

Research on Aging of Population and the Sustainable Development

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Abstract

When the new century arrives, our country also started to step into ranks of the old age type country following up some developed countries, and the step of aging of population is being accelerated unceasingly. Aging of population is one kind of inevitable trend, with both opportunities and challenges. The key is how to seize the opportunities, meet the challenges, respond to aging of population, and promote sustainable development. This paper has brought forward countermeasures from the following four aspects: population policy, retirement pension system, developing human resources of the old and accelerating society economy development.

Keywords: Aging of population, Sustainable development, Opportunity, Challenge, Suggestion

Aging of population is a kind of global trend, and is a necessary outcome when the human society is developed to a certain extent, which reflects progress of human being. Such developed countries as US, Germany, France, Britain and Japan, etc, have stepped into the society of aging earlier. China became a country of old people in 1999. Aging population accounts for an increasing proportion in the overall population, which makes social investment, production, circulation, distribution, savings and consumption structure change enormously. At the time when aging population brings us opportunities, it also affects such important issues of social sustainable development as social security system, medical care system, industrial structure, investment structure, consumption structure, distribution system and relations between generations, etc. Thus, the issue of aging of population has become an issue that is a general focus of the entire world. However, as the unique rapidly aging developing country, China can't ignore any more this issue.

1. Characteristics of aging of population in China

Compared with the process of aging of population in developed countries, aging of population in China has its obvious characteristics as follows.

1.1 Conversion of aging is fast and the scale of population of the elderly is huge.

According to predicted data of the United Nations, the proportion of the elderly at the age of 65 in China was 4.7% in 1980, increased to 6.96% in 2000, which lasted only for twenty years. And only 50 years is enough for the peak value of 22.4% is attained, whereas 80 to 100 years is needed for developed countries. Faced up with the overwhelming aging of population in China and its unprecedented speed, aging has brought unprecedentedly strong attack on the many aspects of politics, economy, culture and society, etc. "By the zero hour on June 1, 2006, the population of the elderly at the age of 60 and above had accounted for 21.4% of the global population of the elderly, occupying the top position in the world and approximately accounting for the total population of the elderly at the age of 60 and above in the entire Europe. The speed of increase of aging of population in China is very fast and its annual increase rate is as high as 3.2%, almost about 5 times of the increasing speed of the total population. According to results of "A Century-long Projection of the Development Trend of Aging of Population in China", population of the elderly in China in the year 2010 will reach 174 million, accounting for 12.8% of the total population, and will increase to 248 million by the year 2020, accounting for 17.2%, presenting a trend of rapidly increasing.

1.2 Aging of population is ahead of economic development.

It was when the per capital gross national product reached about \$10,000 that Aging of population in developed countries appeared. Owing to science and support from immigrants of high quality in developing countries, aging of population has exerted small influences upon economic development of developed countries. Besides, since economy is abundant in developed countries and social security degree of aging of population is high,

social pressure brought about by aging of population is not obvious. However, China is attacked by the “silver tide” in the situation when its economy is under-developed and its per capital GDP is extremely low, and meanwhile, its total population is swelling, so, without doubt, quite a lot of perplexities are encountered in social and economic development of fostering of aging population, which poses huge challenges to sustainable development in the future.

1.3 There are big differences between conditions of aging in different areas.

Conditions of aging of population in different areas are obviously distinguished. That is, urban aging of population is obviously earlier and faster than aging of rural population. The proportion of aging population in the Southeast coastal area with a high population density is obviously higher than that in the central and western area, presenting a well-bedded ladder tendency. “In the year 2000, population of the elderly in China accounted for 10.5% of the total population. There were 12 provinces and cities inland that had a higher population of the elderly than the average level of the whole country and population of the elderly in five provinces and cities was more than 10% of the total population and they became a senile area. Shanghai became a senile city as early as in 1979, 20 years ahead of the entire country, whereas such provinces as Qinghai in Northwest China lagged behind for 20 years.”

