

**Department of Demography**  
**Annual Research Symposium – 2016**

**Population Dynamics and Sustainable Development**

**08 December 2016**

**PROCEEDINGS**



**Department of Demography**  
**Faculty of Arts**  
**University of Colombo, Sri Lanka**

© Department of Demography, University of Colombo  
December 2016

**ISSN 2478 - 0278**

**Proceedings**  
**Annual Research Symposium 2016**  
**Department of Demography**  
**Faculty of Arts**  
**University of Colombo**

*The material in this publication has been supplied by the authors as the final approved document. The Department of Demography is not responsible for any material reproduced in this publication.*



## Department of Demography

### **Our Vision**

*The Department of Demography strives to be a leading regional Centre of excellence in teaching, research and scholarship in Demography*

### **Our Mission**

*Our mission is to promote teaching, learning, research and scholarship in Demography and population related issues affecting the country as well as the region and share such knowledge through collaborative research and training programmes within and outside the country*

### **Editorial Committee**

Prof. W. Indralal De Silva

Dr. Kumudika Boyagoda

Dr. Manori Weeratunga

Dr. Sunethra Perera

### **Organizing Committee**

Dr. Sunethra Perera

Gayathri Abeywickrama

Yuganthi Subasinghe

Sanduni Wijerathna

Nethra Senadhi

Hansa Jayarathne

RLR Malsha

Irangi Samarakoon

Migara Karunarathne

### **Secretarial and Technical Support**

Sarojini Perera

Kalyani Nanayakkara

Dhammika Dharmadasa

Jayamali Udawatta

Thamera Lakshan

Darshana Nuradha

Asithanjana Batuwanthudawa

### **Our grateful thanks for sponsorships**

United Nations Funds for Population Activities (UNFPA)

People's Insurance Ltd.

Nations Trust Bank

Department of Demography Development Fund- University of Colombo

## Message from the Vice-Chancellor, University of Colombo



It is with great pleasure I write this message to my own department's Annual Research Symposium as a senior academic member of the department. First and foremost, I must congratulate Dr. Sunethra Perera, Head of the Department of Demography, organizing the Annual Research Symposium for the year 2016 in parallel to the Annual Research Symposium of the University of Colombo. Sri Lanka is currently experiencing major population dynamics with significant transformations in age structures associated with youth bulges as well as population ageing and considerable changes in migration and urbanization. These novel population trends create many developmental challenges as well as opportunities that have crucial implications for social, economic and environmental development. Most importantly, the potential for a "demographic dividend" remains strong in Sri Lanka, but requires that proper measures be put in place. As we all know, creating the demographic dividend requires sustained fertility decline, which is already in place for Sri Lanka. However, investments in youth, especially education and health will promote opportunities for developing a skilled and healthy labor force. This should include health programs which will address the full range of child, youth, and adult needs in order to make the youth prepare to contribute more significantly to economic growth. At the same time, education will make the youth to learn skills to take up decent jobs in a changing and growing economy. With these investments, Sri Lanka can develop a labor force which is well equipped to move into new opportunities that emerge through its demographic dividend. Characteristically the first demographic dividend continues for many years; however it is naturally transitory in nature. When population ageing originates to govern demographic developments, the portion of the population in the employed ages will weaken. At this moment, the first dividend will turn negative as population growth surpasses growth in the labour force. Ultimately, the share of the population in the employed ages is possibly no larger than before the dividend period began. Therefore, Sri Lanka should be able to ensure that their macroeconomic environment is stable, maintain a low unemployment rate by adopting strategies to absorb the rapidly growing workforce of educated and skilled labour, include greater female labour force participation, and implement policies to encourage high savings and investments which will produce favourable economic results and higher per capita income. I expect that this year Demography Department's Research Symposium has an important role to play. I wish you very productive deliberations of your research findings and hope the outcome will help to improve the current status of our humankind at least to some extent.

**Professor Lakshman Dissanayake**  
**Vice Chancellor**  
**University of Colombo**

## **Message from the Dean, Faculty of Arts**



I pleased to issue this message for the Annual Research Symposium 2016 organized by the Department of Demography, Faculty of Arts, University of Colombo. The Symposium will provide an opportunity for academics and postgraduate students to share their research experience and also to exchange their views on “Population Dynamics and Sustainable Development.” The evidence based research would definitely contribute to address current issues related to the population in Sri Lanka. I am sure this symposium will be of immense benefit to both research contributors and participants that would create an ideal forum to discuss and debate research outcomes in the field of Demography and Population Studies. The symposium would also undoubtedly open up a forum for academics and researchers from demography and interrelated disciplines to exchange ideas. I congratulate the presenters and wish them the very best in their future endeavors.

**Professor Athula Ranasinghe**  
**Dean, Faculty of Arts**  
**University of Colombo**

## Message from the Head, Department of Demography



On behalf of the Department of Demography, I warmly welcome you to the inaugural session and technical sessions of the Annual Research Symposium 2016 of the Department of Demography, Faculty of Arts, University of Colombo. This year, the theme of the symposium is 'Population Dynamics and Sustainable Development'. This symposium provides an opportunity for academics, researchers and postgraduate students to share their knowledge discuss and debate regarding diverse aspects of the Sustainable Development Goals. The Department of Demography is the sole academic body of Sri Lanka in creating and disseminating knowledge on demography and population studies. Hence this Annual Research Symposium marks an important milestone to share their research experience and to discuss and debate on population and sustainable development related issues. The proceedings publication contains abstracts of the technical sessions. I'm very happy to welcome the Keynote Speaker, Senior Professor Lakshman Dissanayake, the Vice Chancellor of the University of Colombo and Senior Professor of Demography. I would like to welcome the Chief Guest Mr. Alain Sibenaler, Country Representative, UNFPA, and thank them for accepting our invitations to grace this occasion. I thank Professor Atula Ranasinghe, the Dean of the Faculty of Arts for his support throughout this event. I would like to express my sincere gratitude to Senior Professor Indralal De Silva, **the Chair of the Department of Demography for the support extended in accepting to review the book titled " Medium-Term Population Projection for Sri Lanka: 2012-2037"** written by Senior Professor Lankshman Dissanayake which is launched at this event. I sincerely acknowledge the financial support given by the UNFPA, People's Insurance Ltd. and Nations Trust Bank for this event. I would also like to express my appreciation to all other academic and support staff members of the Department of Demography and the University of Colombo, who have worked with me to make this symposium a success. I hope this academic endeavor will be carried forward by the Department of Demography in the years ahead and would like to congratulate all paper presenters.

**Dr. EL Sunethra J Perera**  
**Head- Department of Demography**  
**University of Colombo**



## Message from UNFPA Representative, Mr. Alain Sibenaler



It is an honour to deliver a message as the Representative of the United Nations Population Fund (UNFPA) to mark this year's Annual Research Symposium of the Department of Demography, Faculty of Arts at University of Colombo under the theme of "Population Dynamics and Sustainable Development". This is a timely topic given the global push towards achieving the 17 Sustainable Development Goals by 2030. How can Sri Lanka maximize its rapid demographic transition process towards sustainable development? How can we ensure the potential of young people is fulfilled to reap benefits of the demographic dividend? These are important questions that we must answer now, in order to achieve a sustainably developed Sri Lanka. This annual research symposium organized by the Department of Demography is a useful knowledge sharing platform that enables the country's researchers and policymakers to come together to discuss the shifting population dynamics and what it means for Sri Lanka. There is a need for continuous research and evidence to formulate short, medium and long term development strategies to address the changes in Sri Lanka's demographics that capitalize on development opportunities. It is an honour to be part of this distinguished forum that explores these issues and suggests recommendations for the way forward, and as the United Nations Population Fund, we remain committed to assist all key stakeholders in their continuous effort in setting the priorities needed to shape Sri Lanka's long term national development agenda.

**Mr. Alain Sibenaler**  
**UNFPA Representative Sri Lanka**

## Keynote Address

### Demographic Components of Future Population Growth in Sri Lanka

Senior Professor Lakshman Dissanayake

Vice Chancellor  
University of Colombo

This paper presents the contributions of each demographic component—the current age structure of population, fertility, mortality and migration—to future population growth in Sri Lanka. Quantifying the roles of the demographic drivers of future population trends is important for developing policies and programmes aimed at balancing impending demographic changes and social, economic and environmental objectives. Contributions of demographic components have been estimated by constructing a series of appropriate cohort-component population projections: Standard, Natural, Replacement and Momentum. The analysis is based on the 2012 census of Sri Lanka.

