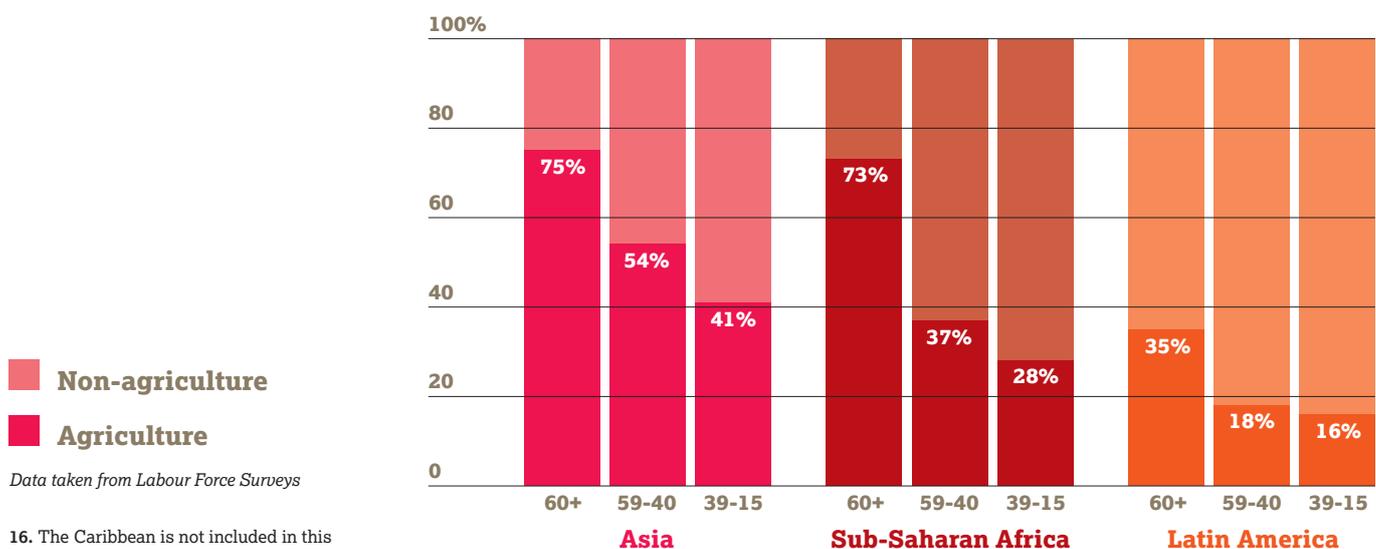
In sub-Saharan Africa, Asia and Latin America, agriculture continues to be the most important source of livelihood for the vast majority of economically active older people, and particularly so for older women. This section presents data on the proportion of economically active older people reporting agriculture as a source of income-generating activity compared with younger age groups. It also considers the proportion of older women engaged in agriculture as opposed to other sectors. Due to a lack of data, this analysis could not be done for the Caribbean.

In all three regions, older people are more likely than other age groups to be working in agriculture than in other industries. This trend can be seen in Figure 24, which shows the distribution of age groups by agriculture compared with non-agriculture in Asia, sub-Saharan Africa and Latin America.¹⁶

In Asia, agriculture represents the largest proportion of employment for the older population. Data on employment by industry, taken from the ILO Labour Force Surveys and UNSD Demographic Statistics on economic activity, show that 75 per cent of people over 60 reported agriculture as their main income-generating activity. Overall, agriculture remained a crucial source of employment for the region as a whole, with the 40-59 and 15-39 age groups also having a high proportion of people reporting agriculture as their main source of income-generating activity (54 per cent and 41 per cent respectively).