1.4 Increase of aging population is faster than increase of the population of the elderly and the overall population.

According to prediction by Chinese academics and United Nations Population Division, the population of the elderly at the age of 65 and above will increase rapidly from 94 million (accounting for 7% of the total population) in 2000 to 334 million in 2050 (accounting for 22.6% of the total population); the population of the oldest-old people at the age above 80 will rapidly increase from 11.5 million in 2000 to 27 million in 2020 and more than 100 million in 2050!” “During fifty years in the first half in the 20th Century, the average annual growth rate of the oldest-old people in China was 4.4%, equal to twice of the average annual growth rate of the elderly at the age of 65 and above, and 6.1 times of the average annual growth rate of the total population, respectively 2.7 times of that in Britain, 1.9 times of that in US, 2.6 times of that in France, 2.5 times of Germany and 1.8 times of Japan.”

2. Aging of population and sustainable development --- co-existence of challenges and opportunities

Sustainable development means sustainable and healthy development of the whole human society on the basis of mutual coordination and common development of population, society, economy, resources and environment and under the guarantee of resources and with a benign environment. Its purpose is not only to satisfy demands of contemporary population, but also not to pose threats to development of later generations. Sustainable development is centered with human being and regards the overall development of human being or the society as its target of development. Thus, a good population environment is required in order to implement the strategy of sustainable development. “A good population environment will promote coordinated development and sustainable development of population and economy, society, environment and resources.” The rapidly increasing population of the elderly will bring opportunities to the sustainable development of social economy, but at the same time, it will put forward challenges to the national situation at the initial stage of socialism in China.

2.1 Aging of population brings opportunities for sustainable development.

2.1.1 Aging population provides talent resources with high quality and low cost for sustainable development.

Human resources of the elderly, especially talent resources, have high value and advantages. Advantages of talent resources of the elderly are mainly reflected in two aspects. On one hand, they have incomparable experiences and skills and accumulated cultural tradition. In order to realize sustainable development, a society has to inherit the excellent achievements of its traditional culture and carry forward and innovate these achievements. The group of the elderly is the bond and bridge that serves as a link between the past and the future and as a connecting link between the preceding and the following, and is an important support and guarantee of sustainable development of the society. On the other hand, among the four approaches of cultivation of talents, development of talent resources of the elderly requires the least investment and gets the fastest effect. However, the three approaches of on-campus training, on-job training and foreign introduction all require the nation and the society to expend a lot of human resources, financial resources and material resources, which needs long period of cultivation, high cost and slow effect. A group of healthy old people with knowledge and skills is precious wealth of the entire society. The earlier a society is able to realize this, the more possible it is for them to acquire advantages brought about by aging of population.

2.1.2 Aging population breeds senior consumption market.

In the process of aging of population, not only the ratio of consumption of the elderly to the total consumption amount of the society is increasing, but also the particularity of demand of the elderly causes the consumption structure of the whole society to change. The senior consumption market of the elderly in China is one that contains huge potential and emerges with changes of the age structure of population. Although this market has already been started, it is still at an initial stage, and many of its fields are still blank or are under-developed. In the mean while, it should be noted, during the post period of aging of population, namely, the stage of aging, demand of the society on the tertiary industry will exhibit an obvious tendency of increase and the market about medical care and life service of the elderly will also be greatly developed.

2.1.3 Aging population is the shock absorber of social stability.

After aging population suffers from frustrations and vicissitudes of life, their state of mind and feelings become more moderate, and their way to look upon an issue and deal with an issue will become more objective and rational. Compared with young people, they are less impulsive and are less rebellious. Furthermore, they tend to influence and educate with their own actions the young generation who are more impulsive and are more rebellious, so as to enable the whole society to become more harmonious, coordinated and stable, and a harmonious, coordinated and stable society is, without doubt, the foundation of sustainable development.

2.2 *Aging of population proposes challenges to sustainable development.*

At the time when aging of population brings opportunities for sustainable development, we should also bear in mind that human resource of the elderly is also neutral, which is a kind of wealth if employed in a correct way and is a kind of burden if employed in an incorrect way. Aging of population will put forward new challenges to sustainable development of the society.

2.2.1 Aging of population will finally cause insufficient labor force and aging of working age and will affect improvement of labor productivity.