The analysis presented in this study quantifies the contribution of the current age structure of a population, fertility, mortality, and migration to future population growth. To measure the contribution of a single demographic component, this report relies on a procedure proposed by Bongaarts and Bulatao (1999). It consists of constructing a series of appropriate cohort-component population projections.

**The series of projections starts with a Standard population projection, which incorporates effects of all four demographic components. For our analysis the Standard population projection is set equal to the Medium variant derived by Dissanayake (2016). This projection starts with population by age and sex in 2012 and projects future population trajectories up to 2037 based on expected trends in fertility, mortality and net international migration. The effect of migration is estimated by constructing a Natural population projection variant, which is derived from the Standard variant by setting net migration to zero. Population growth in this case is driven only by natural increase based on assumptions about future fertility and mortality and by the initial age distribution. The difference in total population between the Standard and Natural variants shows the effect of net migration on future population growth. The effect of fertility is estimated by a Replacement projection variant, which is derived from the Natural variant by setting total fertility at the replacement level for each five-year projection periods. The difference between the Natural and Replacement projection variants shows the effect of total fertility, above or below replacement level, on the overall population growth. The last projection variant, Momentum, is constructed by using as of 2012 constant mortality rates, constant fertility at the replacement level and by setting net migration at zero. Computing the difference in total population between the Replacement and Momentum variants shows the effect of anticipated mortality decline on future population size. It is important to note that trends in mortality between birth and the reproductive ages are taken into account by the changes that occur in the replacement levels**

of fertility. The difference between the Replacement and Momentum projections therefore measures only adult mortality above the average age at childbearing.

## CONTENTS

Women's role in primary caregiving for the elderly: evidence from the literature <i>WDDG Abeywickrama</i>	01
Water pollution and its effects on population in Kurunegala Municipal Council Area <i>MIF Aneesa, Fareena Ruzaik</i>	02
Children's education and women's decision regarding migration to Italy: 'Left behind' by choice? <i>Kumudika Boyagoda</i>	03
Demographic and social characteristics of elderly in different living arrangements: a case study of elderly in Mulatiyana Divisional Secretariat <i>HDA Danapala</i>	04
Solo living: growth of single-person households and their well-being in Sri Lanka <i>W Indralal De Silva</i>	05
Unmet need for family planning among currently married rural women: a case of Beruwala MOH area in Kaluthara District <i>Hasitha Deepthamali</i>	06
Status of empowering young women in rural Sri Lanka: a focus on Millennium Development <i>DN Prasad Fernando</i>	07
Sex differentials in mortality and the changes of health behavioural patterns among males and females in Sri Lanka <i>Uditha Gunasekara</i>	08
Determinants of women obesity in Sri Lanka: a case study of Galle District <i>HKCM Indrathilaka, GKC Nilusha</i>	09
Contribution of socio-cultural characteristics in the demographic evolution of the Afro-Sri Lankan community in Sri Lanka <i>APHS Jayarathne, KR Paranage</i>	10
Spatial distribution of population in Sri Lanka by age and sex, 1981 - 2012 <i>APHS Jayarathne, SMAT de S Nandaseela, RADBM Lankathilake, MP Sampath</i>	11
Knowledge and attitudes about HIV/AIDS and sexually transmitted diseases among university students <i>HVVMP Karunarathne</i>	12
Rural household solid waste management: a case study in Santhapuram Village, Kilinochchi District <i>P Krishanthan</i>	13

A sociological study of inter-generational poverty with reference to the fisheries communities <i>Suranga Lakmal</i>	14
Factors determining the financial dependency of elderly in Sri Lanka <i>Uthayakumary Maheswaran</i>	15
Working women in urban informal sector and their vulnerabilities to diseases <i>RLR Malsha</i>	16
Demographic situation of population ageing in Sri Lanka <i>Munfika Muhammed, Arthika Balachandran</i>	17
Women's participation in environmental management and development: a case study of Weligama coastal area <i>Munfika Muhammed</i>	18
A study of spatial variations and seasonal changes of Leptospirosis patients in Sri Lanka <i>RMB Madhuwanthi, DRP Sendanayake, MAD Samanmali</i>	19
Population ageing and public policy in Sri Lanka: applied demographic perspectives <i>E L Sunethra J Perera</i>	20
Moonlighting among university academics: a case of Sabaragamuwa University of Sri Lanka <i>RADH Rupasinghe, GRSRC Samaraweera</i>	21
Dissemination of sexual and reproductive health knowledge for adolescents: factors contributed and perspectives of mothers <i>IS Samarakoon</i>	22
Economic impacts of persons migrating to Italy: a case study of Mahawawa Divisional Secretariat, Puttlam District <i>VPN Senadhi</i>	23
Social impacts of landslides: a case study of Rathnapura District, Sri Lanka <i>DRP Sendanayake, RMB Madhuwanthi</i>	24
Web based geographic information system as a teaching aid for university students educating on population dynamics <i>MSPM Siriwardane, RNP Rathnayake</i>	25
Women's attitudes towards menopause: evidence from the literature <i>SAYN Subasinge</i>	26
Changing inter-generational roles and population ageing in Sri Lanka <i>Manori Weeratunga</i>	27



## **Women's role in primary caregiving for the elderly: evidence from the literature**

WDDG Abeywickrama<sup>1</sup>

Women are considered as the predominant informal care providers for elderly family members with chronic medical conditions or disabilities in many developing countries including Sri Lanka. Women contribute more unpaid work including care for others, volunteer work, domestic work, child care, self-care etc. than men across the lifespan. Importance of women as primary caregivers has grown significantly, especially in developing countries where the majority of men are involved in the paid employments. Women are recognized as the frontline in caregiving, often highlighted as the 'sandwich' generation, who have multiple role responsibilities such as wife, mother, and caregiver to an older parent or in-law. This study explores existing literature on primary caregiving of women to the elderly in the family. Qualitative and quantitative peer-reviewed electronic journal articles published between the years 2000-2015 were examined and fifteen papers that discuss women's primary caregiving experiences were reviewed. It is revealed that spousal caregivers experience higher levels of burden than other women caregivers as they are more anxious, tired, frustrated or isolated, and had to face a greater work load that they cannot avoided. Compared with male caregivers, female caregivers face higher levels of caregiving stressors due to fewer social and income resources. It is also found that women experience greater mental and physical strain, greater caregiver-burden, and higher levels of psychological distress while providing care. Further, it is found that women use emotion-focused coping and other ineffective coping styles such as fantasy, escape, or avoidance, more frequently than men. In contrast, men have a wider coping strategies than women, and use more effective coping strategies. The analysis indicates that women suffer more from the negative consequences of providing care for the elderly. Therefore, future research will need to address these issues for development of gender-specific caregiver interventions to improve the plight of female caregivers.

