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The Demographic Situation of Ageing Population in Nepal

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Abstract

The title of the study is "Demographic Situation of Population Ageing in Nepal," and its main objective is to illustrate and describe the population situation of ageing in Nepal. The population of old age people is increasing day by day which is a challenge for developing countries like Nepal. Due to this, I was curious to study the situation of the elderly people. The ageing trends and situation of older people are analyzed using the census data of 1952/54-2021AD. This article follows descriptive and analytical methods which are based on secondary sources of data. Furthermore, it is based on a literature review, books, journals, articles, and reports. All these are from internet sources. The age structure of the population in Nepal is in increasing trend. Over the years with declining fertility and controlled adult mortality, the old age population has been increasing. The population of elderly people in the country is increasing both in terms of absolute number and as the proportion of the total population which is growing faster than the annual population growth. Because of better healthcare facilities, nutritious food, and awareness. The elderly people have more knowledge, experience, and wisdom. So, they are an asset to the nation. Society or nation can use these qualities of the elderly people in national reconstruction. With the gradual increase in life expectancy at birth and decline in mortality rate, the median age is in increasing trends. In the Nepalese context, the rate of growth in the elderly population surpasses that of the overall population.

Keywords: Demographic situation, Population ageing, elderly, social security

Introduction

Background of the Study

The ageing population is a worldwide phenomenon. Similarly, Bhandari (2021) said that, globally the proportion of older persons aged 60 years or over is growing at a faster rate than the general population. Ageing is a natural process that happens to everyone. It is a gradual transformation in a person's physical, mental, and social status that starts in the mother's womb and lasts until death. In addition, Paudel (2022) focuses on, how getting old is a part of life that everyone goes through. It comes with some challenges, like higher healthcare costs, not enough support from social programs, and difficulty finding work. This is a real issue for older people in Nepal.

The process of acquiring and maintaining the functional capacity that promotes well-being in old life is known as healthy ageing. A person does not simply get old, as this is a long process that depends on heredity, diet, and mental capacity. It is an individualized process. It differs from person to person. It is a common introduction to life's natural and continuous process. According to Raj (2019), ageing people are invaluable assets to any society or nation, as they possess a wealth of knowledge, extensive life experiences, and diverse ideas by tapping into their abilities, societies, and nations can greatly benefit. These individuals have accumulated wisdom over the years, having witnessed various events and transformations in their respective fields. Similarly, Paudel (2022) opines the elderly have more knowledge, capability, long experiences, and wisdom. For the development of any society or nation, it is necessary to use their experiences or resources. They are the asset of the nation their insights can provide invaluable guidance and mentorship to younger generations. Furthermore, their vast reservoir of knowledge can be harnessed to address complex challenges and make informed decisions. By actively engaging and involving ageing individuals in society's social, cultural, and political fabric, nations can tap into this immense resource and promote a more inclusive and prosperous future for all. The ageing population is a global phenomenon. Similarly, Adhikari (2022) also focuses same things about elderly people who have comparatively more knowledge and experiences. They help to save our culture and tradition. The new generation can learn a lot of things

from senior citizens. In the context of Nepal, the elderly are considered at the age of 60 years and above. This definition is declared by the Government of Nepal as well as the Senior Citizenship Act 2063. The growth rate of the total population is decreasing trends but the elderly population is rapidly increasing trends. The research identified that the proportion of the ageing population is lower in the Terai regions than in the mountain and hilly regions. However, research shows that the ageing population female elderly population is the highest in the three ecological regions as compared to men. According to Bhandari (2019), Population ageing is recognized as one of the most prominent features of population growth in Nepal. Globally, with technological advancement medical development and access to treatment facilities life expectancy is increasing day by day. In Nepal, males live longer than females because of socio-cultural values and norms, and a male-child preference are all possible reasons for this switch from female superiority in life expectancy (Chalise, 2006). Nepal is facing a rapid decline in fertility, remarkable improvement in mortality, and a large migration with an economically active population. Today, the elderly population needs to be supported in every nation like Nepal such as social, economic, health, and family support.

