Changing Causes and Consequences of Labour Force Participation Trends among the Elderly in Sri Lanka

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Abstract

Population ageing in Sri Lanka is an inevitable outcome of a rapid demographic transition. This has occurred in a shorter time period in Sri Lanka than the developed countries. In traditional Sri Lankan society, younger generations were responsible for subsistence of the elderly while the elderly withdrew from the workforce. Increased life expectancy, modernization, migration, family transition, and retirement benefits, health condition of the elderly and inter and intra generational dependency influence changes in economic status among elderly and it can determining the wellbeing of the elderly in the latter part of their life cycle. Therefore, this paper focuses on examining the trends and patterns of the elderly labour force participation, causes and consequences. A Mixed methodological approach has been used, while quantitative data was drawn from the micro data of the Sri Lanka Labour Force Surveys of 2008 to 2012 and qualitative data collected from

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case studies. The main analysis is based on a total of 8006 males and females aged 60 years and over. The results indicate that annual elderly labour force participation rates are about 26% and nearly 9% of them are elderly in the total labour force over the period.

Keywords: Economic Status; Elderly; Labour Force; Sri Lanka

Introduction

Sri Lanka as a developing country is experiencing a rapid ageing population and it is therefore very essential to examine the workforce participation of the elderly to enhance the wellbeing of the elderly. Focusing on the wellbeing of the elderly as well as the development of the country, it is imperative to identify and design a range of strategies to deal with the challenges faced due to the ageing population; especially dependency burden due to ageing (De Silva, 1994: 2012: 2014). Figure 1 presents the trends of dependency of children, the old and also total dependency and the index of ageing during 1946 to 2031. It is clear that the contribution of old age dependency to the total dependency is high throughout this period.

| 140.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.0 | 120.

Figure 1: Trends of Dependency ratios and Indices of Ageing Sri Lanka 1946 - 2031

Notes: Child dependency = Number of persons aged 0 -14 per 100 persons aged 15-59 Elderly dependency = Number of persons aged 60+ per 100 persons aged 15-59

Total dependency = Child dependency + Elderly dependency

Source: Data for the census years are from census reports and for 1994 from demographic survey, data for 1991 and 2001-2031 from De Silva, W.I. (1994)

Therefore, the prevalence and the potential labour force participation behaviour among the elderly have sparked considerable interest in the current context. Remarkably, the labour force participation of elderly in Sri Lanka has remained constantly low (World Bank, 2008). This is for the group of older men and women sixty years and over in age. Also only very few studies focus on the labour force participation among elderly while some of the studies on labour force has focused on the determinants, size and the patterns of labour force participation placing emphasis on the demographic characteristics such as gender and fertility, migration and urbanization, household and labour market characteristics but not the elderly workforce participation. Therefore, this paper examined the trends and patterns of elderly labour force participation in Sri Lanka to enhance the wellbeing of the elderly as well as to shape up the policies and programmes for the country.

Population Ageing in Sri Lanka: Past, Present and Future Trends

Social scientists, especially Demographers point of view is that ageing is a decline in fertility rates and an increase in life expectancy which can affect the population composition and age-sex structure in Sri Lanka (Abeykoon, 1996; De Silva, 1994; Siddhisena, 2004). Population projections and estimates are concerned with analyzing the probable demographic circumstances of Sri Lanka through an understanding of future changes in population age sex structure. This demographic change directly as well as indirectly affects the entire society through several socio, economic, and cultural factors due to the number of elderly people as a percentage of the total population being increased from 12.3% to 27.6% during 2010 to 2050 (De Silva, 2012). Particularly, the proportion of elderly females would be relatively higher than that of elderly males. By 2050 Sri Lanka will become an aged economy. Resultantly, some of the socio economic and cultural complications can be enhanced due to dependency issues. Economic dependency will be a root cause of several problems in social, cultural and psychosocial wellbeing of elderly life since the working age population cannot totally absorb the burden of economic dependency of the elderly. Hence, it is vital to identify the labour force participation among elderly to shape up the policies and programmes which leads to the enhancement of the wellbeing of the elderly as well as development of the country.

Labour Force and Elderly in the Labour Force 2008 to 2012

Sri Lanka labour force structure and the patterns shows the important features of the population in an economic aspect. Sri Lanka Labour Force Surveys of 2008 to 2012 have considered 'working age' as ten years and over. To understand the categories of labour force participation, population is classified as (i) employed (ii) unemployed and (iii) not in the labour force. Further, labour force has been broadly divided into two categories namely, economically active and economically inactive to analyse its trends and characteristics. Distribution of the labour force by gender and urban-rural residential patterns and trends of working age population, benefits the planning of resources distribution and formation of policy recommendation for the development process. Since Sri Lanka has a predominantly rural population; the higher proportion of labour force represents the rural areas. As shown in Table 1 during 2008 to 2012 there is a slight increase of the labour force and males are dominant in the labour force over the period.