**Key Words:** *Caregiving, stressors, coping styles*

---

<sup>1</sup> Department of Demography, University of Colombo

## **Water pollution and its effects on population in Kurunegala Municipal Council Area**

MIF Aneesa<sup>1</sup>, Fareena Ruzaik<sup>2</sup>

Water contamination is one of the critical issues in the Kurunegala MC area (11.32 Km<sup>2</sup>). This is the result due to the rapid urbanization, industrialization, infrastructure development, population growth and the increasing trend of floating population approximately 200,000 people. Waste water discharged to the city is 4,620 m<sup>3</sup>/day; including the liquid waste of 758m<sup>3</sup> discharged from the Kurunegala General Hospital. Further, solid waste disposal was estimated to be an average of 50 MT/day. Due to these reasons, Beu Ela and Wan Ela canals were negatively impacted (Alexendra, 2007). The prime objective of this study is to identify the causes and effects of water contamination in the Kurunegala MC area. Representing the total MC area, 7 water samples were selected from 12 Grama Niladhari (GN) Divisions in the Kurunegala city limit and recorded the results at desirable levels of acidity of the water. The pH value of water sample of Northern city area was 5.967. Similarly, the pH value of water samples selected from the Northeast and Western city area were recorded as 6.386 and 6.054 respectively. Further, this study tested the pH value of water sample from Theliyagonna (6.481 and 5.754), Illupugedara (6.213) and Udawalpola (5.306) too. In addition, Electric Conductivity (EC) of 5 water samples were tested and results of western city was 1,167 and 1,552 µs/cm, Illupugedara 1,156 and 1,521 µs/cm and northern part of Kurunegala city 1,073 µs/cm. This study found different health issues that affected the general public and farmers, due to the contamination of water in Kurunegala MC Area. Those are Diarrhoea-16.6 per cent, (prevalence in April and August), Typhoid-18.2 per cent (25 per cent of patients were recorded in April), Hepatitis-11 per cent (February and May), Malaria-14 per cent (10 per cent in July), Dengue -27.2 per cent (14.9 per cent in January) and Leptospirosis-14.1per cent. Further, acidic water affects the aquatic lives and exceeded levels of EC in water provides room for growing invasive (algae) plants, which will suppress the surface of the water bodies and eradicate the water eco-system. These fast growing uncontrollable plants in the cultivated land area damaged approximately 73 per cent of crop growth and yield in MC area. Therefore, it is recommended to formulate a proper management system to safeguard the water bodies to enhance maximum utilization and productivity. Water contamination caused by human activities cannot be eliminated completely, but it can be controlled and managed to a certain extent by implementing proper management practices, public awareness programs and strict implementation of related laws and obtaining stakeholders' support.

**Key words:** *Contamination, electric conductivity, health issues and stakeholders*

---

<sup>1</sup> MA student, Department of Geography, University of Colombo, <sup>2</sup> Department of Geography, University of Colombo

## **Children's education and women's decision regarding migration to Italy: 'Left behind' by choice?**

Kumudika Boyagoda<sup>1</sup>

Present Sri Lanka is a country of international labour migration, especially of semi and low-skilled workers. Although the prominent destinations were the Middle Eastern countries for long, the list now includes Italy, Singapore, Greece, Korea etc. Research on international labour migration is abundant in Sri Lanka. However, certain aspects have not gained as much attention as others. Migration creates different categories in the population - mainly migrants and left behind families. Both groups are impacted by migration. Further, since migration is a heterogeneous phenomenon where origins, destinations and characteristics of migrants' etc. change, the circumstances faced by migrants and those left behind change accordingly. In Sri Lankan attention on 'left behind' lacks compared to migrants. Similarly, labour migration to countries other than the Middle East has been less researched. Relating to both these issues an important reality is that Middle Eastern countries do not allow families of low and semi-skilled workers to accompany the migrant. The long separations result in many negative consequences. In contrast, countries such as Italy allow families of semi and low skilled migrants to accompany them which allows the negativities of separation to be minimized. However, a preliminary study where in-depth interviews were conducted with 30 female respondents in the Mahawewa Divisional Secretariat in Puttlum district in 2016, focusing on circumstances of left behind families showed that women choose to stay behind when having an alternative under family reunification visas. The main reason to stay behind was children's education. The women interviewed fell into two groups: those who had never migrated and those who migrated with the husband but returned for the reason of schooling. The majority fell into the second group. These women have returned at three stages: a) when the children approached school going age; b) reached grade five and; c) reached GCE Ordinary level. Italian education system was not to their satisfaction because schooling was in Italian. Since earnings were low, educating children in English international schools were unaffordable. Further, cultural and social background in Italy '*was not good to bring up children*'. High value was placed on education as they wanted children to get '*good jobs*' unlike themselves. These women had the financial means to send children to tuition classes and extra-curricular activities – both with the intention of future '*good jobs*'. However, they were all of the view that the husbands should remain in Italy until the children were employed. This indicated voluntary long separations of families that will have its own consequences. It also showed high pressurizing on children to study, with possible negative impacts on their childhood.

**Keywords:** *Sri Lanka, international labour migration, left behind families,*

---

<sup>1</sup> Department of Demography, University of Colombo

## **Demographic and social characteristics of elderly in different living arrangements: a case study of elderly in Mulatiyana Divisional Secretariat**

HDA Danapala<sup>1</sup>

Population ageing is a prominent problem in many countries including Sri Lanka. The transformation of the family from extended to nuclear has changed the living arrangements of the elderly and those changes can affect well-being of the elderly. The overall objective of this paper is to examine the demographic and social characteristics of the elderly in different living arrangements. Data was collected from a survey conducted in 2016. Two hundred employed elders in Matara District were selected and information was obtained using an interviewer administered questionnaire and analyzed using Uni-Variate and Bi-Variate techniques. The findings revealed that there is a relationship between age and elderly living arrangements. When the elderly getting older, the proportion of elderly living alone decreases. The reason is with an increasing age, elderly do not have the ability of self-care. On the other hand, elders are less like to live in complex households when they are young. Majority of female elderly live alone compared to males due to higher life expectancy and majority being widowed. A person, who survives into old age without marriage, may face a higher risk of living alone. The elderly who do not have own children, live alone. Nearly 50 per cent of the elders live with their youngest child. Irrespective of the living arrangements, majority of elders have completed their primary education. Moreover, majority of elders suffer from chronic illnesses such as; diabetics, high blood pressure. Also, weak health condition of elderly is directly affected in determining elderly living arrangements. A relatively higher proportion of elders express satisfaction when they live with children or spouse rather than living alone. However, the findings show that demographic and social factors also contribute to the well-being of the elderly in different living arrangements.

**Key words:** *Elderly, living arrangements, elderly well-being*

---

<sup>1</sup> Department of Demography, University of Colombo

## **Solo living: growth of single-person households and their well-being in Sri Lanka**

W Indralal De Silva<sup>1</sup>

A few decades ago, single-person households (SPHs) were virtually non-existent in Sri Lanka. Nevertheless, consequent to ageing, migration, urbanization, social and economic changes, the single-person households have increased from 3.3 in 1990 to 5.6 in 2012. This paper will examine the trends and well-being of SPHs in Sri Lanka, using data from population censuses and national surveys. Of the SPHs in 2012 almost 55 per cent are identified to be elderly, while only 14 per cent is below the age 40. The corresponding elderly SPHs were lower in the 1990s. The sex ratio of the SPHs is more favorable for females: 82 males per 100 females. However, in 1990 the ratio was more favourable for males. During the last couple of decades female longevity has increased significantly compared to males and by 2011 the gender gap in life expectancy at birth was close to nine years. Gender disparity in the gain of longevity has impacted on the marital status of the SPHs. Two-thirds of the female SPHs are widowed while the corresponding figure among the males is only 28 per cent. During the last few decades an increasing proportion of male SPHs comprises of never married males (in 2012 the figure is 40 per cent), while the corresponding figure among the females is only 18 per cent. Education and livelihood patterns of SPHs also indicate a significant gender disparity. Over 71 per cent of males had secondary or above education, while only one-half of the females had the same. Education has impacted on their employment: 66 per cent and 29 per cent males and females of SPHs are employed. In the mean time one-third of both sexes are reported to be unhealthy for work. Poor income and social networks all suppressed the well-being status of SPHs. Thus, policy planners in Sri Lanka need to recognize their vulnerability and develop appropriate social protection programs without any further delay.