The life cycle of ageing is characterized by various physical, psychological, and social changes. It is considered a later stage of life. Old age is an extremely individualized process. (Sharma, 2023)says that male seniors are more likely than female seniors to be in good health. A lower level of education increases the likelihood that someone may report being unwell. The main factors that support the health of senior people are family advice, religion, having a good job, having enough food and property, getting medical help, and getting proper care. Which plays a significant role in keeping older people healthy. All individuals are different from each other because of their personal history, socio-economic status, health status, experience, and other social factors and support. (Government of Nepal, 2010) World Health Origination (WHO) defines senior citizens as people 60 years and above. The Senior Citizens Acts 2063, Nepal also defines senior citizens as "people who are 60 years and above". The retirement age for the military in Nepal is 45 to 48 years Demographic situation of population ageing in Nepal for the lower class, for general government service 58 years, and for university teachers and the judiciary services is determined 63 years.

There are two fundamental international ageing policies for the twentieth and twenty-first centuries. They are the First World Assembly on Ageing (1982), Vienna and the Second World Assembly on Ageing (2002), Madrid. Those policies also defined, the people who reached 60 years and above are elderly. Similarly in United Nations Conference on Ageing and Urbanization in 1991 also accepted this definition. The number of old age people is increasing for many reasons among them declining fertility, relatively controlled adult mortality, change in traditional behavior, trends of migration and political awareness the age structure of the population in Nepal has been increasing. Over the years with a shift towards older ages increasing gradually declining fertility and relatively controlled adult mortality. Similarly, Political awareness as well as change in traditional behavior have insisted people migrate (Yadav, 2012). Similarly, Bhandari (2019) mentions that Nepal is facing a rapid decline in fertility, a decline in mortality, as well as a huge migration flow of the economically active population in third-world countries. As a result, the old age population is increasing. The old age population needs to be supported in many aspects such as social, economic, health and security, and so on. Today it is important to understand the ageing issue in the proper demographic and national context. According to Paudel (2022) old age is a natural process, beginning from conception. It is an individualized experience. The symptoms of ageing are different from each other which depends on their heredity, diet, mental attitude, environment and standard of living (Wallace, 1997). In addition, Raj (2019) focuses ageing has always been a global issue. In the context of Nepal, it has also taken this issue as one of the priorities of the government. According to Handayani and Babajanian (2012) said the protection for the elderly is essential and is expanding in a variety of ways. Examples exist of ambitious initiatives to combat poverty and extend social rights despite limited financial resources, such as Nepal's universal pension scheme. The observation reveals that elderly citizens are suffering from different types of problems in the world as well as in the context of Nepal such as social problems, economic problems, psychological problems and emotional problems. The number of elderly people has been continuously rising both in absolute number and as a proportion of the total population. The main objective of this article is to explain and describe the population situation of ageing in Nepal using census data.

Methodology

This article is based on descriptive and analytical methods applied to secondary sources of data. These data and information were extracted from extensive review of existing literatures related to elderly people. The data was taken from the Central Bureau of Statistics from the census 1952/54 to the latest census 2021.

Results and Discussion

Data analysis and interpretation of the elderly population

Secondary sources of data were used in this research. The data were collected from CBS reports, population monographs, and articles. The percentile data were presented in tabular format and descriptive analysis of the collected data was done.

The size of the elderly population in Nepal according to the census 1952 AD -2021 AD.

Ageing is a worldwide concern, and Nepal is also treating it as an important matter for the government. At the same time, the number of babies being born has gone down in the past few years. This decrease is happening quicker than expected because fewer people are dying, and both men and women are living longer in Nepal (Raj, 2019). The following table indicates the size of the elderly population and their percentage.