Table 1: Distribution of the Labour Force by Sex and Place of Residence in Sri Lanka 2008 - 2012

Year	Total	Male	Female	Urban	Rural
2008	8081702	5227427	2854275	898902	7182800
2009	8073668	5186457	2887211	856241	7217427
2010	8107739	5317553	2790186	925695	7182044
2011	8554730	5613383	2941347	1039071	7515659
2012	8464706	5636947	2827759	1417812	7046894

Source: Sri Lanka Labour Force Surveys 2008 - 2012

Participation of Elderly in the Labour Force

The elderly labour force is composed of the economically active (employed or unemployed) population 60 years of age and over. Elderly labour force participation rate has represented the number of elderly people in the labour force (employed or unemployed) expressed as a percentage of the total sixty years and over population. Generally labour force participation is calculated by using persons in the working age group (aged 10-59) in Sri Lanka. Retired or elders are considered as a part of the economically inactive population. But this concept is not practical in the Sri Lankan economy due to several economic and socio cultural reasons. Especially because some

explain the behavior of elderly in the current context while continuity theory presents that middle aged and elderly often attempts to engage in their own past experiences by substituting new roles that are similar to the past. The theory suggests that people are most satisfied in their older ages when their new roles and activities are consistent with previous experiences while the life cycle hypothesis (Ando & Modigliani, 1963) and as a neoclassical micro economic theory, work leisure model has been used to conceptualize this study. However, there are some mismatches about the relevance of all of these theoretical approaches, however they also help to analyze the wellbeing of the elderly through actively and productively participating in the socio- economic activities in the latter part of the life.

Data and Methodology

The study uses a mixed methodological approach. The guantitative data was derived from the Sri Lanka Labour Force Surveys 2008 to 2012. The unit of analysis was men and women aged 60 years and over. The main analysis based on the 2012 survey which were covered all island, from a sample of 8006 persons aged 60 years and over. Apart from the quantitative data, case studies and few in-depth interviews have been done in the Badualla, Colombo, Galle, Gampaha, Kurunegala, Matara, Puttlam and Rathnapura districts to obtain the qualitative data. The study has used cross sectional and exploratory analytical approaches. Descriptive statistics have been used to describe the status of labour force participation by socio economic and demographic characteristics. In order to examine the association between the economic status and confounding other demographic and socio-economic variables, chi square test and Pearson correlation was used while qualitative data was analyzed using content analysis and cross case analysis. Micro data from Sri Lanka Labour Force Surveys 2008-2012 has been processed and analyzed by using the Statistical Package for Social Sciences (SPSS) 16.0 for windows. Graphs and tables were reproduced by using Microsoft excel and Maps were drawn by using ArcGIS. Findings from the analysis were presented using tables, graphs and maps. Qualitative data has been processed and analyzed by using manual processing methods of coding and categorization and most of the data has been presented as narratives.

Results

Demographic and Socio Economic Background of Elderly in Sri Lanka

Demographic socio economic backgrounds of the elderly are vital in the future plan implementation on population. Apart from minor differences, the age sex structure of Sri Lankan elderly has not changed remarkably over the period from 2008 to 2012. As shown Figure 2 analysis found that, there has been a slight increase in the percentage of the younger elderly (aged 60-69), whereas the percentage of the older elderly (aged 70-79) has slightly declined.

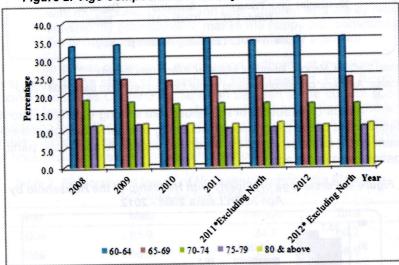


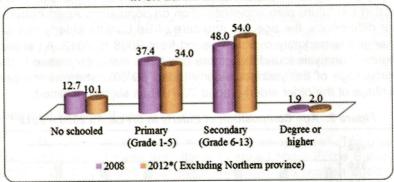
Figure 2: Age Composition of Elderly in Sri Lanka 2008 – 2012

Note: *Jaffana, Mannar, Vavuniya, Mullativu, Killinochchi districts Source: Authours' calculation by using labour force survey micro data 2008 - 2012

The population ageing process has resulted in a slowdown of the economic growth and it can be overcome by efficiency and productivity of the labour supply, increase of the elderly labour force participation or by upgrading the quality of labour supply. Therefore, as a social factor formal as well as informal education can play major role to determine the productive labour supply. The study reveals that, percentage of the elderly, who have not gone to school at all or educated only up to the primary level, have declined over the period. In contrast, the percentage of the elderly with secondary or higher

levels education has been increasing gradually over time. This trend shows that the level of education of the Sri Lankan elderly has increased over time.