It is generally believed, physical strength of elderly labor force falls gradually into a decline, and the elderly can't react as fast as the young, unable to adapt to production activities with a fast rhythm. Especially in labor intensive production, the elderly labor force is unfavorable for improvement of labor productivity and its influences on industries with relatively low automation level and high labor intensity are relatively obvious. The major industry in economically developed countries and districts is technology intensive industry, and their improvement of labor productivity is mainly dependent on science and technology, so unfavorable influence of working-age population aging is relatively small. However, China belongs to a developing country, in which most industries are labor intensive industries with physical strength as the major subject. As a result of differences of different labor force ages in terms of physical strength, energy and adaptability, the supply structure of labor force and changes of quantity are unfavorable for improvement of labor productivity to a certain extent.

2.2.2 Reduction of working-age population rate will necessarily cause rise of fostering coefficient of the elderly and the total feeding coefficient and will increase the cost of labor force.

“Prediction of population age structure indicates, the fostering coefficient of the elderly has been rising since 1970: 12.9% in 1975, 13.5% in 1999, 17.4% in 2010 and will rise to 47.5% by the year 2050. The proportion of working-age population to population of the elderly approaches 2:1.” Increase of fostering expense causes great increase of the cost of labor force, which, in turn, reduces competitive force of products and speed of social and economic development.

2.2.3 Increase of the total number of retired people and expenditure of retirement pension will influence expanded reproduction.

According to statistics of the subject report of “Establishment and Perfection of China Social Security System” by the Ministry of Labour in 1994, the total amount of insurance benefits of all retired people all over the country was 10.61 billion Yuan in 1984, 47.24 billion Yuan in 1990, 206.83 billion Yuan in 1997, and will respectively reach 7321.95 billion Yuan in 2030 and 18219.52 billion Yuan in 2050. Expenditure of the country on retirement pension grows too fast and its proportion in GDP increases, which is unfavorable for expanded re-production and sustainable development of social economy.

2.2.4 Aging of population is unfavorable for social stability.

As a result of decreased tolerance of physical activities and degenerated intelligence of the elderly population, it is necessary that their ability of self-support will reduce and their independence upon others will be aggravated,

and they will become a weak group of the society. At present, the strict family planning policy in China causes miniaturization of the family structure and insufficient human resources to take care of the elderly greatly weakens the ability to provide for the aged. For the time being, the social security system is still not perfect, and the economic self-support ability of the elderly is not enough. Especially, rural elderly people almost totally depend on their children, which will increase the economic burden of the family. Increase of the population of the elderly will bring about direct or indirect influence upon the family economic income and the family consumption level and will arouse contradictions between generations. If the relationship between generations is not well handled, it might affect the stability and unification of the society. Harmony of the society is first of all, harmony of people. Only if the group of the elderly is harmonious and the family is harmonious, can the society be stable and full of vigor and can such a society be created in which generations are harmonious, there is no distinction of ages and all people share everything and can the society be sustainably developed.

3. Suggestions to respond to aging of population and realize sustainable development

Through analysis, it can be seen, aging of population is a necessary trend, both with opportunities and challenges. Our major task is not to obstruct or put off this historical progress, but to face up to the reality of aging of population, to actively explore strategies and countermeasures of aging of population that adapt to requirements of sustainable development, to maximize the benefits of aging of population and to minimize the influences.

3.1 We should formulate a population policy that can not only control growth of population, but can also prevent excessive aging population to realize coordinated development of aging of population and economy.

At present, the enormous population base in China has become a heavy burden of economic development. Thus, we have to carefully carry out existing family planning policy and continue to control growth of population. At the same time, under the circumstance when the total fertility rate in rural areas is unchanged, the country should appropriately increase the total rural fertility rate to enable the couples in urban area that are both the only child in a family to give birth to the second child (already implemented in some provinces and cities), prevent the occurrence of the pattern of family structure “four, two, one”, alleviate the speed of urban aging and reduce the feeding coefficient of the elderly. This can not only control growth of population, but can also prevent too fast aging speed and be favorable for coordinated development of aging and economy.

3.2 We should establish and make perfect the old-age security system in which the progress of aging of population fits with the level of economic development.