Table 1. Size of the Elderly Population and Growth Rates

Census Years	Size of the elderly population (60 years or more)		Growth Rate		
	Number	Per cent	Elderly Population (Percent)	Total Population (Percent)	
1952/54	4,09,761	4.99	-	2.27	
1961	4,89,346	5.22	1.79	1.64	
1971	6,21,597	5.61	2.42	2.05	
1981	8,57,061	5.71	3.26	2.62	
1991	10,71,234	5.80	2.26	2.08	
2001	14,77,379	6.50	3.44	2.25	
2011	21,54,410	8.13	3.07	1.35	
2021	29,77,318	10.21	3.81	0.92	

Source: Population Monograph of Nepal, V.1 (2003), 2014 and 2021

The above table shows the size of the old age population in Nepal. The data of the old population are based on the census from 1952/54 to 2021. Data reveals that the old population is increasing trends. In 1952/54 elderly population was 4,09,761 (4.99 %) which reached 4,89,346 (5.22%) in the census 1961, then in 2001, the elderly population was 14,77,379 (6.50%) and it reached 29,77,381 (10.21%) in 2021. It might be the decline in fertility and increase in the life expectancy at birth in Nepal. This table also exhibits that the growth rate of elderly people has always been found higher than that of the total population.

This table also shows that the percentage of the growth rate of the elderly population was found to be 1.79 per cent in 1961 to 3.50 percent in 2001 and it reached 3.81 percent in 2021 as compared to the total population.

Similarly, the table indicates that the number of elderly people have been increasing both in terms of absolute number and as a proportion of the total population in the context of Nepal. The table reveals that the total growth rate of Nepal was found to be 2.27 per cent in 1952/54 to 1.35 per cent in 2011 and it reached 0.92 per cent in 2021 which reflect decreasing trends, On the other hand, the growth rate of elderly was 4.99 per cent in 1952/54, 3.07 per cent in 2011 and it reached 10.21 per cent in 2021, which is decreasing trends.

Table 2. Situation of Old Age by Sex in Nepal, 1952/54 - 2021(in percent)

Census year	Male	Female
1952/54	4.5	5.4
1961	4.8	5.6
1971	5.4	5.9
1981	5.9	5.5
1991	5.9	5.7
2001	6.5	6.5
2011	6.8	7.1
2021	10.13	10.29

Source: Population Monograph of Nepal, V.1 (2003), 2014 and 2021

This table reveals the percentage of the elderly male and female population out of the total population, based on the data from 1952/54 AD to 2021 AD. Data shows that the elderly population both male and female is in increasing trend. The percentage of male elderly was 4.5 Percent in the census 1952/54 to 5.4 percent in

1971, it reached 6.8 percent in 2011 and 10.13 percent in 2021 AD. Similarly, the percentage of female elderly was 5.4 percent in the census 1952/54 to 6.5 percent in 2001, it reached 7.1 percent in 2011 and reached 10.29 percent in 2021.

Five-year age group	Total		Male		Female	
of elderly	Number	Percent	Number	Percent	Number	Percent
60-64 years	955604	3.28	465962	3.27	489642	3.28
65-69 years	771618	2.65	379689	2.66	391929	2.63
70-74 years	609370	2.09	292054	2.05	317316	2.13
75-79 years	353203	1.21	170998	1.20	182205	1.22
80-84 years	161556	0.55	78315	0.55	83241	0.56
85-89 years	78327	0.27	36888	0.26	41439	0.28
90-94 years	30406	0.10	13191	0.09	17215	0.12
95-+ years	17234	0.06	6810	0.05	10424	0.07

Source: (Government of Nepal, 2023)

The above table shows that, the population of five years age group of the elderly population by sex according to the census 2078. Data reveals that the total number of population of the age group 60-64 years is 955604 with 3.28 per cent. Among them, the total no of the male population of the same age group is 465962 with 3.27 per cent and the total number of the female population of the same age group is 489642 with 3.28 percent.