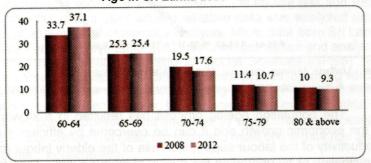
Figure 3: Percentage of Distribution of Elderly by Level of Education in Sri Lanka 2008 - 2012



Note: *Jaffana, Mannar, Vavuniya, Mullativu, Killinochchi districts Source: Authours' calculation by using labour force survey micro data 2008 - 2012

Status of headship of the household among elderly is also a determinant of the psychosocial wellbeing of elderly through self-esteem and it can also direct the elderly to economic and social participation even in old age.

Figure 4: Percentage of Elderly with Headship of the Household by Age in Sri Lanka 2008 - 2012



Note: Excluding Jaffana, Mannar, Vavuniya, Mullativu, Killinochchi districts Source: Authours' calculation by using labour force survey micro data 2008 - 2012

As revealed in the study, household headship is degrading the ages and time. Figure 4 presents that, especially, in 2008 majority of elders held the status of household headship even when they were

in age 70 years or over. In contrast in 2012, majority of young-elders (age 60-69) have taken over headship of the household. Moreover, it is also interesting to note that the elderly who are co-residing with their children and grandchildren have handed over the headship of the household to their adult children considering the future of the younger generation. The voice of Chandrawathie, Sinhala, Buddhist 73 year old graduate, unmarried retired from government service, living in Padukka, Colombo district explores the changes of head of the household in old age.

"I transferred my land and house as a deed of gift with life interest to my married nephew. Presently I'm living with his family where he is the head of the household. I encouraged him to take this responsibility because of their future. I always wish them well and even though I'm unmarried, living with my nephew, his wife and their children who are by relationship my grandchildren makes me happy but sometimes I'm unhappy due to them interfering with my activities.

The power of decision making and authority of the elderly is presented by the status of headship of the household. Even though incidents such as Chandrawathie's can be seen in the current society, Sri Lanka has experiences of a significant proportion of the elderly who live with children as heads of the households. As shown in Table 3 analysis reveals that during 2008 to 2012 almost about 60% of households are elderly headed households.

Table 3: Proportion of Heads of Households among the Elderly in Sri Lanka by Sex 2008 - 2012

Year	Male	Female	Total
2008	65.9	34.1	60.2
2009	66.9	33.1	58.5
2010	67.6	32.4	59.9
2011*	68.4	31.6	58.8
2011	67.9	32.1	58.5
2012*	67.9	32.1	57.5
2012	67.6	32.4	57.3

Note: * Excluding Jaffana, Mannar, Vavuniya, Mullativu, Killinochchi districts Source: Authors' calculation by using labour force survey micro data 2008 - 2012

Socially gender of the head of the household is important for elderly because it determines the wellbeing of families. The study found that, gender differences of the household headship varied all throughout the period of the surveys. Most of the elderly males held (68%) household headship during this period. This socio-economic condition also may lead them to be economically active even in their old age. The proportion as heads of households among the elderly in Sri Lanka has declined over the period. In 2008, 66% of men and 34% women over 60 years of age were heads of households and this has changed to 68% and 32% respectively in 2012 . However the overall trend shows that there is a decline of elderly with reference to household headship in Sri Lanka during the years 2008-2012.

Table 4: Distribution of Household According to Number of Household Members and Number of Elderly in the Household by Place of Residence 2012

Number of Household	Urban		Rural		Estate		Total	
Members	N	%	N	%	N	%	N	%
	91	6.0	445	7.3	20	5.5	556	6.9
2	254	16.8	1367	22.3	67	18.6	1688	21.1
3 blodees	252	16.7	1141	18.6	55	15.2	1448	18.1
4 4 9 00 60 7	250	16.5	998	16.3	55	15.2	1303	16.3
5+	664	43.9	2183	35.6	164	45.4	3011	37.6
Total	1511	100	6134	100	361	100	8006	100
copy top post		nauo.		2.0		4.4		2.0
Average Household Size		4.3		3.8		4.4		3.9
Number of Elderly in the Household								
1	708	46.9	3133	51.1	191	52.9	4032	50.4
2	718	47.5	2780	45.3	158	43.8	3656	45.7
3+	85	5.6	221	3.6	12	3.3	318	3.9
Total	1511	100	6134	100	361	100	8006	100
Average Elderly Per								
Household		1.6		1.53		1.5		1.54

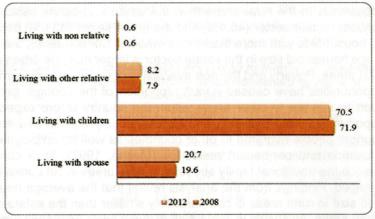
Source: Authours' calculation by using labour force survey micro data 2012

Household composition and structure are very important when providing elderly care which can influence the wellbeing of the elderly. The study also investigated the changing household composition apparent in previous studies (Abeykoon, 2000; Perera, 1999).

