

## The Japan Parliamentarians Federation for Population

# **NEWS LETTER**

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### "World population is projected to reach 11.2 billion by 2100"

#### 1. Upward revision of population projections and background

In the 1970s when very high population growth was forecasted in the coming decades, the United Nations Population Division estimated that the world population would reach 11.2 billion by 2050

and 12.3 billion by 2100, based on the medium variant projections which have the highest probability. <sup>1</sup> Subsequent declines in fertility through population programs and other factors caused the projections to be revised downward: the world population in 2050 was estimated at 9.8 billion in 1994 and 8.9 billion in 1998. After that, however, the projections were revised upward again. The world population in 2050 was forecasted at 9.3 billion in 2010, 9.55 billion in 2012, and 9.72 billion in 2015, an upward revision of 820 million from 1998, 17 years ago.<sup>2</sup>



As for the projection of the world population in 2100, it rose from a projection of 10.13 billion in

the 2010 revision to 11.21 billion in the 2015 revision,<sup>3</sup> an upward shift of 1.08 billion in just five years.

With only about 30 years left until 2050, these changes in projections—an upswing of 820 million in 17 years and 420 million in just five years—is alarming. Reasons cited are slowdown in the pace of fertility decline and longer life expectancy around the world. The situation surrounding the world population has changed substantially to completely alter the picture of our future in a relatively short period of 40 years. This is evidence of the major contribution made by development efforts. The birth and mortality rates have both declined. From the perspective of stabilizing population size,

Yoichi Okazaki, Masaaki Yasukawa, Minoru Muramatsu, Chojiro Kunii, and Haruo Nagaki, *Shinpan zusetsu jinko mondai* [Population issue in illustrations, new edition] (Japan Family Planning Association / Shinjuku Shobo, 1978). United Nations, *World Population Prospects*, 1973.
<sup>2</sup> Motomi Beppu and Tsukasa Sasai, "Kokuren sekai jinko suikei 2012 nenban no gaiyo," *Journal of Population Problems* (National Institute of

Population and Social Security Research), 71-3 (2015.9), pp.260-29.

<sup>&</sup>lt;sup>3</sup> https://esa.un.org/unpd/wpp/Download/Standard/Population/

the decline in mortality came first and then life expectancy was extended to increase the world population. At the same time, the world population is aging on the whole.

Population aging is possible only through improvement in nutrition, public health, sanitation, and access to medical care as well as economic growth that supports these developments. In that respect, aging is a consequence of past development efforts. On the other hand, it is well recognized that various problems brought about by aging will become an important future global issue. Moreover, the increase in the world population and the rising living standards of this population will put more strain on global sustainability. We are called to revisit the challenges we faced when we first began addressing the issues of population and sustainable development.

#### Changes in the UN World Population Projections for 2050 and 2100

	I	Population (unit: 100 million)
Projection	2050	2100
1998 Revision	89.0	-
2002 Revision	89.2	-
2010 Revision	93.0	101.3
2015 Revision	97.2	112.1
Difference between 2010 and 2015 Revisions	4.2	10.8
Difference between 1998 and 2015 Revisions	8.2	-

#### (based on medium variant projections)

Source: United Nations, *World Population Prospect* (for each year). Motomi Beppu and Tsukasa Sasai, "Kokuren sekai jinko suikei 2012 nenban no gaiyo," *Journal of Population Problems* (National Institute of Population and Social Security Research), 71-3 (2015.9), pp.260-29.

<Table compiled by the JPFP secretariat>

#### 2. Population and food security

In particular, the population increase, in the context of sustainable development, poses the greatest threat to the age-old problem of food security. According to the UN Food and Agriculture Organization (FAO), the share of undernourished people in the world population has decreased from 18.9% in 1990-92 to 10.9% in 2014-16, the lowest point in the last 25 years. Some have voiced optimism about the achievability of food security, and concern about food security has receded. Population increase and rising living standards, however, will create greater demand for food and substantially increase the environmental burden. There has only been a 12% increase in the area of land used to cultivate food crops in the last 50 years. This means that an increase in yield per land area has offset the increase in demand, while there are growing concerns about vulnerability to climate change. It remains true even today that we have yet to find effective solutions to the global issue of food security.