***Key words:*** Solo living, single person households, elderly living

---

<sup>1</sup> Department of Demography, University of Colombo

## **Unmet need for family planning among currently married rural women: A case of Beruwala MOH area in Kalutara District**

Hasitha Deepthamali<sup>1</sup>

Studying the unmet need for family planning that has caused unintended pregnancies among the currently married rural women aged between 35 - 49 years is the main objective of this research. As the study area ten rural Public Health Midwife (PHM) areas were selected under the lottery method of simple random sampling from Beruwala MOH area in Kalutara district. According to the eligible couple registers records of selected PHM areas 167 women were identified as unmet need for family planning aged between 35 to 49 years. Therefore those 167 women were used as the sample of the research. As well to check the quality of the data a sub sample of 20 married husbands of the women in the main sample was used. After the crosscheck from the main sample and sub sample, 1.7 per cent of women in the main sample were identified as met need for family planning. The reason for that was, though those women haven't used any family planning method their husbands have used condoms as a family planning method. For this analysis 164 women were identified. According to the analysis the age distribution of these women was identified between 36 to 49 years. Though these women were identified as unmet need for family planning in the present, they had practiced any traditional or modern temporary family planning method in their marriage life before. Pills were recognized as the mostly practiced family planning method and 84 per cent of women in the sample had used pills as a family planning method. But one or more reasons like, the fear of health concerns and side effects, disapproval of husband on practicing family planning methods and think much elder to get pregnant have caused these women to be fallen in to the category of unmet need for family planning in the present. Obesity, giddiness, vomiting, headache and backache were some conditions that have been experienced by the women who refrain from practicing family planning methods because of the fear of health concerns and side effects. Majority of women who refrain from practicing family planning methods because of the disapproval of husbands were Moors. As well the women, who entered their first marriage at the age group of 35-39 years, said the late marriage was the reason to refrain from practicing family planning methods. In generally the knowledge about family planning of the women was in a better position and it was not affected. According to the analysis it was clear that, unmet need for family planning has been caused unintended pregnancies among women. Therefore, it is very important and urgent to take necessary actions such as starting strong family planning programmes to reduce this pathetic situation in Sri Lanka.

**Key words:** *Unmet need, family planning, currently married women*

---

<sup>1</sup> Department of Demography, University of Colombo

## **Status of empowering young women in rural Sri Lanka: A focus on Millennium Development**

DN Prasadi Fernando<sup>1</sup>

Promoting gender equality and empowering women is the 3<sup>rd</sup> millennium development goal. Global trends of labour force participation show that males are prominent than women in working life. This trend is significant in Sri Lanka up to now. As a South Asian developing country with the majority of women, it is essential to upgrade the quality of life as well as gender equality through employment in order to achieve sustainable development. With the aim of development through smart economy, this paper attempts to present the status of young women empowerment in rural Sri Lanka. The study used the mixed methodological approach to investigate how differently socio-economic and demographic factors are associated with gender inequality and promoting labour force participation decision among young women in Sri Lanka. The main source of data is Sri Lanka Labour Force Survey, 2012 and case studies of rural women. Unit of analysis was 303 of unemployed young women aged 15-29 years. The study found that young women in Sri Lanka facing multiple challenges in finding secured decent work due to gender differences and discriminations as well as in the scenario of manpower development of them. The findings of the study show that the gender gap in labour participation among young women in Sri Lanka is 31.5 per cent, and the majority of young women also engaged in rural agricultural and informal sectors. Moreover qualitative findings support that most of the young women primarily work in unstable and precarious employment with no access to social protection, dominating a narrow range of lower paid occupations. Though the majority of young women have relatively higher education level than young men, targets of further development of young women manpower is not in satisfactory level. Especially skills development is not considered a priority for girls in the North and Eastern provinces. The study concludes that, further programs of manpower development for rural young women should be introduced to empower them with equal opportunities.

**Key words:** *Women empowerment, young women, millennium development*

---

<sup>1</sup> Visiting Lecturer, IHRA, University of Colombo

## **Sex differentials in mortality and the changes of health behavioural patterns among males and females in Sri Lanka**

Uditha Gunasekara<sup>1</sup>

Differences in life expectancy between males and females have noticeably increased in Sri Lanka due to the drop of mortality ratios, even though it claims comparatively higher rates of life expectancy in the Asian region. Main objective of this study was to identify sex differentials and differences in health behaviour patterns related to mortality in Sri Lanka. Identification of structural differences according to sex, differences and tendencies that cause specific deaths and discussion of the relation of health behavioural patterns to mortality were other objectives. This study was carried out using secondary data. Data were obtained from the Registrar General Department and the Department of Census and Statistics in Sri Lanka, 2012. Analysis of life expectancy differences was calculated and mortality ratios were calculated by sex and for specific causes of deaths. The study shows that males have comparatively unfavourable behavioural patterns which drag them towards causes of death. Mortality in Sri Lanka dropped in the middle of the 20<sup>th</sup> century and new trends of mortality was observed thereafter. Life expectancy in 2011-2012 of a female and a male were respectively 71 and 79, compared to 32 and 30 in 1920-1922. Difference of 7-8 years in life expectancy was observed between females and males. In 2010, majority of deaths were due to cardiovascular diseases which accounted for 25% of total deaths. Majority of them were within the age group 45 to 64. Deaths from cardiovascular diseases in females were 2796 while it was 6756 among males which is nearly three folds high. This difference was clearly observed in other specific causes of deaths also. Males were identified to have unfavorable health behavioural patterns compared to females including, failure to take a nutritious diet at proper times, tendency toward fast food, usage of alcohol and smoking and poor concern regarding diseases. In this study it is identified that males are more prone to unfavourable health behaviours compared to females in Sri Lanka which suggests the need of implementing health policies and programs for men over 40 years in Sri Lanka.

***Key words:*** Cause specific deaths, life expectancy, men's health

## **Determinants of Women Obesity in Sri Lanka: a case study of Galle District**

---

<sup>1</sup> Department of Demography, University of Colombo

Overweight and obesity which is measured by Body Mass Index (BMI) is defined as abnormal or excessive fat accumulation leading to harm the health condition. This is becoming a major issue in both developed and developing countries. According to Health Ministry Nutrition Unit (2011) 25 per cent of women and 17 per cent of men are suffering from obesity. Obesity increases the risk of many diseases and health conditions. Considering all these factors, the study focused to identify the determinants of obesity among women whose age is greater than 35. Sample of two hundred respondents were selected from Galle District under stratified sampling technique and multiple regression model was used to analyze the data. The dependent variable is BMI while the age, family income, number of children, breakfast patterns, sleeping and eating habits are the explanatory variables in the model. According to the fitted regression model BMI is negatively affected by age, number of children, sleeping and dinner habits while that is positively affected by income and breakfast patterns. Without the effect of these factors obesity of a woman is 33.2 in the BMI and if a woman's income increases by a rupee, the risk of getting weight increases by 0.135. When a woman gives a birth, her BMI level is decrease by 0.155. A woman who sleeps without dinner is less likely to have high weight and the weight is reduced by 0.182. If a woman does not eat without being hungry then she has a less risk of being obese and the weight reduces by 0.4 as a result.

**Key words:** *BMI, overweight and obesity, women's obesity*

### **Contribution of socio-cultural characteristics in the demographic evolution of the Afro-Sri Lankan community in Sri Lanka**

---

<sup>1 & 2</sup> Department of Economics and Statistics, Sabaragamuwa University of Sri Lanka

The Afro-Sri Lankan community is small in number but has its own identity. They are the descendants of migrants from African countries during the 16<sup>th</sup> century. Their settlements are concentrated in a few coastal areas in proximity to Puttalam, Negombo and Trincomalee. The principal objective of the present study is to understand the demographic evolution of the Afro-Sri Lankan community and identify the various socio-cultural variables that contribute to form those said demographic trends. As such, this research will identify the social causes that contribute the formation of specific and identifiable patterns in fertility, mortality, migration and morbidity. It specifically utilizes a theoretical framework influenced by John Bongaart's proximate determinants of fertility in order to translate socio-cultural variables into demographic trends. The study uses both primary and secondary data. Primary data was collected using interviewer administered questionnaire from the Sirambiyadhiya GN division in Puttalam district since the majority of the Afro-Sri Lankans are residing in that district. The study sample comprises of 112 Afro-Sri Lankans who were age 15 and above. Additionally, 10 interviews and case studies were conducted. Census of Ceylon reports (1871-1921) have been utilized as secondary data sources. The findings reveal that a variety of socio-cultural factors underlie demographic evolution of the Afro-Sri Lankan community. Fertility and mortality patterns indicate that the Afro-Sri Lankans are currently in their third phase of demographic transition. Further, it was observed that the socio-cultural conditions including attitudes towards child-education, preferences in maintaining relations with other communities, socio-cultural factors pertaining to marriage etc., are contributive factors towards understanding the major demographic trends identified.