A significant aspect is the higher prevalence of one member households in the rural areas than the urban and estate sector. In contrast, estate sector (45.4%) and the urban sector (43.9%) depicted households with more than five members. Consequently, the average household size in the estate sector is larger than the urban and rural areas. Poverty and the non-availability of expected employment opportunities have caused a vast proportion of the younger generation to migrate to other areas within the country where expected opportunities were available and simultaneously women and many younger people migrated to other countries as well for employment, education and permanent residence (Mason, 1992). As a consequence the traditional family structure in rural areas in Sri Lanka has changed. Findings from the analysis reveal that the average household size in rural areas is comparatively smaller than the estate and urban areas. As shown in Table 4 all of these socio economic factors and consequences have caused the distribution of elderly members in the households.

In the nature of living arrangements of elderly in Sri Lanka, it plays a major role in determining the wellbeing of the elderly (Perera, 1999). In the socio-cultural perspective, Sri Lanka experienced the traditional extended family system and it is common for the elderly to live with their adult children as part of such an extended family (De Silva, 2005). Co-residence implies economic as well as emotional support from children to their parents and elders as well as support from elders to their children and grand children. Asian cultural values still exist with a sizable proportion of elderly in Sri Lanka continuing to live with their younger family mmebers in the later part of their lives. This living arrangement patterns creates providing and receiving support from the ederly. Especifically, the eldelry males provides material suport to their younger family memebers while the elderly females provide intangible support such as services and emotional suport (Perera, 1999). Exisitng findings provide the direction of support due to co-residence with elderly. Uhlenberg (1996) explores that almost three- fourth of the elderly liked co-residing with their children but there is no son- daughter prefernce. As evidence of the distribution of the living arrangements in Sri Lanka in 2012, the percentages of elderly who live with their children have also declined by two percent between 2008 and 2012.

Figure 5: Percent Distribution of Elderly by Living Arrangement in Sri Lanka 2008 - 2012



Source: Authors' calculation by using labour force survey micro data 2012

The proportion of elderly either living with their spouse or living with other relative is on the rise over the period in Sri Lanka. Some previous studies have also noted that with the impact of modernization, urbanization and migration, nuclear families are on the rise and co-residence with children also shows a decline with the implication that family care for the elderly shows a downward trend in Sri Lanka as a country in the Asian region (Institute of Health Policy, 2007; Perera, 1999; Sandarathna, 2004; World Bank, 2008). Moreover, long term co-residence is likely to be a root cause of economic hardship and emotional stress both to the younger generation as well as the eldery in the household (De Silva, 1994). However, the financial and non financial contribution of the elderly to their children and grand children has been growing, interstingly case studies provide the effects of co-residence on the phsychosocial wellbeing of the elderly.

"Living with my ninety seven year old paralyzed mother and two grand-daughters, two years and three and half years old is very stressful and physically tiring. However I can cope with all this because I am in good health. The grand children have a nanny but they always come to me because my daughter in law is working and she is not at

home from 6.30 a.m to 7.30 p.m. Some days she has to work till eight o' clock in the night according to her office requirement. I have to manage my business too. I sometimes feel living with children is difficult but as a grandmother I have to do something for their future as well." (68 years old widower, a business woman with other assets, living in Colombo suburbs)

Economic Characteristics of the Elderly in Sri Lanka

Employment Status of Elderly

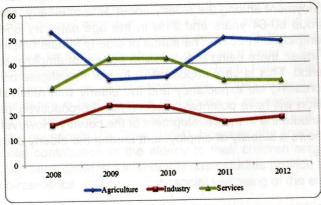
Engaged in employment during the latter part of life provides the opportunity to elders to participate in a productive and active manner instead of being in isolation. However participation in employment increases the vulnerabilities among the elderly who are in unsatisfactory health conditions (World Bank, 2008). Nevertheless, after controlling the barriers and negative aspects of employment of the elderly, Sri Lanka a country with a considerable ageing population can positively contribute her elderly people to the development process. As shown in Table 5 the findings from the analysis of employment of the elderly for years 2008 and 2012 indicate that age, sex patterns of employment among the elderly about 37% of elderly males in the age group 60-64 years and 21% in the age category 65-69 years were employed in 2012 . The status of elderly female employment is much lower, there being a decreasing pattern of employment during the period. This is very important to further investigate because of the increasing life expectancy and the elderly with relatively higher education will have potential to actively and productively participate to contribute the in the development of the country. However the pattern shows a stability of employment among the elderly over the last decade.