Similarly, the total number of the elderly population in the age group 65-69 years is 771618 with 2.65 per cent. Among them, the total number of the male population of the same age group is 379689 with 2.66 per cent. In addition, the total number of the female population of the same age group is 391929 with 2.63 per cent. Likewise, Data reveals that the total number of elderly, population age group 70-74 is 609370 with 2.09 per cent. Among them, the total no of the male population of the same age group is 292054 with 2.05 per cent and the total number of females is 317316 with 2.13 per cent. Consequently, the total number of population of the age group 75-79 years is 353203 with 1.21 per cent. Among

them, the total number of males in the same age group is 170998 with 1.20 per cent and the total number of population of females same age group is 182205 with 1.22 percent.

In addition, Data reflect that the total number of population age group 80-84 years is 161556 with 0.55 per cent. Among them, the total no of males is 78315 with 0.55 per cent and the total number of females is 83241 with 0.56 percent. Moreover, the total population of the age group 85-89 years is 78327 with 0.27 percent. Among them, the total number in the same age group of male is 36888 with 0.26 per cent and the total number population of females of the same age group is 41439 with 0.28 percent.

Correspondingly, the total number of the population of the age group 90-94 is 30406 with 0.10 percent. Among them, the total no of males is 13191 with 0.09 per cent as well and the total number of females is 17215 with 0.12 percent.

In the same way, the total population of the age group 90 years and above is 17234 with 0.06 per cent. Among them, the total number of the same age group of males is 6810 with 0.05 percent and the total number of females is 10424 with 0.07 percent.

Population distribution

The population distribution by age group is different from country to country. Generally in the context of Nepal, a broad age group can be categorized in three ways. They are children aged group 0-14 years old, Age group 15-59 years and old the age group 60 years above. The age group of 0-14 consists of infants, children, and young teenagers. Similarly, the age group 15-59 are workingage population. This age group includes individuals who are typically in their productive working year. Another age group is considered as old age population, which is 60 years and above. This age group comprises senior citizens and retirees.

Table 4. Population by Broad Age Group

Age	Total number	Per cent
14 years below	8115575	27.86
15-59 years	18061685	61.93
60 years and above	29,87,318	10.21
Total	29164578	100

Source: (Government of Nepal, 2023)

The above data shows that the number of total population of children below the age of 14 years is 8115575 and their percentage is 27.86 in the total population. Similarly, the population aged 15–59 years is 18061685 with 61.93 percent in the total population. Likewise, the elderly population aged 60 years and above is 2987318 and their percentage is 10.21 respectively. The age group below 14 years and above 60 years is considered as the dependent population whereas the age group of 15 -59 years is considered as the economically active population.

Sources of data collection about older adults in Nepal

This section comprises the data collection of the elderly population from governmental and non-governmental sources. The governmental sources are given below:

The data collection related to the elderly population is done by the governmental and non-governmental organizations. The governmental organizations include, The Central Bureau of Statistics, Decennial, Nepal Population and Housing Census, and Nepal Living Standards Survey.

Similarly, there are other non-governmental organizations for data collection of the elderly: The United Nations, Indian Institute of Dalit Studies, Scientific and Cultural Organization, World Bank, United Nations Educational, Oxfam, The Asia Foundation, Norwegian Institute of International Affairs, Asian Development Bank, and Small- scale surveys obtained by academic researchers through grant mechanisms

Index of ageing and median age

Population ageing refers to a change in the distribution of a country's population, where there is a growing proportion of older individuals. This shift is characterized by an increase in the average and median ages of the population. It occurs due to two demographic factors: longer life expectancy and reduced mortality rates. The median age of the population is indicated as the value that divides the population into two equal numerical values to measure population ageing, indicators such as the ageing index and median age are commonly used. The ageing index is calculated by dividing the number of people aged 60 and above by the number of children aged 0-14, and then multiplying the result by one hundred.