**Key words:** *Afro-Sri Lankan community, demographic evolution, socio-cultural characteristics*

## **Spatial distribution of population in Sri Lanka by age and sex, 1981 – 2012**

---

<sup>1</sup> Department of Demography, University of Colombo

<sup>2</sup> Department of Sociology, University of Colombo

Population being highly dynamic feature indicates many changes along the time. Patterns of spatial distribution are also changing based on all economic, political, social and environmental factors. Agglomeration of population in different parts of the country depends on the services and infrastructure development of that particular region. Therefore this study focus on the changes of population gravity in Sri Lanka based on three census years as in 1981, 2001 and 2012. When population is normalized by the area it is known as the population density and when it comes to gravity the concept of centroids is used. Gravity center is the geometric center of a feature. For line, polygon, or three-dimensional features, it is the center of mass (or center of gravity) and may fall inside the feature, or outside the feature. Simply, the point where the feature can be balanced. In this study Divisional Secretariat Divisions have used as the polygon features to generate the centroids. Centroids of each polygon (DSDs) are weighted by population for three census years as 1981, 2001 and 2012 and calculated the gravity center. When calculating the mean center it identifies the geographic center or the center of concentration of given features or features. The mean center is the average X and Y coordinate of all the features in the study area. Therefore it is clear to identify the location of the population gravity and how it has change along the decades. This study is entirely based on Secondary Data by the Department of Census and Statistics. According to the analysis the gravity of population by the total population located in Aranayaka DS Division for all three census years. It indicates a small shift towards north from 1981 to 2012. When considering the sex, the gravity of population for both female and male population also falls within the Aranayaka DS Division. Indicating a very small shift from each other, this means a proportionately balanced distribution. Therefore the gravity center of population does not indicate any significant changed except only a small shift towards northern parts of the DSD.

**Key Words:** *Population gravity, spatial distribution, mean center*

## **Knowledge and attitudes about HIV/ AIDS and sexually transmitted diseases among university students**

---

<sup>1</sup> Department of Geography, University of Colombo

HIV/AIDS and STDs create serious public health problems in Sri Lanka. The most vulnerable group to have HIV/AIDS and STDs are the youth aged 15 to 25. Main reasons for the high vulnerability of youth for these diseases are the lack of knowledge and negative attitudes towards HIV/AIDS and STDs. Youth can be categorized to sub groups according to different themes. The university youth are also such a sub group, which gets less attention from the society regarding their awareness on HIV/AIDS and STDs. Therefore the main aim of this study was to determine the knowledge and attitudes of HIV/AIDS and STDs among university students. Two hundred and ten respondents were selected from the University of Colombo, in same quantities according to their gender, faculties and ethnicities by using purposive sampling method. Data were collected through a self-administered questionnaire. Respondents' mean age was 23.5 years. About 50 per cent of the respondents were living in urban areas and 65.7 per cent were living in university hostels and private boarding places. Majority of respondents interviewed (99.5 per cent) had heard of AIDS. It is important to note that 18.6 per cent of the respondents could not define AIDS in any manner. The findings showed that a lot of respondents are vulnerable to get HIV, due to not having correct knowledge about condoms. Majority of the respondents (87.6 per cent) have heard of STDs but, most of their clinical knowledge about STDs were low. The highest per cent of respondents (64.8 per cent) gained their knowledge on HIV and STDs through the internet and 92.9 per cent of the respondents prefer to study more about HIV/AIDS. Majority of the respondent's attitude was that awareness of HIV among youth is important. Most respondents have a positive attitude about the rights of HIV affected persons. This research recommends organizing panel discussions, compulsory lectures and counseling sessions are vital to improve student's knowledge on HIV/AIDS and STDs.

**Key words:** *Knowledge on HIV/AIDS, Knowledge on STDs, attitudes of university students*

**Rural household solid waste management: a case study in Santhapuram  
Village, Kilinochchi District**

---

<sup>1</sup> Department of Demography, University of Colombo

The problems of solid waste in rural areas are different from the urban. Santhapuram is one of the resettlement villages in the Kilinochchi district and is one of the solid waste non-collection areas in the district. The main aim of the study was to explore the solid waste management in rural areas. Thirty households were selected via a simple random sampling method for a questionnaire survey. In addition, semi structured interviews were also used. Collected data was analyzed using quantitative and qualitative methods. This study estimated that the total generation of solid waste in household was 4.68kg/per/day. Among this, 99 per cent was organic material while only 1 per cent was inorganic material. The total waste generation rates for high, middle and low income households were 6.09, 4.20 and 3.13 kg/per/day respectively and was mainly depended on the economic activities at the household level. In the study area majority of the households (93.3 per cent) disposed their wastes in their own back yard while 6.7 per cent dumped waste in open land near their houses. According to this study villagers used traditional knowledge and approaches to dispose the household solid wastes. Approximately 48.9 per cent of households used their livestock, garden and kitchen wastes for composting. Remaining organic wastes were disposed by feeding animals, burying, dumping, and burning. This study found there is no proper inorganics wastes disposal practices in this village, where 13.9 per cent, 28.07 per cent and 32.2 per cent of household dispose the inorganic wastes by burying, open dumping and burning respectively. These practices are harmful to human health and the quality of the environment. This research clearly identified that the majority of households have good practices in organic wastes management, though they don't have adequate knowledge on inorganic solid waste management. Thus the public should be educated on solid waste management and relevant stakeholders, especially local authorities and non-government institutions should take sustainable actions in order to properly manage solid waste with minimum effort and cost while the focus must be on management at the household and community level.

**Key words:** *Inorganic and organic wastes, rural household, waste management*

### **A Sociological study of inter-generational poverty with reference to the fisheries communities**

---

<sup>1</sup> Department of Geography, University of Colombo

The main objective of this research is to investigate the correlation between the poverty of people who engage in fisheries industry and the culture surrounded them. This study focuses on the effect of social institutions as socialization agencies to create inter-generational poverty. Also, the study tries to discern the effect of attitudes and motivation among the community which creates poverty. Attention is also paid to identify the sub cultural factors which have created poverty. Two theories have been utilized to analyze primary data: the culture of poverty by Oscar Lewis and the hierarchy of needs by Abraham Maslow. The study uses the exploratory research methodology for the research. Hathagala Gramaseva Division in Ambalantota Division, Hambantota District was selected as the research field. Sample of 25 families from 68 families were selected by using simple random sampling. In addition, 10 people who have a direct connection with the industry were selected using judgmental sample method. Structured interviews and participatory observations were used as data collecting techniques. According to the research findings, they are living in an inherited subculture and it motivates them to be unconscious of their poverty. They do not feel to take actions to get rid of inter-generational poverty.

**Key words:** *Intergenerational poverty, fisheries communities, socialization and subculture*

### **Factors determining the financial dependency of elderly in Sri Lanka**

---

<sup>1</sup> Department of Sociology, University of Colombo

Ageing in Sri Lanka and its demographic impacts like decreasing mortality, fertility levels and increasing life expectancy can be compared with those of the developed countries but not the economic impacts because of the economic status of the country. Ageing of population results in increase in the number of elderly people with shrinking of the labour force and this implies an increase in economic dependence. This becomes a major determinant of economic development. The elderly people have the feeling that they will be independent and they will have more self-esteem if they have a reasonable income in their old age. This study attempts to identify the elders who depend on others for financial needs by using a measurement of minimum cost for day to day expenditure for their subsistence. The data for this study were obtained from the Household Income and Expenditure Survey (HIES) - 2009/2010, conducted by the Department of Census and Statistics. This study reveals that the elderly people in the districts of Sabaragamuwa province were found vulnerable when considering the income from various sources. If the population of elders are ranked Sabaragamuwa is in the 3<sup>rd</sup> rank where Western and Central provinces are the first and second. In Sri Lanka like other Asian countries gender is a strong determinant of financial dependency in older ages. Females are depending on others for financial support in their older ages. Similarly, sector is also a determinant of financial dependency. An important finding of this study is that the health condition of the elderly does not have any impact on financial dependency. While, employment, level of education and marital status determine the financial dependency religion does not have much of an effect on it. It is also an important finding that the widowed are financially independent relative to the married elderly.