3 1 5 3 7 5	377.								the many	
	60-64	Years	65-69	Years	70-74	Years	75+	Years	Total	
Year	M	F	М	F	М	F	М	F	M	F
2008	36.7	14.9							73.5	26.5
	38.6									

Note: Excluding Jaffana, Mannar, Vavuniya, Mullativu, Killinochchi districts Source: Author's calculation by using labour force survey micro data 2008 - 2012

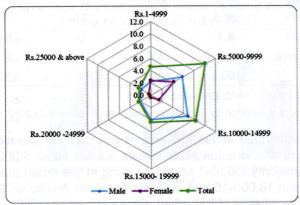
The findings of the study specifically reveal that, more than 0.81 million (28.6%) elderly persons were in employment in the year 2012. Out of these employed persons, about 0.6 million (74%) were male, and about 50% of them are engaged in the agriculture sector while one-third (33%) of the total employed elderly worked in the service sector. However, considering this in the recent past from 2008 till 2012, employment in the agricultural sector shows a slight decrease while figures show a gradual increase of employment in the industrial and service sectors as shown in Figure 6.

Figure 6: Trends in Employment of Elderly by Main Industry Groups 2008 - 2012



Note: Excluding Jaffana, Mannar, Vavuniya, Mullativu, Killinochchi districts Source: Authors' calculation by using labour force survey micro data 2008 - 2012 Investigations on status of occupation of elderly by their sex, shows that among the economically active elderly, majority of elderly are own account workers. Relatively higher proportion of elderly females are engaged as unpaid family workers even in the old age whilst elderly males are dominant in the other occupational categories. Earnings from economic activities consist of a monthly salary, which is equivalent to the daily wage multiplied by the number of days of work or income in kind. The analysis revealed that, there is a significant difference between the monthly income levels of employed elderly by their gender as shown in Figure 7.

Figure 7: Monthly Earnings among Elderly in Sri Lanka by Gender 2012



Note: *** = p < 0.001, df = 2, Chi value = 8.826

Source: Authors' calculation by using labour force survey micro data 2012

The majority of elderly men earned rupees 10,000-14,999 per month whilst the majority of elderly women have received about 5,000-9,999 rupees. Further analysis shows that the average monthly income of the males is higher than that of the elderly women (rupees 13,399 and 8,377 rspectively). Qualitative findings also presents the gender disparity of the monthly earnings from employment.

I usually work 25 days per month and earn Rs. 500 per day, I can earn around Rs.12, 500 rupees per month however this depends on the number of days I work. I use all my earnings for the daily needs of myself and my wife. (72 year elderly male living in urban sector with his wife)

These findings are significant to policy planners on livelihood development among the elderly with special consideration on elderly

women in Sri Lanka. As shown in Table 6 the analysis shows that there are significant differences in the monthly earnings of the elderly by their place of residence.

Table 6: Percentage Distribution of Monthly Income of Employed Elderly by Place of Residence 2012

Monthly Income		Place of	f Residence	
(Rupees) ***	Urban	Rural	Estate	Total
1-4999	6.6	15.0	23.9	14.2
5000-9999	19.1	34.2	46.3	32.5
10000-14999	30.9	26.3	26.9	27.2
15000-19999	26.5	12.9	3.0	14.5
20000-24999	8.1	6.1	0	5.9
25000 & above	8.8	5.6	0	5.7
Total	100.0	100.0	100.0	100.0

Note: *** = p < 0.001, df=10, Chi value = 54.630

Source: Authors' calculation by using labour force survey micro data 2012

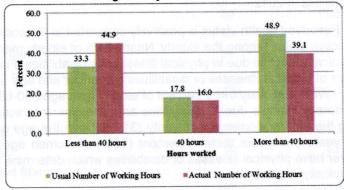
As illustrated in Table 6 around one-third of the elderly living in the rural and estae sectors have earned about 5,000-10,000 while the majority (30.9%) of eldery living in the urban areas have earned about 10,000-15,000 rupees per month. Moreover, the average monthly income of the urban elderly (rupees 15,566) exceeds that of the eldery in the rural (rupees 11,411) and estate sectors (rupees7,800) in Sri Lanka .These findings clearly show that there is an income diffrence based on the place of residence and that the estate sector employed eldery are more vulnerable than others in the income perspective.