Calculated by using the following relationship:

Table 5. Ageing Index and Median Age of Population by Sex According to Census 1971-2011

Census Years	Ageing index(percent)			Median A	Median Age(Years)			
	Male	Female	Total	Male	Female	Total		
1971	13.20	14.75	13.86	19.80	20.70	20.30		
1981	14.08	13.51	13.81	19.50	20.30	19.90		
1991	13.56	13.80	13.58	18.41	19.40	18.92		
2001	16.51	16.32	16.70	19.00	20.00	20.00		
2011	22.59	24.03	23.30	21.28	23.05	22.26		

Source: Population Monograph of Nepal, 2003 AD & 2014 AD

The above table reveals the index of an ageing population and the median age of the population according to the census 1971AD-2011 AD for males and females. It shows it has increasing trends. The male ageing index showed 13.20 per cent in the census 1970 AD to 14.08 per cent and reached 16.51 in the census 2001 reached 22.59 in the census 2011. Similarly, the data reveals the female ageing index in the census 2071 was 14.75 to 16.32 in 2001 and it reached 24.03 per cent in 2011 AD respectively. The total percentage of the ageing index was 23.30 per cent in 2011. From the table, it is clear that both the index of ageing and median ageism have increased in Nepal over the years, with an increase in the growth rate and proportion of the elderly population.

In the case of median age, the data shows that the male median age in the census of 2071 AD was 19.80 years to 18.41 years in the census of 1991 AD and reached 21.28 years in the census of 2011 AD. Similarly, the female median age was 20.70 years in the census 2071 AD to 19.40 years in the census 1999 and reached 23.05 years in the census 2011 AD respectively. The total percentage median age was 22.26 years in the census 2011. It indicated both sexes have increased gradually from 1971AD to 2011AD. This table also showed that the total median age of the population of Nepal was around 20 years before the 2001 census

and it increased to 22.26 years in the 2011 census. Moreover, this indicates that the Nepalese population is growing to an elderly age and there are more elderly females than the male population which can be concluded that the Nepalese population is moving slightly from a younger population to an older population. It showed that with the gradually increase the life expectancy at birth and decline in mortality rate, the median age is increasing trends.

Nepal is facing a rapid decline in fertility, remarkable improvement in mortality and increased life expectancy.

Nepal is facing a rapid decline in fertility and improved mortality. The advancements in medical and expansion of knowledge as well as the health care system may have increased life expectancy as well as the proportion of elderly in the population. According to Chalise (2006) fertility, mortality and life expectancy are closely interrelated each other.

Table 6. Decline in Fertility, Improvement in Mortality Increases Life Expectancy

Census	TFR	IMR	CDR	Life expectancy		Family size
year				Male	Female	
1971	6.3	147	21.4	42.1	40.0	5.5
1981	6.3	97	13.5	50.9	48.1	5.8
1991	5.6	64.4	13.3	55.0	53.5	5.6
2001	4.1	48	9.6	60.8	61.0	5.4
2011	2.6	40.5	7.3	65.56	69.09	4.88

Source: Population Monograph of Nepal, V.1 (2003), 2014

The provided data represents key demographic indicators for Nepal over several census years. These indicators provide insights into the country's population dynamics and socio-economic progress. Let's break down the information within the context of Nepal:

Total Fertility Rate (TFR): TFR represents the average number of children a woman is expected to have during her lifetime. Historically, the fertility and mortality trend was very high in Nepal. The TFR values in Nepal have been declining over the years. In 1971 and 1981, the TFR was relatively high at 6.3,

indicating larger family sizes of 5.5 and 5.8 respectively. However, by 2011, it had significantly dropped to 2.6, reflecting a decrease in birth rates and smaller family sizes of 4.88. This decline could be attributed to factors such as increased access to education, family planning, and economic changes.