**Key words:** Ageing, financial dependency, economic impacts of ageing

---

<sup>1</sup> Department of Census and Statistics

## **Working women in urban informal sector and their vulnerabilities to diseases**

R L R Malsha<sup>1</sup>

Health is very important to human well-being. Literature on urban health in Sri Lanka has mainly focused on maternal and child health. However, there is lack of evidence on health issues faced by women who work in the informal sector. In recent decades, there has been a rise in the informal economy and that has created more opportunities for women to participate in informal employment, especially in the urban sector. As a result, feminization of informal labor market has also been observed over the last three decades in Sri Lanka. Occupation is directly related with health and wellbeing of women. Therefore, this paper examines the socio-economic characteristics of working women who engage in informal employments and their vulnerabilities to diseases. The data for this paper was obtained from a primary survey conducted in Nawagampura Grama Niladhari Division (GND) in Colombo District. One hundred and ten women who were engaged in informal employment for more than a year were selected for the study. An interviewer administered questionnaire was used to collect information. The results reveal that many women engaged in employment such as street cleaning (31 per cent), self-employment (22 per cent) and street vending (15 per cent). Women's level of education and the types of informal job that they had were related to their health vulnerabilities. More than 86 per cent of women have suffered from health problems such as asthma, diabetic, gastritis, blood pressure, joint pain, back pain and eye sight related problems. The diseases that they had experienced were directly related to the informal jobs that they have engaged. Many women who were employed as housemaids and cleaners mostly suffered from asthma, while women engaged in sewing suffered from joint pain. In addition, many of these women dropped out from formal education before grade 8 and thus they had poor health education which impacted on their health vulnerabilities. Furthermore, poor economic condition, risk behaviours and community factors make them more vulnerable to non-communicable diseases.

***Keywords:*** *Urban informal sector, working women, vulnerability to diseases*

---

<sup>1</sup> Department of Demography, University of Colombo

## Demographic situation of population ageing in Sri Lanka

Munfika Muhammed<sup>1</sup>, Arthika Balachandran<sup>2</sup>

Ageing is a biological process that starts from the date of conception and goes until the death. It is a global phenomenon that occurs due to changes in the physical, psychological and functional arenas of an individual. This process can not to be stopped or reversed but quality can be altered. Well-being of elderly is highly associated with socio-cultural, economic and environmental factors. Interventions to improve the well-being of elders should be started as early as possible. Sri Lanka's total population is 20 million and the population over 60 year's is respectively 1971 - 6.3 percent, 2001 - 9.2 percent and 2041 24.8 percent. Sri Lanka's old age dependency ratio has progressively increased over the last 20 years and is expected to double over the next 20 years. By 2040 demographers forecast that one in four of the population will be aged 60 and over. Although these changes constitute a significant development, the implications for growth and income distribution may not be quite as dramatic as these statistics imply. Advances in medical technology have led to increase the life expectancy as well as the increases in the number of older people, which makes population ageing an international priority in the 21st century. Although the proportion of elderly is increasing both in absolute numbers and as a proportion of Sri Lanka's total population, traditional family norms and values of supporting the elderly are eroding at an alarming rate. The objective of this paper is to illustrate population aging in Sri Lanka using census data, other reports for the purpose of further research and inquiry. The increase in the proportion and number of elderly does not match by any corresponding increase in supporting measures either through formal channels – pension/ health plans - or informal channels – socio economic security measures or the provision of subsidies for health care, any other form of home or nursing care. Traditionally, Sri Lanka's pension plan is the only system of financial security for older people. However the pension coverage is limited and the elderly are then forced to be dependent upon family support. However, due to recent socio-economic changes, aging of the population in the country is emerging as a problem. Existing provisions for the protection and advancement of senior citizens, however, falls far short of their rapidly growing needs. In addition the rights of the elderly have not yet received much attention as other groups.

**Key words:** *Population ageing, financial security, social security*

---

<sup>1</sup> & <sup>2</sup>Department of Geography, University of Colombo

## **Women's participation in environmental management and development: a case study of Weligama Coastal Area**

Munfika Muhammed<sup>1</sup>

Involving women in protecting the environment would help societies develop the sense of responsibility needed to maintain a good balance between humans and the earth's resources. One of the aspects of sustainable development is the concept of culture and its impact on the environment and in the past, preparations to achieve this goal has taken place in the minds of environmental scientists of the world. This study has been done in Weligama coastal area with the aim of understanding the role of women's management and their collaborative role in development and promotion of environmental culture. The theoretical framework of this research is based on the opinions and beliefs that demonstrate the positive effects of management and participation of women in development and promotion of environmental culture. Women take the main role in the transmission of the culture in the environment to the future generations. Most of the ideas about the role of women in environmental protection are including in the education of children in the family and simple activities, while the women's skill in environmental management are obvious. The study has been analyzed by the use of descriptive method and data quality (commentary) on the basis of the documents. The results of this study suggest that women have always been closely associated with the environment and they directly or indirectly benefit from this situation. Women can solve the environmental problems by using their innate abilities and by using their abilities and managerial talents can work beyond the family's education and protect the environment and their rights.

***Key words:*** *Women's participation, environmental management, environmental protection*

---

<sup>1</sup> Department of Geography, University of Colombo

## **A Study of Spatial Variations and Seasonal Changes of Leptospirosis Patients in Sri Lanka from 2010 to 2016**

R.M.Bhagya Madhuwanthi<sup>1</sup>, D.R.P.Sendanayake<sup>2</sup>, M.A.D.Samanmali<sup>3</sup>

Leptospirosis is identified as the most widespread zoonotic disease throughout the world. Human Leptospirosis was first described in Sri Lanka in the year 1953 and increasing number of Leptospirosis patients is an ongoing problem in Sri Lanka. Leptospirosis is the most common disease in tropical and subtropical areas. It is an infectious disease caused by pathogenic bacteria called leptospirosis, which are maintained in nature in the kidneys of certain animals such as rodents, livestock, canines and wild mammals. These organisms are transmitted directly or indirectly from animals to humans but this disease is not known to spread from person to person. In Sri Lanka, Leptospirosis cases are reported all over the year. High humidity and heavy rainfall intensity are the factors for the spread of the disease. Main objective of this study is to identify the spatial and seasonal changes of Leptospirosis patients in Sri Lanka, from 2010 to 2016 and also examine the variations of Leptospirosis patients according to the monsoon seasons of Sri Lanka. The spatial distribution and seasonal changes of Leptospirosis patients in Sri Lanka was studied by using Geographical Information System (GIS) during the period 2010 to 2016. This study is based on secondary data collected from epidemiology unit, the Ministry of Health, Sri Lanka. Data Analysis was done by using Spatial Analysis tool in ArcGIS 10.1 and Microsoft Excel and mainly based on Spatial Analysis methods. The Inverse Distance Weighted method (IDW) in GIS is used to identify the spatial variations and changes of Leptospirosis patients in Sri Lanka. According to the study highest Leptospirosis patients were recorded in the Western province of Sri Lanka; mainly Colombo, Gampaha and Kaluthara districts were the highest vulnerable districts and Rathnapura and Kurunagala districts have high potential of Leptospirosis patients from 2010 to 2016. High records of Leptospirosis patients in Sri Lanka were observed in year 2011 and there were 6689 patients. The spatial distribution of Leptospirosis patients in Sri Lanka from 2010 to 2016 showed that special case. Northern Province was identified as the lowest vulnerable province for Leptospirosis patients. However though one patient was reported in 2010 it had increase to 16 patients by 2016 and an upward trend can be identified in districts of Northern province. Seasonal variation of Leptospirosis patients in Sri Lanka showed that, during the time of monsoons, March to May and October to December high numbers of Leptospirosis patients are reported in Sri Lanka.