Actual and Usual Working Hours

In the productivity aspect of the employment and to advancement of the efficiency of any elderly employees, duration of work is provides useful information. Interestingly, the study found that there is a difference between actual and usual working hours of employed elderly in Sri Lanka as shown in Figure 8. Analysis has found that the average weekly number of usual hours of work provided by elderly workers is about 43.5 and it deviates by 16 hours per week (mean = 43.49, standard deviation=15.83) while on average actual hours worked is less than 40 hours per week (mean = 38.08, standard deviation = 19.3 hours). Various factors like off season or bad weather (35%), Sickness/injury/personal (15.6%), mentioned as the reasons for working less than the usual number of hours per week among the elderly in 2012.

Even though the majority of the elderly are engaged in only one main job, in contrast, approximately 7% of the elderly are engaged in secondary occupations as well, which caused the number of working hours to be more than forty hours per week and in-depth analysis found that, the construction field absorbed two–thirds (66%) of Sri Lankan elderly who engaged in dual jobs during the period.

Figure 8: Percentage Distributions of Actual vs Usual Working Hours Among Elderly in Sri Lanka - 2012



Source: Authors' calculation by using labour force survey micro data 2012

Further investigation has revealed that, the number of hours of work is reduced with the age of the elderly. There is a significant negative correlation between usual (r = -0.105, p< 0.01) and actual hours (r = -0.072, p<0.01) and the age of the elderly. As noted from the in-depth analysis, among the elderly who have worked 40 hours per week there is a reduction from 10% to 3% between ages 60-64 to 70-74 years. Also approximately 28% of the elderly aged 60-64 have worked more than 40 hours per week.

Unemployment and Economically Inactive Status among Elderly in Sri Lanka

There are several contributing factors for elderly to be economically inactive although they prefer to participate in the labour force. Findings of this study show that among the elderly in the age group 60-69 years about one-third has been unemployed due to difficulties in finding suitable jobs, while another one-third are unemployed due to household work. Economically inactive status of the Sri Lankan elderly shows that, sixty four percent of the economically inactive elderly are not able to engage in such economic activities due to the fact that they are considered as retired or to be of old age, followed by another 27% who are unable to do so due to household activities while 8% of the elderly are inactive due to physical ailments or disabilities in 2012.

Perceived health status is positively correlated to the economically active status among the elderly. Nearly 54% of elderly men are economically inactive due to physical illnesses or disabilities. Further analysis of physical illnesses or disabilities by gender and age of the elderly reveal that, sixty three percent of elderly men aged 60-69 are economically inactive due to disabilities and illnesses. Interestingly, among the elderly women the majority (31.7%) is in the age group 70-79 years and about thirteen percent (13%) of women aged 80 and over have physical illnesses or disabilities which determine their economically inactive status.

The overall analysis delineates that economically inactive status among elderly women of age 70 and over is higher than that of elderly men of the same age. Moreover, these findings support the observation that elderly women suffer more from bad health conditions than men (Institute of Health policy, 2007; Perera, 1999; (Dissanayake & Siddhisena, 2011). Further analysis of economically inactive status by socio demographic factors shows that elderly women are more vulnerable to bad health conditions and especially elderly in the rural sector with the headship of the household living with illnesses and disabilities than the elderly living in urban and estate sectors shown in Table 7. These conditions can make them highly vulnerable and can have negative effects on their wellbeing.

Table 7: Distribution of Economically Inactive Elderly Due to Disabilities and Illnesses by Selected Characteristics 2012

bad meane evilor anemicos	Economically Inactive Elderly			
Characteristics	Number	Percentage		
Sex	VITO	ble exchangemedie		
Total	457	100.0		
Male	245	53.6		
Female	212	46.4		
Age				
Total	457	100.0		
60-64	151	33.0		
65-69	119	26.0		
70-74	80	17.5		
75-79	56	12.3		
80 & over	51	11.2		
Place of Residence				
Total	457	100.0		
Urban	64	14.0		
Rural	374	81.0		
Estate	19	4.2		
Marital Status				
Total	457	100.0		
Never Married	41	9.0		
Currently Married	270	59.1		
Widowed	135	29.5		
Separated/Divorced	ports from 11 mins	2.4		
Headship of the Household				
Total	457	100.0		
Head of the Household	258	56.5		
Not Head of the Household	199	43.5		

Source: Authors' calculation by using labour force survey micro data 2012

Even though a considerable proportion (8%) of the elderly are economically inactive due to physical illnesses or disabilities, in contrast, some of the elderly are economically active even with bad health conditions in order to fulfill their daily needs as well as support their dependents. Such conditions can have a negative impact on the wellbeing of the elderly.