Infant Mortality Rate (IMR): IMR is the number of infant deaths per 1,000 live births. The IMR in Nepal has shown a remarkable reduction over the years, indicating improved healthcare and living conditions. In 1971, the IMR was 147, which means there were 147 infant deaths per 1,000 live births. By 2011, it had dropped to 40.5, indicating a substantial improvement in infant survival rates.

Crude Death Rate (CDR): CDR represents the number of deaths per 1,000 population. Like the IMR, the CDR has also decreased over the years, suggesting advancements in healthcare and overall living standards. The CDR decreased from 21.4 in 1971 to 7.3 in 2011, indicating lower mortality rates across different age groups.

Life Expectancy: Life expectancy at birth has consistently increased in Nepal. In 1971, the life expectancy for males was 42.1 years and for females was 40.0 years. By 2011, it had risen to 65.56 years for males and 69.09 years for females. This indicates that people are living longer, possibly due to improved healthcare, sanitation, and nutrition.

Family Size: The average family size in Nepal has been gradually decreasing. In 1971, the average family size was 5.5 members. This reduced to 4.88 members in 2011. This trend is likely influenced by changing societal norms, increased urbanization, and the availability of family planning resources.

Overall, the data reflects Nepal's progress in terms of healthcare, education, and socio-economic development over the years. The country has witnessed significant improvements in infant mortality, life expectancy, and family planning, which are indicators of a society's overall well-being and development.

Finding

The increment in life expectancy and proportion of senior citizens in population is due to the advancements in medicines, awareness regarding health care, and its accessibility.

The position of the elderly member in a family reflects their position in society. One of the greatest success and achievement of the twenty-first century is thought to be the population ageing and increasing life expectancy, along with the success of public health initiatives.

However, effective population ageing management is a significant challenge for contemporary societies, and as a result, identifying the situation of elderly

people in Nepal should be the main focus to improve their health and well-being. The majority of population-related activities are geared toward lowering fertility and population control, while the current healthcare system largely disregards the unique health requirements of senior citizens. The study shows that having fewer babies and people living longer are the main reasons for the population getting older. The proportion of the elderly population is getting higher due to higher life expectancy and lower child birth rate.

Conclusion

Population ageing is a global concern in the twenty-first century since advances in medical technology have increased life expectancy and the number of elderly people. However, very little is known about the elderly in Nepal. This research focuses on analyzing the situation of the elderly population in Nepal, acknowledging that ageing is a global concern and also for the Nepalese government. The study reveals that elderly individuals in Nepal face various challenges, including social, economic, psychological, and emotional issues. The number of elderly citizens is increasing both in absolute terms and as a percentage of the total population. The median age of the elderly population in Nepal is 22.26 years, and the ageing index is 23.30 per cent. It indicated that the median age has increased gradually from 1971AD to 2011AD. This suggests that Nepal's population is gradually shifting towards an older demographic due to increased life expectancy and reduced mortality rates. Similarly, other indicators are size of the elderly population, the index of ageing and the median age of the population which are gradually increasing over the years, which makes the confirmation that a greater proportion of elderly individuals in the population

Population ageing has already begun in Nepal. Identifying the situation of elderly people in Nepal should be the main focus of any effort to improve their health and well-being. Further planning for the health and welfare of the elderly cannot be done without baseline data and knowledge about the true scenario of their situation. The government and non-state organizations that seek to promote the health and well-being of the elderly also need to work closely together. The percent of old age in Nepal was 10.21 according to the census 2078 which is in an increasing trend compared to the previous census of 2068 which was 8.14% The proportion of older people is expected to double to 18.6% in 2050 the total population in Nepal. This research is significant for the academia. This research is

not final one due the time and nature of topic, however, it has showed the path for the further researchers.

This study will identify the major issues faced by the elderly population of Nepal and help in solving their issues through in family level, local level as well as in state level. The study can give a way to formulation of a policy focusing on socio-economic, political and health sector to support the elderly population.

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