---

<sup>1,2 & 3</sup> Department of Geography, University of Colombo

**Key words:** *Leptospirosis disease, spatial distribution, GIS*

## **Population ageing and public policy in Sri Lanka: applied demographic perspectives**

EL Sunethra J Perera<sup>1</sup>

The demographic determinants of population ageing and its socio-economic implications have been discussed over the last two decades in Sri Lanka. It is evident that a close relationship exists between ageing and public policy in developed countries. However, in Sri Lanka, research and an analysis of ageing and public policy remains relatively underdeveloped. Presently, ageing population (aged 60 and over) consists of more than 12 per cent of the total population in the country and it is projected to be doubled (or one in every four persons will be aged) by the middle of the century. In this context, applied demographic knowledge is vital for addressing present and future implications of the ageing population successfully. Therefore, the main objective of this paper is to examine the relationships between ageing and public policy in Sri Lanka by looking through the ageing process through applied demographic perspectives. This would substantially contribute to understanding a better model for public policy formation and decision making to improve welfare system for the elderly, especially at local level. The paper analyses theoretical and empirical literature, and also the data obtained from the Sri Lanka Population and Housing Census, 2012. The findings reveal that as in many other countries, in Sri Lanka too, the meaning of ageing is recognized by a very few parameters such as chronological age division, the labour market needs and the rules and institutional framework of the public and private sector. In the existing pension system, old age is symbolized as retirement age, hence retirement programmes and welfare programs for elderly are designed accordingly. Local level demographic and socioeconomic condition have not been given significant attention in policy planning and therefore existing policies and programmes are inadequate in addressing components of physical, mental and social well-being of old aged population. The analysis further suggests that Sri Lanka should adopt a multi-dimensional model which can recognize and integrate key domains of elderly well-being such as access to geriatric health care, promote active and healthy ageing, ensure financial well-being, social dignity and rights of older people. In doing this, policy makers should incorporate provincial or local level demographic diversities in order to strengthen the coverage, efficiency, and the sustainability of the elderly welfare system in Sri Lanka.

---

<sup>1</sup> Department of Demography, University of Colombo

**Key words:** *Population ageing; ageing and public policy; applied demography of ageing*

## **Moonlighting among university academics: A case of Sabaragamuwa University of Sri Lanka**

RADH Rupasinghe<sup>1</sup>, GRSRC Samaraweera<sup>2</sup>

Moonlighting is defined as holding of secondary employment in addition to the primary job. This was recorded as 11.1 per cent of employees in education sector which represents the highest proportion of moonlighting in the service sector and 9.8 per cent of professionals which records the second highest percentage among the all occupation categories in 2010. Therefore, having a research on moonlighting among professionals in education sector has timely importance among other categories in the service sector. The key objectives of this study is to identify the determinants of moonlighting and its impacts on job satisfaction of academics in Sabaragamuwa University of Sri Lanka. The study has used stratified random sampling as the sampling method. Population is 209 academics in Sabaragamuwa University of Sri Lanka. Sample was 60 per cent (125 academics) from the population. Questionnaires were distributed among 125 academics who are representing all five faculties of the university to collect data and the responded rate was 76.8 per cent (96 of academics were responded). Binary Logistic Regression models were used to identify the determinants of academic moonlighting and the impacts of moonlighting on job satisfaction of primary employment. This study has found that, moonlighting is positively affected by being male, having postgraduate education and having good health. Moonlighting among university academics from the Faculty of Social Sciences and Languages and Management Studies are higher than the Science based three other faculties. Job satisfaction of academics in their primary employment is negatively affected by moonlighting in line with the literature. Conducting visiting lectures and the research projects are the common modes of moonlighting among academics in Sabaragamuwa University of Sri Lanka. Heterogeneous job motive (for getting experience or utilizing different skills), financial motive and the tendency for utilizing their full capacity are the three key motives of moonlighting among academics.

**Keywords:** *Moonlighting, academics, job satisfaction*

---

<sup>1&2</sup> Department of Economics and Statistics, Sabaragamuwa University of Sri Lanka

## **Dissemination of Sexual and Reproductive Health knowledge for adolescents: factors contributed and perspective of mothers**

IS Samarakoon<sup>1</sup>

Adolescents' knowledge on Sexual and Reproductive Health (SRH) is a growing concern today. Conservative societies consider that discussion of SRH is a taboo but they expect the adolescents to reach safe adulthood. Even though many efforts are taken to increase the knowledge of the adolescents, they have shown to be ineffective. This study has investigated the perspective of the mothers in disseminating SRH Knowledge to adolescents and the factors that has influenced. This study has used primary data from a sample of 210 mothers with adolescent children and 20 adolescent children from Akkara 50 GN Division of Katana DS Division in Gampaha District. Results of the survey indicates that nearly one third (70 per cent) of the mothers have discussed about SRH related topics with their adolescent daughters while only 13 per cent have discussed with adolescent boys. Further assessment of the survey indicates that the age at first the discussions initiate for adolescent daughters as early as 8-10 years and continue throughout the adolescent period where as for the sons, the discussions would initiate around 10-12 years and continue only till 12-14 years. When considering the mothers' perspective on the SRH knowledge provided by the school majority of 58 per cent were not satisfied and 41 per cent of them prefer themselves to disseminate knowledge while nearly 38 per cent prefer teachers. With this positive attitude of disseminating SRH knowledge to adolescent and the study has identified the mothers willingness to disseminate the SRH knowledge to adolescents and their desire to improve the knowledge. Furthermore this study has found out the reasons for the non-dissemination of SRH knowledge which plays a vital role creating awareness programmes for the adolescents.

**Keywords:** *adolescence, health, sexual and reproductive health*

---

<sup>1</sup> Department of Demography, University of Colombo

## **Economic impacts of persons migrate to Italy: a case study of the Mahawawa Divisional Secretariat, Puttlam District**

VPN Senadhi<sup>1</sup>

Today Sri Lankan migrating orientation is shifting towards the developed countries and migrants recognized Italy as a welfare country. The migration welfare system introduced by the Italian government has opened the doors for both legal and illegal migrants who specially live in developing countries (Borjas, 1999). In this context migrants attempt to immigrate to Italy through not only the regular channel but also irregular forms from Sri Lanka. In this situation when some people have achieved noticeable economic advancement, some of them have become economically depressed. The main objective of the study is to examine the economic impact of migrating to Italy on migrants and the families left behind in Sri Lanka. The study is based on the data collected from the migrant's households of Mahawawa Divisional Secretariat (DS) Division in Puttlam district. Using snowball sampling method data was collected from 150 households. Quantitative data were collected using a structured questionnaire whilst qualitative data were collected using in-depth interviews and case studies. The study has revealed that three migration goals have affected the migration to Italy such as to improve the economy, social status and material resources, in addition to unemployment. But these goals have been changed as legal status that migrants faced before and after the migration, nature of employment at the destination, experiences that migrants have suffered at the destination. Some of the migrants have been able to achieve the above mentioned goals. Therefore, the study area called as "Little Italy". There are some households which have suffered from economic hardships and social disgraced due to the unemployment of migrants, being arrested, being in prisons as irregular migrant. Therefore after the occurrence of such incidence family members of the migrants happened to spend their remittances for the medicine of the migrant and pay higher interest to the bank and the creditor. It has become a reason for mental stress for both migrant and family members. However, migrant attempts to fulfill their economic goals by staying for a longer period in Italy, but their families have become disorganized in the process.

**Keywords:** *Migration to Italy, international labour migration, economic impacts*

---

<sup>1</sup> Department of Demography, University of Colombo

## **Social impacts of landslides: a case study of Rathnapura District, Sri Lanka**

DRP Sendanayake<sup>1</sup>, RMB Madhuwanthi<sup>2</sup>

Landslides are among the most widespread geological hazards that threaten, lives and property globally, most especially on the mountainous regions of the world (Huabin, et al., 2005). It has been a major geologic hazard in South Asia, especially in Sri Lanka. According to Disaster Event and Impact Profile (2011) landslides had been traditionally considered as a minor type of disaster and not a common occurrence in Sri Lanka. Until the year 2002, the annual average number of landslide records did not exceed 50. However, the data shows a sudden increase in the occurrence of landslides during the period 2003 - 2008. With respect to spatial distribution, most landslides appear in the Southern, Sabaragamuwa, Uva and Central province within the districts of Badulla, NuwaraEliya, Kegalle and Rathnapura, which are the most landslide-prone districts. Rathnapura district belongs to a wet zone and it receives heavy rainfall throughout the year. The district is known as a landslide prone district since historical times, it could be identified as the most vulnerable to landslides that have occurred in the recent past. The main objectives of this study are to identify the occurrences and trends of landslide events both spatially and temporally in Rathnapura district during the period of 1981-2010, and to identify the spatial and temporal trends of losses of human lives in Rathnapura district caused by landslides during the same period. Data was collected from Disaster management center (DMC) of Sri Lanka (2016) and National Building Research Organization (2016), both obtained from the World Disaster Database. Time series analysis method was used to identify the temporal trends of landslide events and those are displayed by graphs and spatial trends were displayed by maps. Microsoft Excel and Arc View GIS 3.2 software were used for the data analysis and mapping. The study revealed that, landslide events and losses of human lives are gradually increased in 1981-2010 period, and those events have shown a rapid increase by 2001-2010. There was a positive temporal trend of landslide events and losses of human lives in whole 30 years in Rathnapura district. In those 30 years 248 losses of human lives were recorded due to 213 of landslides occurrence in Rathnapura district. Kalawana DSD has shown the highest spatial distribution of landslide events in 2001-2010.