The voice of Seelawathie a widower who lives in a small, cadjan hut with clay walls in a village close to Kuliyapitiya in Kurunegala district reflects how serious the economic and social conditions are which can have a negative impact on the wellbeing of the elderly.

> "I'm 70 years old and I did not consider myself old until I had a very severe ear ache coming from the very depth of my ear (Kan adi kekkuma) and a severe chest pain (Papuwe amaruwa) which changed my life style quite a bit. I'm now under treatment from a government hospital being treated for high blood pressure and anemia (le madi kama). However although I don't like it very much I am unable to stop my work in a coir factory close to my house. I have to take a decision now whether to work or not and what is left for me to do! The situation is grave, as I have to look after three grand children aged 6, 8, and 11 years abandoned by my son and daughter in law due to disruption of their legal marriage. My son is living with another woman and my daughter in law is living with another man far away from the village. I have to contribute to the 'death aid' (maranadhara) society and also spend for the monthly alms giving to the temple".

Trends of labour Force Participation among Elderly in Sri Lanka

As a key labour market outcome for elderly workers, changes in the labour force participation among elderly provides a useful picture of the elderly labour market. As revealed in Figure 9 there is almost a stable trend (26% to 26.9%) of the annual elderly labour force participation over the period. The findings support the existing findings of World Bank (2008) which explained that, elderly labour force participation of elderly workers had remained stable.

40 36.6 35.7 35 30 ₹ ₂₅ 26.9 26.0 force 20 15 10 5 0 2011 2012 2010 2008 2009 Year -Total(Including Nothern province)

Figure 9: Annual Labour Force Participation among Elderly in Sri Lanka 2008 - 2012 (Excluding Northern Province*)

Note: *Jaffana, Mannar, Vavuniya, Mullativu, Killinochchi districts

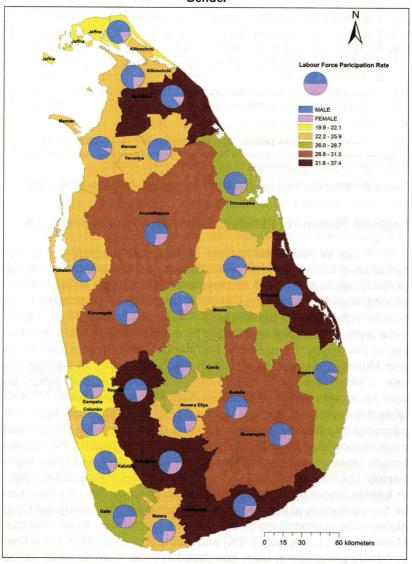
Source: Authors' calculation by using labour force survey micro data 2008 - 2012

Regional Patterns of Elderly Labour Force Particiaption by Sex

Place of residence as well as regional, geographical or administrative diffrences also have determined the elderly workforce particiaption. Availability of employment opportunities, household responsibilities etc also affect levels of labour force participation and gender diffrentials of particiaption. The analysis found that, labour force particapation of elderly varied by geographical location and also sex of the elderly. Remarkably, Rathnapura, Hambantota, Batticaloa and Mullativu districts have shown the highest overall particaption rate of elderly as 31.6% to to 37.4% in 2012. The highest eldelry labour force particiaption rate reports from Rathnapura district (37.4%) while the lowest reports from Jaffna district (36.5%). Considering the participation rates by gender, Mullativu district reports the highest male participation rate (59.6%) and Rathnapura reports the highest female labour force participation (23%). Also, Badulla (19%) Hambantota (17.9%) and Galle (17.1%) districts show comparatively higher female labour force participation rates. The possible reasons can be the availability of agricultural and informal sector employment and higher elderly propotions in the age sex stucture in those districts. Mannar (3.4%), Ampara (4.3%) and Jaffna (6.9%) districts show lower female participation rates compared to other districts while Jaffna (34.2%), Gampaha (34.3%) and Vavuniya (36.6%) districts show a

comparatively lower elderly workforce particiaption in Sri Lanka in 2012. Moreover findings from the analysis reveal that, in 2012 elderly male participation rates are higher than those of elderly females in all the districts in Sri Lanka shown in Map 1.