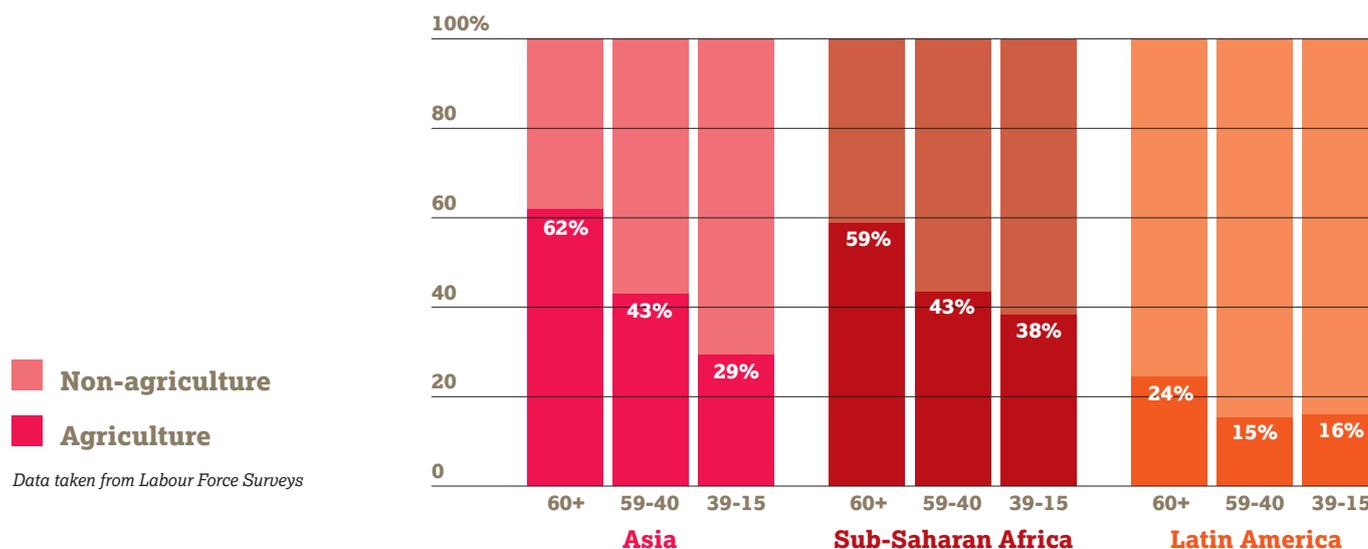
Similarly, in sub-Saharan Africa, a large majority of older people (73 per cent) reported agriculture as a source of income. Interestingly, it was a less important source of employment than other industries for the younger age groups when compared with Asia, at 37 per cent and 28 per cent for the 40-59 and 15-39 age groups respectively.

Figure 24: Distribution of older and younger people's employment, by region and sector



16. The Caribbean is not included in this analysis due to a lack of Labour Force Survey data coverage.

Figure 25: Distribution of female employment, by sector and age group



In Latin America, where urbanisation has taken place rapidly and at large scale, agriculture is a less significant source of employment for older people compared with other industries. Proportionately, older people were more likely to be engaged in agriculture than the other age groups, with 35 per cent reporting agriculture as an income activity. The proportion of the younger age groups working in agriculture was also lower than in the other two regions (18 per cent of those aged 40-59, and 16 per cent of those aged 15-39).

As Figure 25 shows, agriculture is an important source of livelihood for economically active women above the age of 60 years, although more so in Asia and sub-Saharan Africa than in Latin America. In all three regions, the proportion of older women deriving their livelihood from agriculture is higher than for younger women. Often, gender analyses of women’s increasing share of the burden of agricultural work, described as the “feminisation of agriculture”, do not disaggregate data by age. But as Figure 25 shows, women farmers are not a heterogenous group.

In Asia, agriculture represents the most important source of employment for women above 60 years, employing 62 per cent of all economically active older women over 60. Agriculture is also an important source of employment for the 40-59 and 15-39 age groups, at 42.9 per cent and 28.8 per cent respectively.

In sub-Saharan Africa, 58.7 per cent of economically active older women above 60 years are employed in agriculture. The sector employed fewer women from younger age groups, although still significant, employing 43.4 per cent of women in the 40-59 age group and 38.3 per cent of women aged 15-39.