**Keywords:** *Hazards, landslides, spatial trends*

---

<sup>1& 2</sup> Department of Geography, University of Colombo

## **Web based geographic information systems as a teaching aid for university students educating on population dynamics**

MSPM Sirirwardane<sup>1</sup>, RNP Rathnayake<sup>2</sup>

Geographic Information Systems (GIS) can be defined as a computer based tool that allows to create, manipulate, analyze, store and display information based on its geographic location. When it integrates with the demographic domain that gives a wider perspective of understanding the dynamics related to the geographic context. This is commonly incorporated based on geographical administrative boundaries with population data. As a result of modern information technological development, GIS has been used as a powerful tool to display and analyze population data even in the web based environment. The main objective of this research is to develop a teaching aid which allows to think beyond the traditional tools of teaching about the population dynamics. As the methodology, population data from the Department of Census and Statistics were used to develop a GIS and the population layers were uploaded as web map layers. The data layers from 2001 and 2012 has been created as an indicator for understanding temporal changes. Cartographic enhancement for the population data were used with natural breaks and equal interval data classification techniques using ArcGIS software. Created web application is consisted with population queries by giving an equation or condition. The charts and other descriptive statistical summaries can be derived by simple click of the application. Therefore, it allows more user friendly approach to retrieve data and understand the geographical patterns of population dynamics. As the conclusion, it identifies the use of modern technology can be used as a simple but a powerful way of conveying the population dynamics for educational purposes. Further, the young generation is always involved in exploring the emerging trends in the information technology and it will be beneficial to have a teaching aid which attracts their expectations of learning about the population dynamics.

**Keywords:** *Geographic Information System, Population Dynamics, Teaching Aid*

---

<sup>1</sup> GIS Solutions PVT Ltd.

<sup>2</sup> Department of Teacher Education, National Institute of English, Maharagama

## **Women's attitudes towards menopause: Evidence from the literature**

SAYN Subasinghe<sup>1</sup>

Menopause is the cessation of the menstruation and is a part of natural ageing process for women. Although menopause occurs in women between the ages of 45 to 55 years, women go through this process at an earlier age in some contexts especially in the developing countries (Lennon, 1992). Experiencing menopausal symptoms causes physical and psychological problems, but it may depend on the attitudes of women towards menopause (Lock, 1994). Therefore the main objective of this paper is to examine menopausal women's attitudes towards menopause. Women's attitudes towards menopause and their response to this period of life reflects both medical and non-medical literature. This study explores existing literature on women's attitudes towards menopause. Qualitative peer-reviewed articles published from 1990-2000 were examined and fifteen papers that discuss women's attitudes towards menopause were reviewed. Although women face similar biological changes during menopause, they experience it differently. Socio, demographic characteristics, reproductive characteristics, menopausal symptoms, woman's age and hormonal level present the best model for significantly predicting attitudes toward menopause (Avis & McKinlay, 1991). Therefore, it can be identified that education, geographical location, customs, ethnic factors, the value granted to women and elderly people by society, a woman's role, sexuality, women's life philosophy and the meaning that society and women attribute to menopause are important cultural effects that have an impact on the perception of menopause and menopausal attitudes. According to literature menopausal status also has an impact on attitude (Avis & McKinlay 1991; Bowles 1990). Literature regarding attitudes of women toward menopause may differ from countries to countries regions to region and among cultures (Dasgupta & Ray, 2013). In Sri Lanka, at present, women are spending about two decades, a large part of their later life in the menopausal stage due to the increase of female life expectancy. These results suggest that special attention should be given on menopausal women's attitudes towards menopause in order to enhance their quality of life.

**Key words:** *Menopause, attitudes, menopausal women*

## **Changing Intergenerational roles and population ageing in Sri Lanka**

---

<sup>1</sup> Department of Demography, University of Colombo

The ageing of populations is an unavoidable and irreversible global phenomenon. Ageing in developed countries occurred gradually over a relatively long period of time, while ageing in developing countries including Sri Lanka has been more rapid. The ageing process has an important relationship with the changing nature, structure and the function of the family which has been occurring simultaneously in Sri Lanka. The Sri Lankan elderly have traditionally been almost totally dependent on family support, and a key policy question is whether the transition from traditional to modern family will change intergenerational relationships. The main objective of this paper is to explore the impact of changing intergenerational roles on population ageing in Sri Lanka. The study uses a mixed methodology based primarily on surveys of 300 elderly households and 150 control households and a wide range of quantitative and qualitative information. The study further showed that there was a shift in wealth transfers from parents to children during their life course in the modern family setting, where parents have become sole investors in their children's education and health. In contrast to the life course developments, the study further examined the current intergenerational transfers between elderly parents and their adult children. The current net transfers between elderly parents and adult children revealed that the elderly parents were mainly at the receiving end. Examination of net transfers by type of transfers revealed that the net financial transfers are upward from adult children to parents, but elderly who live in one generation families benefit more than their co-residing counterparts. The material net transfers are also upward from children to elderly parents but more for the co-residing parents compared to those who live in one generation families. The net social transfers (moral/emotional support) are also upward from adult children but more on co-residing parents. Although half of the elderly living in one generation families do not receive social support from their adult children, they receive more support from the community. On the other hand, detailed interviews showed that elderly parents are not just merely recipients of support, but in some instances provide significant support to their adult children. It was also observed that when the elderly have more capacity to support their adult children, they tend to receive more support from their adult children. The study also showed that the low level of well-being status of the elderly in Sri Lanka is constrained by the lack of pension schemes and other social protection facilities available for the elderly.

**Key Words:** *Ageing, inter-generational transfers, living arrangements*

---

<sup>1</sup> Department of Demography, University of Colombo

## **Ethnic differentials in desired fertility behavior: a case study of Maradhana Grama Niladari Division, Colombo District**

DMSG Wijerathna<sup>1</sup>

Fertility is one of the major demographic components, which is connected to various socio-economic and demographic factors. Fertility behaviour is directly affects the changes in fertility levels, trends and patterns. There are three main behavioural patterns related to fertility, namely starting, spacing and stopping behaviours. Fertility behaviour depends on socio-economic factors such as ethnicity, religion, geographical location, education etc. Ethnicity is one of the core factors affecting the fertility behaviour. Sri Lankan society is diverse, as it is composed of a multi-cultural, multi-religious and multi-linguistic population. Sinhalese are the majority group, predominate, while Tamil and Moor communities form the other major ethnic groups (De Silva, 2016). According to the latest census report, ethnic differentials of fertility are also significant in 2011. Sri Lankan Moors report the highest fertility (TFR = 3.3) in 2011 followed by Indian Tamils (2.9), Sri Lankan Tamils (2.3) and Sinhalese (2.3) respectively. As mentioned earlier, fertility behaviour is directly affecting the changes of fertility levels. Therefore, this study mainly focuses on identifying the factors affecting fertility behaviour of married women in different ethnic groups. This study used a mixed methodological approach. The sample includes 150 married women who are in the age group 15-29, representing Sinhala, Tamil and Muslim ethnic groups. The study area is Maradhana Grama Niladari Division in the Colombo district. Purposive sampling technique was adopted in selecting the sample. According to this study, in 1985-1999 birth cohorts, women in all three ethnic groups, shows that most of young women are limiting their fertility and they have expected only two children, expected longer birth spacing between births and stop their fertility before 30-35 ages. Socio-economic factors are influencing these changes of fertility behaviour. Economic difficulties, the quality, better education, freedom, nutrition and social background of the children are identified as key socio economic factors affecting the expected fertility behaviour in their living environment. Although there is a significant variation exists in ethnic fertility behavior at national level, there is no significant variation observed among the ethnic groups in the study area.

**Key words:** *Fertility, fertility behaviour, ethnic fertility*

---

<sup>1</sup> Department of Demography, University of Colombo