It is a primary issue to be resolved in the process of aging to guarantee providing for the elderly. In order to adapt to the progress of aging of population and demand of social and economic development, we ought to establish a multi-level old-age security system that takes into consideration of both fairness and efficiency, has multiple channels of resources of funds, and has a combination of social old-age support, family old-age support and community old-age help service with a distinction between urban and rural areas. The country should accelerate reform of social endowment insurance system and enlarge the coverage of endowment insurance, improve the socialized degree of endowment insurance and realize overall social planning of endowment insurance, expand resources of old-age insurance pension, set up a mechanism in which retired people can share achievements of economic development, change the collection means of old-age insurance pension and transfer from the model of pay-as-you-go to the model of partial accumulation, accumulate more insurance pension as accumulated funds and make preparations for the radical growth of retirement pension in the peak period of aging population in the 21st Century. This can not only guarantee the economic life of the elderly in a short period of time, but can also alleviate pressure in the future.

3.3 We should develop and employ human resource of the elderly and transform aging of population as a pressure to a motive.

An important measure to face up to challenges of aging is to develop and employ human resource of the elderly and let more old people with labor capacity participate in social and economic development. Firstly, this can make up for deficiency of labor force; secondly, this can create more wealth for the country; thirdly, this can change part of consumption population to production population and change the pressure of aging of population to a motive that promotes economic and social development. The specific measures are as follows. Firstly, the country should gradually increase age of retirement. Under the attack of the tide of aging in many countries in the world, when on earth to retire has become a new globally difficult problem. Suffered from deficit and the crisis of aging, quite a lot of countries in the world are moving back the age of retirement to reduce the pressure of deficit and alleviate attack of aging on economic development. Since 2010, it has become a unanimous choice of a lot of countries (especially developed countries) to extend age of retirement. For instance, Germany has increased the age of retirement to 67 in order to cut down on release of retirement pension and reduce pressure of

the financial expenditure of the government. The age of retirement that is being used at present in China was confirmed according to the productivity level and the per capita life expectancy in the 50s in the Twentieth Century. Over the sixty years, the social productivity level in China has been greatly improved and per capita life expectancy has been extended to 70. Thus, increase of the upper limit of the working age at an appropriate time can effectively development and employ labor resources and make the rate of working age population and the supporting coefficient at a level that is favorable for economic development. Secondly, the country should encourage re-employment among younger elderly people. Re-employment of younger elderly people means, the elderly people with good physical condition, working aspiration and working ability at the age of 60 to 69 again walk to a working position after their retirement. The World Health Organization put forward the concept of active aging which also contains this implication, that is, when people are old, they make the opportunities of health, participation and guarantee bring a maximum benefit in order to improve the quality of life. Thus, we can conduct continuous education and vocational training on younger elderly people, improve their scientific and technical level and their ability to adapt to development of skills, select appropriate working positions to continue to offer service for the society, relieve economic pressure of the family and the society and maintain normal running of social life. Thirdly, we advocate healthy aging. Healthy aging means that most of the elderly are in good health and have a long life, which is not only reflected as extension of longevity, but more importantly as improvement of the quality of life. This can not only promote development of employment of talent resources of the elderly, but can also reduce expenditure of medical care and reduce financial pressure of the nation.

3.4 *The country ought to accelerate social and economic development and improve endurance to aging of population.*

The global meeting about aging in Vienna summarized the issue of aging as two aspects: one is to satisfy particular demand of the elderly and the other is the social and economic development brought about by aging of population. The fundamental way to resolve these two issues is to accelerate social and economic development and intensify the comprehensive national strength. This is more critical to China. It is in the situation when the economy was under-developed that China entered the stage of aging. The objective fact that the aging of population is ahead of economic development needs acceleration of social and economic development so as to strengthen endurance on aging of population. Therefore, before the peak period of aging of population comes, we should make full use of the "golden period" of the population age structure, and vigorously develop economy to lay a material foundation to adapt to the rapid development of aging and for the forthcoming of the aging society. Especially, we should regard aging industry as an important point of increase in the economic development of the aging society, expand domestic demand, drive consumption, alleviate the employment pressure of the society and promote economic prosperity.

In one word, aging of population is the objective rule of human social development and is the necessary outcome of social and economic development. We can either ignore or shirk its challenges to sustainable development. On the contrary, we ought to take positive responsive measures to alleviate unfavorable influences of aging of population upon economic and social development and create more favorable population environment for implementation of the strategy of sustainable development.

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