In Latin America, agriculture was less significant overall as a source of employment. Among economically active older women above 60 years, 24.5 per cent are employed in agriculture. Younger women are also less well represented in the agricultural workforce, at 15.5 per cent and 16.1 per cent of the 40-59 and 15-39 age groups respectively. In Latin America, non-agricultural forms of employment are more important as a source of income for women, as shown in Figure 25.



Jeff Williams/HelpAge International

5. Conclusion

The available data shows that, as in other parts of the world, rural populations in low- and middle-income countries are ageing. There has been a universal trend of an increase in the proportion of older people and a decrease in younger people residing in rural areas. This paper has shown that specifically, the population attached to agricultural holdings (referred to in this report as “farm population”) are ageing across Asia, sub-Saharan Africa, Latin America and the Caribbean. Yet there is considerable regional diversity in the pace and levels of ageing. The trend is occurring most rapidly in South East Asia and southern Africa, while other sub-Saharan African countries have experienced less change in the rural demographic structure. In Latin America and the Caribbean, the proportion of older farmers is relatively high, although this is not a new phenomenon, and proportionately, older people in Latin America are more likely to live in cities. The complexity of this phenomenon is reflected in the diverse drivers of rural population ageing in each national and regional context.

This emerging demographic reality demands urgent attention from policy-makers and practitioners alike. However, a simplistic view that labels older farmers as unproductive and unable to adopt new technologies, with negative consequences for future food security, is unhelpful both for capturing the opportunities and addressing the challenges that this trend presents. Given the important role of agriculture for older people’s livelihoods, it is crucial that they have equal access to productive resources and training on innovative technologies. Yet older farmers are often excluded from such support, based on unfounded perceptions of them not being able to learn new skills.

Given that rural populations are ageing, it is imperative that governments consider how best they can support farmers throughout the different stages of their lives to protect and promote their livelihoods. Supportive government policies will also be important in terms of maintaining or increasing national agricultural production levels. Social policies (including adequate social protection systems) should also address the needs of vulnerable older people in rural areas, given that traditional family support systems that have typically provided livelihood support have been considerably weakened by rural-urban migration and other factors.

Supporting farmers in later life in this new demographic reality could bring wide-ranging benefits. Helping them to adapt to changing climatic conditions, raising their crop yields and income, will make an important contribution to demonstrating the potential of smallholder farming as a profitable business. This may in turn create incentives for younger people to (re-)engage in agriculture.

This report has started to fill the knowledge gap on farm population ageing in low- and middle-income countries. However, to draw conclusions on the challenges and opportunities presented by an ageing farm workforce, further research is needed, covering not only productivity levels but also the strengths of and constraints faced by older farmers. Examining older farmers’ access to arable land, their levels and types of crop production, and market participation will be important factors influencing older farmers’ contribution to food security at different levels. Exploring the linkages between older and younger farmers and their combined contribution to agriculture is another area that would benefit from further research.

Annex 1: Indicators of farm population ageing in low- and middle-income countries