Map 1: Labour Force Participation Rate of Elderly by Districts and Gender



Source: Authors' calculations by using labour force survey micro data 2012

Conclusions and Policy Implications

Patterns and determinants of the labour force participation among elderly and the results of the basic demographic characteristics of the elderly in Sri Lanka pinpoints to the fact that nearly twothirds of the elderly are in age group between 60 to 69 years of age. Majority of Sri Lankan elderly are in the status of currently married and there is a decline in the trend of widowhood after 2009. Decreasing patterns of widowhood imply that family; at least living with spouse will increase in the future due to decreasing mortality trends. However some of the elderly are more vulnerable due to working in the old ages in the latter part of their life with chronic illnesses and disabilities. Further, in the demographic and socio-cultural perspective, average family size of the rural sector is smaller than that of the urban and estate sectors in 2012 and also the proportion of the elderly with household headship has reduced over the period which can negatively affect the self-esteem of the elderly whilst elderly in the current society is comparatively better educated than in the past. In the light of the above findings; though, the quantitative analysis showed a decreasing pattern of co-residence with children qualitative findings explore that the physical, financial and emotional support and formal and informal support from the elderly to their children and grandchildren has been growing in recent times even though they do not co- reside with the younger generations. Interestingly, intra-generational support; especially support from elderly mothers or relatives to the younger generation has increased due to migration of the young and an increase in the female labour force participation and also due to family disruption.

A major concern of elderly is their personal health, which affects their ability to be in active and productive participation within their families, communities as well as the labour market. Apart from the health status, education progression trends imply that Sri Lankan elderly will also have higher educational qualifications and they can provide more productive work to the economy in the future. Also the results assert that the level of education negatively effects employment among elderly. Moreover, results confirm that the elderly with degrees or higher educational qualifications are relatively less likely to be employed or to be searching for employment opportunities rather than those who have never schooled or are only with a primary education.

In the economic perspective, more than 70% of the elderly are economically inactive in Sri Lanka, which basically reflects that the elderly who have the potential are out of the labour force due to several demographic ,socio-economic, cultural, health, administrative or combined reasons. Though, around 28% of elderly are employed, the employed percentage among the female elderly remains very low whilst the elderly women are dominated in the age sex structure. And also there is a significant difference between gender and the monthly earnings form the employment in the aspect of productivity, significant difference of actual and usual number of working hours.

As a vital indicator of the elderly labour market, labour force participation of the elderly indicates an almost stable pattern during 2008 to 2012 with regional variation in elderly labour force participation. Quantitative as well as qualitative analysis also confirm that not searching for employment opportunities or being engaged in unpaid domiciliary activities is relatively higher for the elderly female than the elderly males. These situations imply that there is a necessity and possibility of absorbing the elderly females to the labour force by enhancing opportunities, and skills for the employment of the female labour force. Also poor health status prevents the elderly to be employed but considerable proportion of the elderly are still employed even with illnesses and disabilities. Economically active status of the elderly is most supportive by development through provision of skills. mature knowledge and advanced human capital. The study can be concluded that the poor, unhealthy and socially vulnerable elderly are more likely to participate in the labour force and that too mostly in the agriculture or informal sector and in unskilled low paid jobs but elderly women participation in the labour force is at a very low level.

Moreover, the study found that in practice, family care still remains the most widely used survival strategy for the majority of the elderly as well as younger generation in the family, whether in the context of extended families or co-residence parents with adult children. The study findings of urban families with relatively higher number of elderly per household implies the necessity of future needs of elderly care and active participation opportunities and suitable environment for elderly in the urban sector in Sri Lanka. Households in the estate sector in Sri Lanka consist of about two elderly members and relatively higher elderly female labour force participation. The most probable vulnerable condition is that with a higher number of elders in the household combined with the higher elderly female

workforce participation, the estate sector elderly are mostly marginalized in elderly care, elderly livelihood support and active community participation.

Upgrading the primary caregiving facilities for both elderly as well as younger children, including daycare centers, family support systems, and pre-schools and child day care centers would reduce the burden on the elderly females, who are engaged as primary care givers to their grandchildren and another elderly in the families in most of the Sri Lankan households. This would encourage the female elderly to be employed in income generation activities. Moreover, participation opportunities should be introduced to sustain the elderly to be economically active in the later part of their life. Socio-economic policies should be focused at enhancing the participation rates of elderly, especially of elderly women and also of all elderly workers through introduction of culture oriented and geographical location based participation opportunities, especially for elderly women. Moreover, Family-friendly economic policies and progrmmes such as home based jobs, part time working opportunities for women, skills development or on the job training for women should be introduced to reduce their economic and psycho-social dependency on the family or community. Focusing on the overall active and productive participation of elderly by advancement of the productivity of the elderly workforce, opportunities should be introduced to upgrade the efficiency of elderly workers, which would also help them, upgrade their employability, through the investments in lifelong learning and participation. In addition to providing opportunities to participate, improving health care facilities would help them to increase their working and earning capacities and sources of income support. Therefore productivity enhancement and health awareness programmes among elderly should be launched in the focus of better future for Sri Lanka.

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