	Census year	Total farm population			Agricultural holders		
		total 000	%55+	%65+	total 000	%55+	%65+
Africa							
Algeria	2001	...	...	...	1,024	38.1	17.2
Benin	1992	3,192	6.5	2.6	...	...	...
Botswana	1993	540	11.1	6.8	...	...	...
	2004	554	13.2	8.0	51	63.1	31.9
Burkina Faso	1993	8,302	8.0	3.7	887	37.9	19.0
Cape Verde	1988	...	...	...	32	45.0	23.0
Comoros	2004	335	6.6	2.9	...	...	...
Dem Rep of Congo	1990	...	...	...	4,480	25.0	12.0
Djibouti	1995	...	...	...	1	41.1	14.1
Egypt	2000	...	...	...	4,537	31.1	7.8
Ethiopia	1992	...	...	...	6,193	24.0	14.0
	2002	52,661	7.1	3.3	...	...	...
	2012	...	...	...	15,031	22.7	5.7
Gambia	2001	735	8.1	3.9	69	36.6	25.1
Guinea	1989	3,946	10.0	4.7	431	72.4	67.2
	2001	6,365	8.5	3.9	840	34.9	15.7
Guinea Bissau	1988	...	...	...	84	46.8	27.1
Lesotho	1990	...	...	...	229	43.6	22.7
	2000	1,486	4.3	2.2	338	40.8	22.2
	2010	1,163	12.9	7.1	225	48.6	28.2
Madagascar	2005	13,316	6.0	2.8	2,428	20.2	9.3
Mali	2004	10,228	9.1	3.8	...	...	...
Mozambique	2009				3,826	29.3	14.9
Niger	2007	10,109	6.3	2.9	...	...	...
Reunion	1989	...	...	...	15	24.2	5.3
	2000	...	...	...	9	20.7	3.3
Rwanda	2008	8,284	6.5	3.0	1,675	24.6	11.9
Senegal	2000	...	...	...	437	46.9	22.6
Seychelles	1998	...	...	...	0	40.1	22.0
	2011	2	15.9	6.6	1	30.4	12.2
Swaziland	1993	...	...	...	74	38.0	18.0
Tanzania	1995	21,011	8.1	3.7	3,870	28.5	13.3
	2003	24,744	7.1	2.0	...	...	...
	2008	30,264	6.8	1.9	...	...	...
Uganda	1991	9,537	7.1	3.2	1,705	30.0	11.3
	2009	18,862	6.8	3.3	...	...	...
Zambia	1990	...	...	...	519	31.3	13.8

	Census year	Total farm population			Agricultural holders		
		total 000	%55+	%65+	total 000	%55+	%65+
Caribbean							
Bahamas	1994	7	26.3	14.8	...	...	...
Barbados	1989	...	...	...	17	49.5	31.1
Dominica	1995	...	...	...	8	33.0	16.2
Grenada	1995	43	15.0	10.0	12	43.6	26.4
Guadeloupe	1989	...	...	...	17	45.0	18.6
Martinique	1989	...	...	...	16	55.9	27.0
Puerto Rico	1987	...	...	...	20	52.7	31.2
	2000	...	...	...	17	62.8	31.8
St Kitts & Nevis	1987	...	...	...	3	48.6	29.4
	2000	...	...	...	3	34.7	21.5
St. Lucia	1986	...	...	...	12	29.0	16.0
St Vincent & Grenadines	1986	42	35.9	30.7	9	30.4	13.6
	2000	...	...	...	7	32.2	15.7
Trinidad and Tobago	2004	...	...	...	19	35.5	15.2

Central and South America

Argentina	1988	1,447	14.4	6.7	...	...	...
	2002	1,230	18.2	8.5	202	48.7	23.6
Colombia	1988	6,521	11.8	5.2	...	...	...
French Guiana	1989	...	...	...	4	20.3	6.2
Guatemala	2003	...	...	...	654	24.5	11.5
Nicaragua	2000	...	...	...	197	33.1	16.1
Panama	1990	...	...	...	208	32.1	15.8
	2000	...	...	...	232	34.8	17.5
Paraguay	1991	1,580	8.9	4.1	...	...	...
Peru	1994	...	...	...	1,732	28.5	15.6
Uruguay	2000	190	22.4	11.0	...	...	...

Asia

Bhutan	2011	282	14.9	8.7	...	...	...
Kyrgyzstan	2002	...	...	...	247	30.3	17.9
Lao	1999	...	...	...	668	22.1	7.9
Lebanon	1999	...	...	...	195	43.7	22.6
Myanmar	1993	15,877	11.5	4.9	2,924	30.9	11.9
	2003	17,464	10.5	5.1	3,465	23.5	8.2
Nepal	1992	...	...	...	2,736	22.3	7.4
	2002	16,258	8.0	3.1	3,364	25.5	9.4
Philippines	2002	...	...	...	4,823	29.9	13.2
Thailand	1988	22,894	11.7	4.3	...	...	...
	2003	22,193	16.1	7.3	5,788	32.2	13.3
Vietnam	2006	22,929	8.7
	2011	20,558	12.3

Source: Agricultural Censuses
... = information not given

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